

Question Paper Preview

Notations :

- Options shown in green color and with ✓ icon are correct.
- Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	371 Dietician class 3 1
Subject Name :	371 Dietician class 3
Number of Questions :	210
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

Part A Reasoning DI QA Constitution of India Current Affairs Comprehension

Maximum Instruction Time :	0
Is Section Default? :	No

Question Number : 1 Question Id : 441009831900

In a certain code language,
 $A \wedge B$ means 'A is the father of B',
 $A \nmid B$ means 'A is the brother of B',
 $A \leq B$ means 'A is the sister of B' and
 $A \text{ ₹ } B$ means 'A is the wife of B'.
 Based on the above, how is S related to O if 'S ₹ Q ₹ P ^ O'?

Options :

4410093280789. ✗ Brother
 4410093280790. ✗ Wife's brother
 4410093280791. ✗ Mother's father
 4410093280792. ✓ Mother's brother

Hints :

S is O's mother's (Q) brother

Question Number : 1 Question Id : 441009831900

એક ચોક્કસ સંકેતિક ભાષામાં,

$A \wedge B$ નો અર્થ થાય છે કે 'A એ B ની પિતા છે',
 $A \nmid B$ નો અર્થ થાય છે કે 'A એ B નો ભાઈ છે',
 $A \leq B$ નો અર્થ થાય છે કે 'A એ B ની બહેન છે' અને
 $A \text{ ₹ } B$ નો અર્થ થાય છે 'A એ B ની પત્ની છે'

ઉપર આપેલી માહિતીના આધારે, જો 'S ₹ Q ₹ P ^ O' હોય, તો S એ O સાથે કેવી રીતે સંબંધિત છે?

Options :

4410093280789. ✗ ભાઈ
 4410093280790. ✗ પત્નીનો ભાઈ
 4410093280791. ✗ માતાના પિતા
 4410093280792. ✓ માતાનો ભાઈ

Hints :

S is O's mother's (Q) brother

Question Number : 2 Question Id : 441009850725

In a certain code language,
 $A + B$ means 'A is the daughter of B',
 $A \% B$ means 'A is the mother of B',
 $A \times B$ means 'A is the wife of B' and
 $A \div B$ means 'A is the father of B'.
 Based on the above, how is F related to U if 'F + T \% B \div N \times U'?

Options :

4410093355707. ✓ Wife's father's sister
 4410093355708. ✗ Wife's father's mother

4410093355709. ❌ Wife's sister

4410093355710. ❌ Wife's mother

Hints :

Wife's father's sister

Question Number : 2 Question Id : 441009850725

એક ચોક્કસ સંકેતિક ભાષામાં,

$A + B$ નો અર્થ થાય છે કે 'A એ B ની પુત્રી છે',

$A \% B$ નો અર્થ થાય છે કે 'A એ B ની માતા છે',

$A \times B$ નો અર્થ થાય છે કે 'A એ B ની પત્ની છે' અને

$A \div B$ નો અર્થ થાય છે કે 'A એ B ની પિતા છે'

ઉપર આપેલી માહિતીના આધારે, જો ' $F + T \% B \div N \times U$ ' હોય, તો F એ U સાથે કેવી રીતે સંબંધિત છે?

Options :

4410093355707. ✔ પત્નીના પિતાની બહેન

4410093355708. ❌ પત્નીના પિતાની માતા

4410093355709. ❌ પત્નીની બહેન

4410093355710. ❌ પત્નીની માતા

Hints :

Wife's father's sister

Question Number : 3 Question Id : 4410091720878

Fill in the blank.

C is the _____ of O. O is the father of R. U is the father of P. P is the son of R. C is the sister of R.

Options :

4410096786770. ✔ Daughter

4410096786771. ❌ Brother

4410096786772. ❌ Son

4410096786773. ❌ Husband

Hints :

1

Question Number : 3 Question Id : 4410091720878

ખાલી જગ્યા ભરો.

C એ Oની/નો _____ છે. O એ Rના પિતા છે. U એ Pના પિતા છે. P એ Rનો પુત્ર છે. C એ Rની બહેન છે.

Options :

4410096786770. ✔ પુત્રી

4410096786771. ❌ ભાઈ

4410096786772. ❌ પુત્ર

4410096786773. ❌ પતિ

Hints :

1

Question Number : 4 Question Id : 4410091711580

Read the given statement(s) and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statement(s).

Statements: All flowers are fruits. Some fruits are seeds.

Conclusion (I): Some seeds are flowers.

Conclusion (II): Some fruits are not flowers.

Options :

4410096750564. ❌ Only conclusion (I) follows

4410096750565. ❌ Only conclusion (II) follows

4410096750566. ✔ Neither conclusion (I) nor (II) follows

4410096750567. ❌ Both conclusions (I) and (II) follow

Hints :

con ii follows

Question Number : 4 Question Id : 4410091711580

આપેલા વિધાનો અને તારણોને કાળજીપૂર્વક વાંચો. ધારી લો કે વિધાનોમાં આપેલી માહિતી સાચી છે, ભલે તે સામાન્ય રીતે જાણીતા તથ્યોથી અલગ હોય, અને નક્કી કરો કે આપેલા તારણોમાંથી કયું/કયા તારણો વિધાનોને તાર્કિક રીતે અનુસરે છે.

વિધાનો: બધા ફૂલો, ફળો છે. કેટલાક ફળો, બીજ છે.

તારણ (I): કેટલાક બીજ, ફૂલો છે.

તારણ (II): કેટલાક ફળો, ફૂલો નથી.

Options :

4410096750564. ✖ માત્ર તારણ (I) અનુસરે છે.

4410096750565. ✖ માત્ર તારણ (II) અનુસરે છે.

4410096750566. ✔ ન તો તારણ (I) કે ન તો તારણ (II) અનુસરે છે.

4410096750567. ✖ તારણો (I) અને (II) બંને અનુસરે છે.

Hints :

con ii follows

Question Number : 5 Question Id : 4410091338987

A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.

Among 5 trees, L, M, O, P and Q each having a different height, which tree is the shortest?

(I) M is taller than L

(II) Only one tree is shorter than O. O is shorter than L but taller than Q

Options :

4410095288033. ✖ Data in Statement I alone is sufficient to answer the question while data in statement II is not

4410095288034. ✔ Data in Statement II alone is sufficient to answer the question while data in statement I is not

4410095288035. ✖ Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

4410095288036. ✖ Both statements I and II together are NOT sufficient to answer the question

Hints :

Data in Statement II alone is sufficient to answer the question while data in statement I is not

Question Number : 5 Question Id : 4410091338987

એક પ્રશ્ન પછી (I) અને (II) થી ક્રમાંકિત બે વિધાનો આપવામાં આવ્યા છે. તમારે નક્કી કરવાનું છે કે વિધાનોમાં આપેલી માહિતી એ પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે કે નહીં. બંને વિધાનોને વાંચીને સૌથી યોગ્ય જવાબ પસંદ કરો.

5 વૃક્ષો, L, M, O, P અને Q છે, દરેકની ઊંચાઈ અલગ-અલગ છે. તેમાંથી કયું વૃક્ષ સૌથી નીચું છે?

(I) M એ L કરતા ઊંચું છે.

(II) ફક્ત એક જ વૃક્ષ O કરતા નીચું છે. O એ L કરતા નીચું છે પરંતુ Q કરતા ઊંચું છે.

Options :

4410095288033. ✖ વિધાન I માં આપેલી માહિતી એકલી જ પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે, જ્યારે કે વિધાન II માં આપેલી માહિતી પ્રશ્નનો જવાબ આપવા માટે પૂરતી નથી.

4410095288034. ✔ વિધાન II માં આપેલી માહિતી એકલી જ પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે, જ્યારે કે વિધાન I માં આપેલી માહિતી પ્રશ્નનો જવાબ આપવા માટે પૂરતી નથી.

4410095288035. ✖ વિધાન I અને II માં આપેલી માહિતીને એકસાથે લેતા (અને વિધાન I અથવા વિધાન II ની માહિતીને એકલી રીતે ધ્યાનમાં ન લેતા) તે પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે.

4410095288036. ✖ વિધાન I અને II માં આપેલી માહિતીને એકસાથે લેતા તે પ્રશ્નનો જવાબ આપવા માટે પૂરતી નથી.

Hints :

Data in Statement II alone is sufficient to answer the question while data in statement I is not

Question Number : 6 Question Id : 4410091338990

In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and decide the appropriate answer.

Among 5 trees, L, M, O, P and Q each having a different height, which tree is the shortest?

(I) M is shorter than Q. L is shorter than O

(II) L is taller than M

Options :

4410095288045. ✖ Data in Statement I alone is sufficient to answer the question while data in statement II is not

4410095288046. ✖ Data in Statement II alone is sufficient to answer the question while data in statement I is not

4410095288047. ✖ Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

4410095288048. ✔ Both statements I and II together are NOT sufficient to answer the question

Hints :

Both statements I and II together are NOT sufficient to answer the question

Question Number : 6 Question Id : 4410091338990

એક પ્રશ્ન પછી (I) અને (II) થી ક્રમાંકિત બે વિધાનો આપવામાં આવ્યા છે. તમારે નક્કી કરવાનું છે કે વિધાનોમાં આપેલી માહિતી એ પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે કે નહીં. બંને વિધાનોને વાંચીને સૌથી યોગ્ય જવાબ પસંદ કરો.

5 વૃક્ષો L, M, O, P અને Q છે, દરેકની ઊંચાઈ અલગ-અલગ છે. કયું વૃક્ષ સૌથી નીચું છે?

(I) M એ Q કરતાં નીચું છે. L એ O કરતાં નીચું છે.

(II) L એ M કરતાં ઊંચું છે.

Options :

4410095288045. ❌ વિધાન I માં આપેલી માહિતી એકલી જ પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે, જ્યારે કે વિધાન II માં આપેલી માહિતી પ્રશ્નનો જવાબ આપવા માટે પૂરતી નથી.

4410095288046. ❌ વિધાન II માં આપેલી માહિતી એકલી જ પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે, જ્યારે કે વિધાન I માં આપેલી માહિતી પ્રશ્નનો જવાબ આપવા માટે પૂરતી નથી.

4410095288047. ❌ વિધાન I અને II માં આપેલી માહિતીને એકસાથે લેતા (અને વિધાન I અથવા વિધાન II ની માહિતીને એકલી રીતે ધ્યાનમાં ન લેતા) તે પ્રશ્નનો જવાબ આપવા માટે પૂરતી છે.

4410095288048. ✅ વિધાન I અને II માં આપેલી માહિતીને એકસાથે લેતા તે પ્રશ્નનો જવાબ આપવા માટે પૂરતી નથી.

Hints :

Both statements I and II together are NOT sufficient to answer the question

Question Number : 7 Question Id : 4410091720814

Six people C, R, A, T, E and S, each scored different marks. Only three people have scored between E and T, where none of them have scored the lowest marks. C has scored immediately more than T. Only three people have scored between A and S. T has scored less than A. Only _____ people have scored less than R.

Options :

4410096786514. ❌ One

4410096786515. ❌ Two

4410096786516. ✅ Three

4410096786517. ❌ Four

Hints :

E>A>R>C>T>S

Question Number : 7 Question Id : 4410091720814

છ લોકો C, R, A, T, E અને S, પ્રત્યેકે અલગ-અલગ ગુણ મેળવ્યા. માત્ર ત્રણ જ લોકોએ E અને T ના ગુણની વચ્ચેના ગુણ મેળવ્યા, જ્યાં તેમાંથી કોઈએ પણ સૌથી ઓછા ગુણ મેળવ્યા નથી. C ના ગુણ એ T ના ગુણ કરતાં તરત જ વધુ છે. ફક્ત ત્રણ જ લોકોએ A અને S ના ગુણની વચ્ચેના ગુણ મેળવ્યા છે. T ના ગુણ એ A ના ગુણ કરતાં ઓછા છે. તો માત્ર _____ વ્યક્તિ/લોકોએ R કરતાં ઓછા ગુણ મેળવ્યા છે.

Options :

4410096786514. ❌ એક

4410096786515. ❌ બે

4410096786516. ✅ ત્રણ

4410096786517. ❌ ચાર

Hints :

E>A>R>C>T>S

Question Number : 8 Question Id : 4410091720823

Six people C, R, A, T, E and S, each scored different marks. Only four people have scored between T and A. S has scored immediately more than A. C has scored less than E but more than R. _____ has scored more than C but less than T.

Options :

4410096786550. ❌ R

4410096786551. ❌ A

4410096786552. ✅ E

4410096786553. ❌ S

Hints :

TECRSA

Question Number : 8 Question Id : 4410091720823

છ લોકો C, R, A, T, E અને S પ્રત્યેકે અલગ-અલગ ગુણ મેળવ્યા છે. માત્ર ચાર જ લોકોએ T અને A ના ગુણની વચ્ચેના ગુણ મેળવ્યા છે. S એ A ના ગુણ પછીના તરત જ વધુ ગુણ મેળવ્યા છે. C એ E ના ગુણ કરતાં ઓછા પણ R ના ગુણ કરતાં વધુ ગુણ મેળવ્યા છે. તો _____ એ C ના ગુણ કરતાં વધુ પણ T ના ગુણ કરતાં ઓછા ગુણ મેળવ્યા છે.

Options :

4410096786550. ❌ R

4410096786551. ❌ A

4410096786552. ✅ E

4410096786553. ✖ S

Hints :

TECRSA

Question Number : 9 Question Id : 4410091726520

Six people L, M, N, P, Q and R sit around a circular table, facing the centre. N sits to the immediate left of R. L sits second to the left of N. P sits to the immediate right of M.

_____ sits third to the left of M.

Options :

4410096808716. ✖ L

4410096808717. ✖ N

4410096808718. ✖ P

4410096808719. ✔ Q

Hints :

Q

Question Number : 9 Question Id : 4410091726520

છ વ્યક્તિઓ L, M, N, P, Q અને R એક વર્તુળાકાર ટેબલની આસપાસ કેન્દ્ર તરફ મુખ રાખીને બેસે છે. N એ Rની તરત જ ડાબી બાજુએ બેસે છે. L એ Nની ડાબી બાજુએ બીજા સ્થાને બેસે છે. P એ Mની તરત જ જમણી બાજુએ બેસે છે.

_____ એ M ની ડાબી બાજુએ ત્રીજા સ્થાને બેસે છે.

Options :

4410096808716. ✖ L

4410096808717. ✖ N

4410096808718. ✖ P

4410096808719. ✔ Q

Hints :

Q

Question Number : 10 Question Id : 4410091728266

Five children aged 6, 7, 8, 9, and 10 years sit in a row.

The 10-year-old sits at the left end.

The 6-year-old sits third from the left.

The 7-year-old is not at any extreme end.

The 9-year-old does not sit to the right of the 6-year-old.

The _____-year-old sits immediately to the left of the 8-year-old.

Options :

4410096815657. ✖ 6

4410096815658. ✔ 7

4410096815659. ✖ 8

4410096815660. ✖ 9

Hints :

7

Question Number : 10 Question Id : 4410091728266

6, 7, 8, 9 અને 10 વર્ષની ઉંમરના પાંચ બાળકો એક હરોળમાં બેસે છે.

10 વર્ષનું બાળક ડાબા છેડે બેસે છે.

6 વર્ષનું બાળક ડાબી બાજુથી ત્રીજા સ્થાને બેસે છે.

7 વર્ષનું બાળક કોઈ પણ અંતિમ છેડે બેસતું નથી.

9 વર્ષનું બાળક 6 વર્ષના બાળકની જમણી બાજુ બેસતું નથી.

તો કેટલા વર્ષનું બાળક 8 વર્ષના બાળકની તરત ડાબી બાજુએ બેસે છે?

Options :

4410096815657. ✖ 6

4410096815658. ✔ 7

4410096815659. ✖ 8

4410096815660. ✖ 9

Hints :

7

Question Number : 11 Question Id : 441009971705

Each letter in the word LAPTOP is changed to the letter immediately succeeding it in the English alphabetical order and then all the letters thus formed are arranged in the English alphabetical order. Which of the following letters will be third from the left in the new group of letters thus formed?

Options :

4410093839877. ✖ M

4410093839878. ✖ Q

4410093839879. ✔ P

4410093839880. ✖ U

Hints :

630680910562_Reviewed

The newly formed word is BMPQQU

Question Number : 11 Question Id : 441009971705

LAPTOP શબ્દમાં, દરેક અક્ષરને અંગ્રેજી મૂળાક્ષરોના ક્રમમાં તરત જ તેના પછી આવતા અક્ષર દ્વારા બદલવામાં આવે છે અને પછી આ રીતે બનેલા તમામ અક્ષરોને અંગ્રેજી મૂળાક્ષરોના ક્રમમાં ગોઠવવામાં આવે છે. આ રીતે બનેલા નવા અક્ષરોના સમૂહમાં નીચેનામાંથી કયો અક્ષર ડાબી બાજુથી ત્રીજો હશે?

Options :

4410093839877. ✖ M

4410093839878. ✖ Q

4410093839879. ✔ P

4410093839880. ✖ U

Hints :

630680910562_Reviewed

The newly formed word is BMPQQU

Question Number : 12 Question Id : 4410091474833

The position(s) of how many letters will remain unchanged if each letter in the word ENTROPY is arranged in alphabetical order?

Options :

4410095826893. ✖ None

4410095826894. ✖ One

4410095826895. ✖ Two

4410095826896. ✔ Three

Hints :

ENOPRTY

Question Number : 12 Question Id : 4410091474833

જો ENTROPY શબ્દના દરેક અક્ષરને અંગ્રેજી મૂળાક્ષરોના ક્રમ મુજબ ગોઠવવામાં આવે, તો કેટલા અક્ષરોનું સ્થાન અપરિવર્તિત (યથાવત) રહેશે?

Options :

4410095826893. ✖ એકપણ નહીં

4410095826894. ✖ એક

4410095826895. ✖ બે

4410095826896. ✔ ત્રણ

Hints :

ENOPRTY

Question Number : 13 Question Id : 441009929455

Each letter in the word SWINDLE is changed to the letter immediately preceding it in the English alphabetical order and then all the letters thus formed are arranged in the English alphabetical order. Which of the following letters will be fourth from the right in the new group of letters thus formed?

Options :

4410093671775. ✔ K

4410093671776. ✖ M

4410093671777. ✖ H

4410093671778. ✖ R

Hints :

SWINDLE

RVHMCKD

CDHKMRV

Question Number : 13 Question Id : 441009929455

SWINDLE શબ્દમાં, દરેક અક્ષરને અંગ્રેજી મૂળાક્ષરોના ક્રમમાં તેની તરત જ પહેલા આવતા અક્ષર દ્વારા બદલવામાં આવે છે અને પછી આ રીતે બનેલા તમામ અક્ષરોને અંગ્રેજી મૂળાક્ષરોના ક્રમમાં ગોઠવવામાં આવે છે. આ રીતે બનેલા નવા અક્ષરોના સમૂહમાં નીચેનામાંથી કયો અક્ષર જમણી બાજુથી ચોથો હશે?

Options :

4410093671775. ✔ K

4410093671776. ✖ M

4410093671777. ✖ H

4410093671778. ✖ R

Hints :

SWINDLE
RVHMCKD
CDHKMRV

Question Number : 14 Question Id : 441009880159

This question is based on the following four words.

TOO MOM SOM LOO

If K is added at the end of each word, which of these words will form meaningful English word(s)?

Options :

4410093474289. ✖ Only TOO

4410093474290. ✖ Both TOO and SOM

4410093474291. ✖ Only MOM

4410093474292. ✔ Both TOO and LOO

Hints :

630680334795_Scaled

IB2305-IBIC-0266_GMA_(10th)_RS_MM_58_Translation Template_P1E1

Took, mock and Look

Question Number : 14 Question Id : 441009880159

આ પ્રશ્ન નીચે આપેલા ચાર શબ્દો પર આધારિત છે.

TOO MOM SOM LOO

જો પ્રત્યેક શબ્દના અંતે K ઉમેરવામાં આવે, તો આમાંથી કયો/ કયા શબ્દ/ શબ્દો અર્થપૂર્ણ અંગ્રેજી શબ્દ બનશે?

Options :

4410093474289. ✖ માત્ર TOO

4410093474290. ✖ બંને TOO અને SOM

4410093474291. ✖ માત્ર MOM

4410093474292. ✔ બંને TOO અને LOO

Hints :

630680334795_Scaled

IB2305-IBIC-0266_GMA_(10th)_RS_MM_58_Translation Template_P1E1

Took, mock and Look

Question Number : 15 Question Id : 4410091734590

This question is based on the five, three-digit numbers given below.

(Left) 582, 634, 791, 248, 315 (Right)

(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if the second digit of the lowest number is subtracted from the second digit of the highest number?

Options :

4410096840443. ✖ 8

4410096840444. ✔ 5

4410096840445. ✖ 7

4410096840446. ✖ 6

Hints :

9 - 1 = 8

Question Number : 15 Question Id : 4410091734590

આ પ્રશ્ન નીચે આપેલી પાંચ, ત્રણ-અંકની સંખ્યાઓ પર આધારિત છે.

(ડાબી બાજુ) 582, 634, 791, 248, 315 (જમણી બાજુ)

(ઉદાહરણ: 697 – પહેલો અંક = 6, બીજો અંક = 9 અને ત્રીજો અંક = 7)

જો સૌથી નાની સંખ્યાના બીજા અંકને સૌથી મોટી સંખ્યાના બીજા અંકમાંથી બાદ કરવામાં આવે, તો પરિણામ શું આવશે?

Options :

4410096840443. ✖ 8

4410096840444. ✔ 5

4410096840445. ✖ 7

4410096840446. ✖ 6

Hints :

9 - 1 = 8

Question Number : 16 Question Id : 441009906891

Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) M F T # A Q L \$ % R Y P & Z K R A F ^ M P T Z Q Y L # & (Right)

How many such symbols are there each of which is immediately preceded by a letter and also immediately followed by another symbol?

Options :

4410093581372. ✓ 2

4410093581373. ✗ 1

4410093581374. ✗ 3

4410093581375. ✗ 0

Hints :

(Left) M F T # A Q L \$ % R Y P & Z K R A F ^ M P T Z Q Y L # & (Right)

How many such symbols are there each of which is immediately preceded by a letter and also immediately followed by another symbol?

Question Number : 16 Question Id : 441009906891

નીચે આપેલી અક્ષર અને પ્રતીક શ્રેણીનો સંદર્ભ લો અને તેની પછી આપેલા પ્રશ્નનો જવાબ આપો. ગણતરી ફક્ત ડાબી બાજુથી જમણી બાજુ કરવાની રહેશે.

(ડાબી બાજુ) M F T # A Q L \$ % R Y P & Z K R A F ^ M P T Z Q Y L # & (જમણી બાજુ)

એવા કેટલા પ્રતીકો છે કે જેમની તરત પહેલા એક અક્ષર આવે છે અને તરત પછી અન્ય પ્રતીક પણ આવે છે?

Options :

4410093581372. ✓ 2

4410093581373. ✗ 1

4410093581374. ✗ 3

4410093581375. ✗ 0

Hints :

(Left) M F T # A Q L \$ % R Y P & Z K R A F ^ M P T Z Q Y L # & (Right)

How many such symbols are there each of which is immediately preceded by a letter and also immediately followed by another symbol?

Question Number : 17 Question Id : 4410091341373

Refer to the following number and symbol series and answer the question (Counting to be done from left to right only). All digits are single numbers.

(Left) 1 2 3 4 ? 5 7 @ 8 ? £ 1 \$! 9 @ (Right)

How many such symbol(s) are there each of which is immediately preceded by a number and also immediately followed by a number?

Options :

4410095297526. ✗ One

4410095297527. ✓ Two

4410095297528. ✗ Three

4410095297529. ✗ Four

Hints :

1 2 3 4 ? 5 7 @ 8 ? £ 1 \$! 9 @

Question Number : 17 Question Id : 4410091341373

નીચે આપેલી સંખ્યા અને પ્રતીક શ્રેણીનો સંદર્ભ લો અને તેની નીચે આપેલા પ્રશ્નનો જવાબ આપો. (ગણતરી ફક્ત ડાબી બાજુથી જમણી બાજુ કરવાની છે.) બધી સંખ્યાઓ એક-અંકની સંખ્યાઓ છે.

(ડાબી બાજુ) 1 2 3 4 ? 5 7 @ 8 ? £ 1 \$! 9 @ (જમણી બાજુ)

એવા કેટલા પ્રતીક છે જે દરેકની તરત જ પહેલા એક સંખ્યા આવે છે અને તરત જ પછી પણ એક સંખ્યા આવે છે?

Options :

4410095297526. ✗ એક

4410095297527. ✓ બે

4410095297528. ✗ ત્રણ

4410095297529. ✗ ચાર

Hints :

1 2 3 4 ? 5 7 @ 8 ? £ 1 \$! 9 @

Question Number : 18 Question Id : 441009791744

Refer to the following letter and symbol series and answer the question. Counting is to be done from left to right only.

(Left) G Ω T \$ A & L M £ Z Q * W @ Y ^ B % E D # R (Right)

If all letters are dropped, which symbol will be fifth from the left?

Options :

4410093120975. ✗ &

4410093120976. ✓ *

4410093120977. ✖ ^

4410093120978. ✖ \$

Hints :

6306801241888_Reviewed

* is 5th left**Question Number : 18 Question Id : 441009791744**

નીચેની અક્ષર અને પ્રતીક શ્રેણીનો સંદર્ભ લો અને પ્રશ્નનો જવાબ આપો. ગણતરી માત્ર ડાબેથી જમણે જ કરવાની છે.

(ડાબે) G Ω T \$ A & L M £ Z Q * W @ Y ^ B % E D # R (જમણે)

જો બધા જ અક્ષરો કાઢી નાખવામાં આવે, તો કયું પ્રતીક ડાબેથી પાંચમું હશે?

Options :

4410093120975. ✖ &

4410093120976. ✔ *

4410093120977. ✖ ^

4410093120978. ✖ \$

Hints :

6306801241888_Reviewed

* is 5th left**Question Number : 19 Question Id : 4410091147779**

Refer to the following series and answer the question (All numbers are single digit numbers only. Counting to be done from left to right)

(Left) 8 3 5 6 1 2 7 9 2 4 8 7 3 2 4 7 9 1 5 6 2 (Right)

How many such odd digits are there each of which is immediately preceded by an odd digit and also immediately followed by an even digit?

Options :

4410094526072. ✖ One

4410094526073. ✖ Two

4410094526074. ✖ Three

4410094526075. ✔ Four

Hints :

(Left) 8 3 5 6 1 2 7 9 2 4 8 7 3 2 4 7 9 1 5 6 2 (Right)

How many such odd digits are there each of which is immediately preceded by an odd digit and also immediately followed by an even digit?

Question Number : 19 Question Id : 4410091147779

નીચે આપેલી શ્રેણીનો સંદર્ભ લો અને તેની નીચે આપેલા પ્રશ્નનો જવાબ આપો. (બધી સંખ્યાઓ ફક્ત એક અંકની સંખ્યાઓ છે. ગણતરી ફક્ત ડાબેથી જમણે કરવાની છે.)

(ડાબી બાજુ) 8 3 5 6 1 2 7 9 2 4 8 7 3 2 4 7 9 1 5 6 2 (જમણી બાજુ)

એવા કેટલા એકી અંકો છે, જે દરેકની તરત જ પહેલા એક એકી અંક આવે છે અને તરત જ પછી એક બેકી અંક પણ આવે છે?

Options :

4410094526072. ✖ એક

4410094526073. ✖ બે

4410094526074. ✖ ત્રણ

4410094526075. ✔ ચાર

Hints :

(Left) 8 3 5 6 1 2 7 9 2 4 8 7 3 2 4 7 9 1 5 6 2 (Right)

How many such odd digits are there each of which is immediately preceded by an odd digit and also immediately followed by an even digit?

Question Number : 20 Question Id : 4410091607706

In a certain code language, 'LONG' is coded as '7213' and 'GOWN' is coded as '5271'. What is the code for 'W' in the given code language?

Options :

4410096349788. ✔ 5

4410096349789. ✖ 3

4410096349790. ✖ 1

4410096349791. ✖ 2

Hints :

5

Question Number : 20 Question Id : 4410091607706

એક ચોક્કસ કૂટ ભાષામાં, 'LONG' ને '7213' અને 'GOWN' ને '5271' તરીકે કૂટબદ્ધ કરવામાં આવે છે. આપેલી કૂટ ભાષામાં 'W' માટેનો કૂટ (કોડ) શું છે?

Options :

4410096349788. ✓ 5

4410096349789. ✖ 3

4410096349790. ✖ 1

4410096349791. ✖ 2

Hints :

5

Question Number : 21 Question Id : 4410091607709

In a certain code language, 'LIND' is coded as '5697' and 'DINE' is coded as '1569'. What is the code for 'E' in the given code language?

Options :

4410096349800. ✖ 5

4410096349801. ✓ 1

4410096349802. ✖ 7

4410096349803. ✖ 6

Hints :

1

Question Number : 21 Question Id : 4410091607709

એક ચોક્કસ કૂટ ભાષામાં, 'LIND' ને '5697' અને 'DINE' ને '1569' તરીકે કૂટબદ્ધ કરવામાં આવે છે. આપેલી કૂટ ભાષામાં 'E' માટેનો કૂટ (કોડ) શું છે?

Options :

4410096349800. ✖ 5

4410096349801. ✓ 1

4410096349802. ✖ 7

4410096349803. ✖ 6

Hints :

1

Question Number : 22 Question Id : 441009765035

KR 42 is related to IP 40 in a certain way. In the same way, IT 52 is related to GR 50. To which of the following is HW 62 related, following the same logic?

Options :

4410093014133. ✖ LS 60

4410093014134. ✖ IX 40

4410093014135. ✓ FU 60

4410093014136. ✖ GV 50

Hints :

630680912103_Reviewed

HW 62 related to FU 60

HW (-2 EACH LETTER) = FU

62-2=60

Question Number : 22 Question Id : 441009765035

KR 42 એક ચોક્કસ રીતે IP 40 સાથે સંબંધિત છે. તેવી જ રીતે, IT 52 એ GR 50 સાથે સંબંધિત છે. તો, તે આ તર્કને અનુસરતા, નીચેનામાંથી કોની સાથે HW 62 સંબંધિત છે?

Options :

4410093014133. ✖ LS 60

4410093014134. ✖ IX 40

4410093014135. ✓ FU 60

4410093014136. ✖ GV 50

Hints :

630680912103_Reviewed

HW 62 related to FU 60

HW (-2 EACH LETTER) = FU

62-2=60

Question Number : 23 Question Id : 4410091333378

What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

$$4 \div 3 + 12 \times 4 - 3 = ?$$

Options :

4410095265128. ✓ 12

4410095265129. ✗ 10

4410095265130. ✗ 14

4410095265131. ✗ 19

Hints :

$$4 \div 3 + 12 \times 4 - 3 = ?$$

$$12 - 3 + 3 = 12$$

Question Number : 23 Question Id : 4410091333378

જો '+' અને '-' ની પરસ્પર અદલાબદલી કરવામાં આવે અને 'x' અને '÷' ની પણ પરસ્પર અદલાબદલી કરવામાં આવે, તો નીચેના સમીકરણમાં પ્રશ્નચિહ્ન '?' નાં સ્થાને શું આવશે?

$$4 \div 3 + 12 \times 4 - 3 = ?$$

Options :

4410095265128. ✓ 12

4410095265129. ✗ 10

4410095265130. ✗ 14

4410095265131. ✗ 19

Hints :

$$4 \div 3 + 12 \times 4 - 3 = ?$$

$$12 - 3 + 3 = 12$$

Question Number : 24 Question Id : 4410091333281

Each of the digits in the number 3812796 is arranged in ascending order from left to right. What will be the sum of the digits which are second from the left and second from the right in the new number thus formed?

Options :

4410095264744. ✗ 8

4410095264745. ✗ 9

4410095264746. ✓ 10

4410095264747. ✗ 11

Hints :

3812796

1236789

10

Question Number : 24 Question Id : 4410091333281

સંખ્યા 3812796ના દરેક અંકને ડાબી બાજુથી જમણી બાજુ ચડતા ક્રમમાં ગોઠવવામાં આવે છે. આ રીતે બનેલી નવી સંખ્યામાં ડાબી બાજુથી બીજા ક્રમે અને જમણી બાજુથી બીજા ક્રમે આવતા અંકોનો સરવાળો કેટલો થશે?

Options :

4410095264744. ✗ 8

4410095264745. ✗ 9

4410095264746. ✓ 10

4410095264747. ✗ 11

Hints :

3812796

1236789

10

Question Number : 25 Question Id : 4410091333374

What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

$$3 \div 2 + 15 \times 5 - 3 = ?$$

Options :

4410095265112. ✓ 6

4410095265113. ✗ 9

4410095265114. ✗ 12

4410095265115. ✖ 15

Hints :

$$3 \div 2 + 15 \times 5 - 3 = ?$$

$$6 - 3 + 3$$

$$= 6$$

Question Number : 25 Question Id : 4410091333374

જો '+' અને '-' ની પરસ્પર અદલાબદલી કરવામાં આવે અને 'x' અને '÷' ની પણ પરસ્પર અદલાબદલી કરવામાં આવે, તો નીચેના સમીકરણમાં પ્રશ્નચિહ્ન '?' નાં સ્થાને શું આવશે?

$$3 \div 2 + 15 \times 5 - 3 = ?$$

Options :

4410095265112. ✔ 6

4410095265113. ✖ 9

4410095265114. ✖ 12

4410095265115. ✖ 15

Hints :

$$3 \div 2 + 15 \times 5 - 3 = ?$$

$$6 - 3 + 3$$

$$= 6$$

Question Number : 26 Question Id : 441009883399

What should come in place of '?' in the given series?

14 23 19 28 24 33 ?

Options :

4410093487570. ✖ 37

4410093487571. ✔ 29

4410093487572. ✖ 42

4410093487573. ✖ 31

Hints :

Pattern: +9, -4, +9, -4,

Question Number : 26 Question Id : 441009883399

નીચે આપેલી શ્રેણીમાં પ્રશ્નચિહ્ન '?' ના સ્થાને શું આવવું જોઈએ?

14 23 19 28 24 33 ?

Options :

4410093487570. ✖ 37

4410093487571. ✔ 29

4410093487572. ✖ 42

4410093487573. ✖ 31

Hints :

Pattern: +9, -4, +9, -4,

Question Number : 27 Question Id : 441009883414

What should come in place of '?' in the given series?

5 9 18 34 59 95 ?

Options :

4410093487630. ✖ 114

4410093487631. ✖ 140

4410093487632. ✖ 110

4410093487633. ✔ 144

Hints :

Pattern: +4, +9, +16, +25, +36, +49

Question Number : 27 Question Id : 441009883414

નીચે આપેલી શ્રેણીમાં '?' ના સ્થાને શું આવવું જોઈએ?

5 9 18 34 59 95 ?

Options :

4410093487630. ✖ 114

4410093487631. ✖ 140

4410093487632. ✖ 110

4410093487633. ✔ 144

Hints :

Pattern: +4, +9, +16, +25, +36, +49

Question Number : 28 Question Id : 441009387357

Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(19, 7, 133)

(8, 16, 128)

Options :

4410091515042. ✔ (12, 11, 132)

4410091515043. ✖ (13, 8, 94)

4410091515044. ✖ (9, 13, 107)

4410091515045. ✖ (12, 10, 110)

Hints :

6306801004740_Reviewed

1st number * 2nd number = 3rd number

Question Number : 28 Question Id : 441009387357

નીચેના સમૂહોની સંખ્યાઓ જે રીતે સંબંધિત છે તેવી જ રીતે જેમાં સંખ્યાઓ સંબંધિત હોય તે સમૂહ પસંદ કરો.

(નોંધ: સંખ્યાઓને તેમના ઘટક અંકોમાં અલગ કર્યા વિના, પૂર્ણ સંખ્યાઓ પર ક્રિયા કરવી જોઈએ. દા.ત. 13 પરની ક્રિયાઓ જેવી કે 13 સાથે સરવાળો/બાદબાકી/ગુણાકાર, વગેરે પૂર્ણ 13 પર કરી શકાય છે. 13 ને 1 અને 3માં અલગ કરીને અને પછી 1 અને 3 પર ગાણિતિક ક્રિયા કરવાની છૂટ નથી.)

(19, 7, 133)

(8, 16, 128)

Options :

4410091515042. ✔ (12, 11, 132)

4410091515043. ✖ (13, 8, 94)

4410091515044. ✖ (9, 13, 107)

4410091515045. ✖ (12, 10, 110)

Hints :

6306801004740_Reviewed

1st number * 2nd number = 3rd number

Question Number : 29 Question Id : 441009387356

Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(280, 60, 220)

(245, 75, 170)

Options :

4410091515038. ✖ (265, 90, 185)

4410091515039. ✔ (300, 95, 205)

4410091515040. ✖ (230, 105, 135)

4410091515041. ✖ (210, 70, 130)

Hints :

6306801004744_Reviewed

1st number - 2nd number = 3rd number

Question Number : 29 Question Id : 441009387356

નીચેના સમૂહોની સંખ્યાઓ જે રીતે સંબંધિત છે તેવી જ રીતે જેમાં સંખ્યાઓ સંબંધિત હોય તે સમૂહ પસંદ કરો.

(નોંધ: સંખ્યાઓને તેમના ઘટક અંકોમાં અલગ કર્યા વિના, પૂર્ણ સંખ્યાઓ પર ક્રિયા કરવી જોઈએ. દા.ત. 13 પરની ક્રિયાઓ જેવી કે 13 સાથે સરવાળો/બાદબાકી/ગુણાકાર, વગેરે પૂર્ણ 13 પર કરી શકાય છે. 13 ને 1 અને 3માં અલગ કરીને અને પછી 1 અને 3 પર ગાણિતિક ક્રિયા કરવાની છૂટ નથી.)

(280, 60, 220)
(245, 75, 170)

Options :

4410091515038. ✖ (265, 90, 185)
4410091515039. ✔ (300, 95, 205)
4410091515040. ✖ (230, 105, 135)
4410091515041. ✖ (210, 70, 130)

Hints :

6306801004744_Reviewed
1st number - 2nd number = 3rd number

Question Number : 30 Question Id : 4410091323853

Given below are two sets of numbers. In each set of numbers, a certain mathematical operation on first number results in the second number. Similarly, certain mathematical operation on second number results in the third number and so on. Which of the given options follows the same set of operations as in question?

(NOTE – A two/three digit number cannot be broken into individual digits for operations e.g. if 37 is followed by 10, the operation cannot be 3+7 as a two digit number cannot be broken into individual digits)

12-60-62-248 ; 15-75-77-308

Options :

4410095226855. ✔ 11-55-57-228
4410095226856. ✖ 14-70-72-298
4410095226857. ✖ 17-85-87-350
4410095327532. ✖ 13-65-67-260

Hints :

a 5a + 2 4c

Question Number : 30 Question Id : 4410091323853

નીચે બે સંખ્યા ગણ આપેલા છે. દરેક સંખ્યા ગણમાં, પ્રથમ સંખ્યા પર અમુક ગાણિતિક ક્રિયાના પરિણામે બીજી સંખ્યા મળે છે. એ જ રીતે, બીજી સંખ્યા પર અમુક ગાણિતિક ક્રિયાના પરિણામે ત્રીજી સંખ્યા મળે છે અને આ પ્રમાણે ક્રિયા આગળ ચાલે છે. કયો વિકલ્પ એ સમાન ક્રિયાઓને અનુસરે છે જે પ્રશ્નમાં આપેલા સંખ્યા ગણો દ્વારા અનુસરવામાં આવી છે?

(નોંધ - બે / ત્રણ અંકની સંખ્યાને ક્રિયાઓ માટે વ્યક્તિગત અંકોમાં વિભાજિત કરી શકાશે નહિ, ઉદાહરણ તરીકે, જો 37 પછી 10 આવે, તો ક્રિયા 3 + 7 ન હોઈ શકે કારણ કે બે અંકની સંખ્યાને વ્યક્તિગત અંકોમાં વિભાજિત કરી શકાતી નથી.)

12-60-62-248 ; 15-75-77-308

Options :

4410095226855. ✔ 11-55-57-228
4410095226856. ✖ 14-70-72-298
4410095226857. ✖ 17-85-87-350
4410095327532. ✖ 13-65-67-260

Hints :

a 5a + 2 4c

Is Section Default? :

No

Question Number : 31 Question Id : 4410091738039

In a school, 24 boys scored an average of 68 marks, and 26 girls scored an average of 83 marks. What is the combined average of all students?

Options :

4410096853841. ✖ 73.4 marks
4410096853842. ✖ 74.6 marks
4410096853843. ✔ 75.8 marks
4410096853844. ✖ 76.2 marks

Hints :

Given: 24 boys scored average 68 marks; 26 girls scored average 83 marks
Total marks of boys = $24 \times 68 = 1,632$
Total marks of girls = $26 \times 83 = 2,158$
Total marks = $1,632 + 2,158 = 3,790$
Total students = $24 + 26 = 50$
Combined average = $3,790 \div 50 = 75.8$ marks

Question Number : 31 Question Id : 4410091738039

એક શાળામાં, 24 છોકરાઓએ સરેરાશ 68 ગુણ મેળવ્યા અને 26 છોકરીઓએ સરેરાશ 83 ગુણ મેળવ્યા. તમામ વિદ્યાર્થીઓની સંયુક્ત સરેરાશ કેટલી થાય?

Options :

4410096853841. ✖ 73.4 ગુણ
4410096853842. ✖ 74.6 ગુણ

4410096853843. ✓ 75.8 ગુણ

4410096853844. ✗ 76.2 ગુણ

Hints :

Given: 24 boys scored average 68 marks; 26 girls scored average 83 marks

Total marks of boys = $24 \times 68 = 1,632$

Total marks of girls = $26 \times 83 = 2,158$

Total marks = $1,632 + 2,158 = 3,790$

Total students = $24 + 26 = 50$

Combined average = $3,790 \div 50 = 75.8$ marks

Question Number : 32 Question Id : 4410091738041

A grocer mixes 18 kg of sugar costing ₹52 per kg with 22 kg of sugar costing ₹68 per kg. What is the cost per kg of the mixture?

Options :

4410096853849. ✗ ₹57.20/kg

4410096853850. ✗ ₹58.40/kg

4410096853851. ✗ ₹59.60/kg

4410096853852. ✓ ₹60.80/kg

Hints :

Given: 18 kg at ₹52/kg mixed with 22 kg at ₹68/kg

Cost of 18 kg sugar = $18 \times 52 = ₹936$

Cost of 22 kg sugar = $22 \times 68 = ₹1,496$

Total cost = $936 + 1,496 = ₹2,432$

Total quantity = $18 + 22 = 40$ kg

Cost per kg = $2,432 \div 40 = ₹60.80/\text{kg}$

Question Number : 32 Question Id : 4410091738041

એક કરિયાણાનો વેપારી ₹52 પ્રતિ kg કિંમતની 18 kg ખાંડને ₹68 પ્રતિ kg કિંમતની 22 kg ખાંડ સાથે મિશ્ર કરે છે. તો આ મિશ્રણની પ્રતિ kg કિંમત કેટલી હશે?

Options :

4410096853849. ✗ ₹57.20/kg

4410096853850. ✗ ₹58.40/kg

4410096853851. ✗ ₹59.60/kg

4410096853852. ✓ ₹60.80/kg

Hints :

Given: 18 kg at ₹52/kg mixed with 22 kg at ₹68/kg

Cost of 18 kg sugar = $18 \times 52 = ₹936$

Cost of 22 kg sugar = $22 \times 68 = ₹1,496$

Total cost = $936 + 1,496 = ₹2,432$

Total quantity = $18 + 22 = 40$ kg

Cost per kg = $2,432 \div 40 = ₹60.80/\text{kg}$

Question Number : 33 Question Id : 441009919969

If the 8-digit number 36904p79 is divisible by 11, then the minimum value of p is:

Options :

4410093633847. ✓ 8

4410093633848. ✗ 9

4410093633849. ✗ 6

4410093633850. ✗ 4

Hints :

6306801173854_Scaled

GQA_M_9 Oct 24_Sheet17_AT

Question Number : 33 Question Id : 441009919969

જો 8-અંકની સંખ્યા 36904p79 એ 11 વડે વિભાજ્ય હોય, તો p નું લઘુત્તમ મૂલ્ય શોધો.

Options :

4410093633847. ✓ 8

4410093633848. ✗ 9

4410093633849. ✗ 6

4410093633850. ✗ 4

Hints :

6306801173854_Scaled

GQA_M_9 Oct 24_Sheet17_AT

Question Number : 34 Question Id : 4410091738043

Which of the following pairs of numbers is coprime?

Options :

4410096853857. ✖ 21 and 35

4410096853858. ✔ 36 and 55

4410096853859. ✖ 28 and 42

4410096853860. ✖ 45 and 60

Hints :

a) $HCF(21, 35) = 7 \rightarrow$ Not coprime

b) $HCF(36, 55) = 1 \rightarrow$ Coprime

c) $HCF(28, 42) = 14 \rightarrow$ Not coprime

d) $HCF(45, 60) = 15 \rightarrow$ Not coprime

Answer: b) 36 and 55

Question Number : 34 Question Id : 4410091738043

સંખ્યાઓની નીચેનામાંથી કઈ જોડી સહઅવિભાજ્ય (coprime) છે?

Options :

4410096853857. ✖ 21 અને 35

4410096853858. ✔ 36 અને 55

4410096853859. ✖ 28 અને 42

4410096853860. ✖ 45 અને 60

Hints :

a) $HCF(21, 35) = 7 \rightarrow$ Not coprime

b) $HCF(36, 55) = 1 \rightarrow$ Coprime

c) $HCF(28, 42) = 14 \rightarrow$ Not coprime

d) $HCF(45, 60) = 15 \rightarrow$ Not coprime

Answer: b) 36 and 55

Question Number : 35 Question Id : 4410091048654

If 8 meters of cloth costs ₹320, what is the cost of 16 meters of the same cloth?

Options :

4410094143727. ✖ ₹620

4410094143728. ✔ ₹640

4410094143729. ✖ ₹660

4410094143730. ✖ ₹680

Hints :

Using unitary method:

Cost of 8 meters of cloth = ₹320

Cost of 1 meter of cloth = $₹320 \div 8 = ₹40$

Cost of 16 meters of cloth = $₹40 \times 16 = ₹640$

Question Number : 35 Question Id : 4410091048654

જો 8 મીટર કાપડની કિંમત ₹320 હોય, તો સમાન કાપડના 16 મીટર કાપડની કિંમત કેટલી થશે?

Options :

4410094143727. ✖ ₹620

4410094143728. ✔ ₹640

4410094143729. ✖ ₹660

4410094143730. ✖ ₹680

Hints :

Using unitary method:

Cost of 8 meters of cloth = ₹320

Cost of 1 meter of cloth = $₹320 \div 8 = ₹40$

Cost of 16 meters of cloth = $₹40 \times 16 = ₹640$

Question Number : 36 Question Id : 4410091002648

Convert $3.\overline{13}$ as a fraction.

Options :

4410093962320. ✔ $3\frac{2}{15}$

4410093962321. ✖ $3\frac{7}{15}$

4410093962322. ✖ $3\frac{4}{15}$

4410093962323. ✖ $3\frac{1}{15}$

Hints :

$3(2/15)$

Question Number : 36 Question Id : 4410091002648

3.13 ને અપૂર્ણાંકમાં રૂપાંતરિત કરો.

Options :

4410093962320. ✓ $3\frac{2}{15}$
 4410093962321. ✗ $3\frac{7}{15}$
 4410093962322. ✗ $3\frac{4}{15}$
 4410093962323. ✗ $3\frac{1}{15}$

Hints :

3(2/15)

Question Number : 37 Question Id : 441009677030

Three traffic lights blink at intervals of 24 seconds, 36 seconds, and 54 seconds. If they blink together at 9:00:00 a.m., when will they next blink together?

Options :

4410092662293. ✗ 9:03:12 a.m.
 4410092662294. ✓ 9:03:36 a.m.
 4410092662295. ✗ 9:04:18 a.m.
 4410092662296. ✗ 9:05:24 a.m.

Hints :

Find the LCM of 24, 36, and 54.

- Prime factors:

$$24 = 2^3 \times 3$$

$$36 = 2^2 \times 3^2$$

$$54 = 2 \times 3^3$$

- LCM = $2^3 \times 3^3 = 216$ seconds

Convert 216 seconds →

$$216 \div 60 = 3 \text{ minutes } 36 \text{ seconds}$$

So, next common blink = 9:00:00 + 3 min 36 sec = 9:03:36 a.m.

Question Number : 37 Question Id : 441009677030

ત્રણ ટ્રાફિક લાઈટ અનુક્રમે 24 સેકન્ડ, 36 સેકન્ડ અને 54 સેકન્ડના અંતરાલે ઝબકે છે. જો તેઓ સવારે 9:00:00 વાગ્યે એકસાથે ઝબકે, તો હવે પછી તેઓ ફરીથી ક્યારે એકસાથે ઝબકશે?

Options :

4410092662293. ✗ સવારે 9:03:12 વાગ્યે
 4410092662294. ✓ સવારે 9:03:36 વાગ્યે
 4410092662295. ✗ સવારે 9:04:18 વાગ્યે
 4410092662296. ✗ સવારે 9:05:24 વાગ્યે

Hints :

Find the LCM of 24, 36, and 54.

- Prime factors:

$$24 = 2^3 \times 3$$

$$36 = 2^2 \times 3^2$$

$$54 = 2 \times 3^3$$

- $\text{LCM} = 2^3 \times 3^3 = 216 \text{ seconds}$

Convert 216 seconds →

$$216 \div 60 = 3 \text{ minutes } 36 \text{ seconds}$$

So, next common blink = 9:00:00 + 3 min 36 sec = 9:03:36 a.m.

Question Number : 38 Question Id : 441009893315

If the HCF of x and 36 is 12, what could be the sum of all possible values of x given that x is less than 100?

Options :

4410093527330. ✓ 324

4410093527331. ✗ 432

4410093527332. ✗ 360

4410093527333. ✗ 424

Hints :

6306801276904 Reviewed

Required sum = 324

Question Number : 38 Question Id : 441009893315

જો x અને 36 નો ગુ.સા.અ. (HCF) એ 12 હોય અને x એ 100 થી નાનો હોય, તો x ના તમામ શક્ય મૂલ્યોનો સરવાળો કેટલો હોઈ શકે?

Options :

4410093527330. ✓ 324

4410093527331. ✗ 432

4410093527332. ✗ 360

4410093527333. ✗ 424

Hints :

6306801276904 Reviewed

Required sum = 324

Question Number : 39 Question Id : 441009893355

Find the value of $\left[\left(\frac{1}{2}\right)^{-3} + \left(\frac{1}{4}\right)^{-2} + \left(\frac{1}{3}\right)^{-3} - 6^2\right]$.

Options :

4410093527490. ✗ 12

4410093527491. ✓ 15

4410093527492. ✗ 17

4410093527493. ✗ 19

Hints :

6306801276181 Reviewed

equals 2 cubed plus 4 squared plus 3 cubed minus 6 squared

equals 8 plus 16 plus 27 minus 36

equals 51 minus 36

equals 15" class="Wirisformula" data-mathml="<math

xmlns="http://www.w3.org/1998/Math/MathML"><mo>[</mo><msup><mfenced><mfrac><mn>1</mn></mn></mfrac></mfenced><mrow><mo>-</mo><mn>3</mn></mrow><msup><mn>2</mn></mn></msup><mo>+</mo><msup><mn>4</mn></mn></msup><mo>+</mo><msup><mn>3</mn></mn></msup><mn>8</mn></mo><mo>+</mo><mn>16</mn></mo><mo>+</mo><mn>27</mn></mo>-</mo><mn>36</mn></mspace><mo>-</mo><mn>6</mn></msup><mn>2</mn></msup></math></p></div>

https://g26.tcsion.com/CAE/pdf-preview

18/99

Question Number : 39 Question Id : 441009893355

$$\left[\left(\frac{1}{2}\right)^{-3} + \left(\frac{1}{4}\right)^{-2} + \left(\frac{1}{3}\right)^{-3} - 6^2\right] \text{ નું મૂલ્ય શોધો.}$$

Options :

4410093527490. ✖ 12

4410093527491. ✔ 15

4410093527492. ✖ 17

4410093527493. ✖ 19

Hints :

6306801276181_Reviewed

equals 2 cubed plus 4 squared plus 3 cubed minus 6 squared

equals 8 plus 16 plus 27 minus 36

equals 51 minus 36

equals 15" class="Wirisformula" data-mathml="<math

xmlns="http://www.w3.org/1998/Math/MathML"><mo>[</mo><msup><mfenced><mfrac><mn>1</mn><mn>2</mn></mfrac></mfenced><mrow><mo>-</mo><mn>3</mn></mrow><msup><mo>+</mo><mn>4</mn></mn></msup><mo>+</mo><mn>3</mn></mn></msup><mo>-</mo><mn>6</mn></mn></msup><mo>]</mo></math>" data-bbox="64 267 967 335"/>

Question Number : 40 Question Id : 441009893483

Find the sum of the square of 79 and the square root of 117649.

Options :

4410093528002. ✖ 6484

4410093528003. ✖ 6574

4410093528004. ✔ 6584

4410093528005. ✖ 7584

Hints :

6306801272793_Reviewed

$79^2 = 6241$

$$\sqrt{117649} = 343$$

Sum = 6241 + 343

= 6584

Question Number : 40 Question Id : 441009893483

79ની વર્ગ અને 117649ની વર્ગમૂળનો સરવાળો શોધો.

Options :

4410093528002. ✖ 6484

4410093528003. ✖ 6574

4410093528004. ✔ 6584

4410093528005. ✖ 7584

Hints :

6306801272793_Reviewed

$79^2 = 6241$

$$\sqrt{117649} = 343$$

Sum = 6241 + 343

= 6584

Question Number : 41 Question Id : 441009893358

Find the value of $\{(2^{-4} + 4^{-2})^{-1}\}^2 - \{(3)^4 + 4^0 + 5^2\}$.

Options :

4410093527502. ✖ -24

4410093527503. ✖ -35

4410093527504. ✔ -43

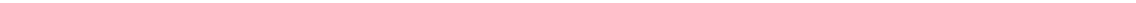
4410093527505. ✖ -51

Hints :

6306801276169_Reviewed

parenthesis to the power of negative 1 end exponent right curly bracket squared minus left curly bracket left parenthesis 3 right parenthesis to the power of 4 plus 4 to the power of 0 plus 5 squared right curly bracket
 equals left curly bracket left parenthesis 1 over 16 plus 1 over 16 right parenthesis to the power of negative 1 end exponent right curly bracket squared minus left curly bracket 3 to the power of 4 plus 4 to the power of 0 plus 5 squared right curly bracket
 equals left curly bracket left parenthesis 2 over 16 right parenthesis to the power of negative 1 end exponent right curly bracket squared minus left curly bracket 81 plus 1 plus 25 right curly bracket
 equals left curly bracket 8 squared right curly bracket minus left curly bracket 107 right curly bracket
 equals 64 minus 107

equals negative 43" class="Wirisformula" data-mathml="«math

[illegible]

src="data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAQsAAADGCAYAAAADfVVKWMAAAACXBIWXMAABM5AAATOQGPwIYBAAAABGJhU0UA
style="max-width: none;" />

Question Number : 41 Question Id : 441009893358

$\{(2^{-4} + 4^{-2})^{-1}\}^2 - \{(3)^4 + 4^0 + 5^2\}$ નું મૂલ્ય શોધો.

Options :

4410093527502.  -24

4410093527503.  -35

4410093527504. ✓ -43

4410093527505.  -51

Hints :

6306801276169_Reviewed

$$\frac{\left(\frac{\left(\frac{2}{16}\right)^{-1} \cdot 4^{-2} \cdot 4^4}{\left(\frac{3}{4}\right)^4 + 4^0 + 5^2}\right)^{-1} \cdot \left(\frac{1}{16} + \frac{1}{16}\right)^{-1} \cdot \left(\frac{3}{4}\right)^4 + 4^0 + 5^2}{8^2 \cdot 107} = 64 - 107$$

equals negative 43" class="Wirisformula" data-mathml="«math

$$\frac{m_1^2 + m_2^2 - m_3^2}{2m_1m_2} = \cos A$$

Question Number : 42 Question Id : 4410091738045

In an election with two candidates, 10% of the votes were invalid. The winning candidate received 58% of the valid votes and won by 7,200 votes. What was the total number of votes cast?

Options :

4410096853865.  46,000

4410096853866. 48,000

4410096853867. ✓ 50,000

4410096853868.  52,000

Hints :

50000

Question Number : 42 Question Id : 4410091738045

બે ઉમેદવારો વચ્ચેની એક ચૂંટણીમાં, 10% મતો અમાન્ય હતા. વિજેતા ઉમેદવારને માન્ય મતોના 58% મતો મળ્યા અને તે 7,200 મતોથી જીત્યો. ચૂંટણીમાં કુલ કેટલા મતો પડ્યા હતા?

Options :

4410096853865.  46,000

4410096853866.  48,000

4410096853867. ✓ 50,000

4410096853868.  52,000

Hints :

50000

Question Number : 43 Question Id : 441009277885

The present cost of a plot area is ₹1,16,282. After a year, its cost will increase to ₹1,64,659. The percentage increase (rounded off to the nearest integer) in the cost of the plot area is:

Options :

4410091079499. ✓ 42%
 4410091079500. ✗ 39%
 4410091079501. ✗ 49%
 4410091079502. ✗ 37%

Hints :

6306801334454_Scaled
 GQA_M_1 Dec 24_Sheet1_AT

Question Number : 43 Question Id : 441009277885

એક પ્લોટ એરિયાની વર્તમાન કિંમત ₹1,16,282 છે. એક વર્ષ પછી તેની કિંમતમાં વધારો થઈને તે ₹1,64,659 થાય છે. તો પ્લોટની કિંમતમાં થયેલ ટકાવારી વધારો (નજીકના પૂર્ણાંક સુધી આવરીને જવાબ આપો) શોધો.

Options :

4410091079499. ✓ 42%
 4410091079500. ✗ 39%
 4410091079501. ✗ 49%
 4410091079502. ✗ 37%

Hints :

6306801334454_Scaled
 GQA_M_1 Dec 24_Sheet1_AT

Question Number : 44 Question Id : 4410091738047

The cost price of 47 pants equals the selling price of 39 pants. What is his profit percentage (rounded off to two decimal places)?

Options :

4410096853873. ✗ 20.17%
 4410096853874. ✗ 20.29%
 4410096853875. ✗ 20.43%
 4410096853876. ✓ 20.51%

Hints :

Given: CP of 47 pants = SP of 39 pants
 Let CP of 1 pant = ₹1
 CP of 47 pants = ₹47 = SP of 39 pants
 SP of 1 pant = 47/39
 Profit per pant = 47/39 - 1 = 8/39
 Profit % = (8/39) × 100 = 20.51%

Question Number : 44 Question Id : 4410091738047

47 પેન્ટની પડતર કિંમત 39 પેન્ટની વેચાણ કિંમત જેટલી થાય છે. તો દુકાનદારના નફાની ટકાવારી કેટલી થાય? (જવાબને 2 દશાંશ સ્થાન સુધી આવરી લો.)

Options :

4410096853873. ✗ 20.17%
 4410096853874. ✗ 20.29%
 4410096853875. ✗ 20.43%
 4410096853876. ✓ 20.51%

Hints :

Given: CP of 47 pants = SP of 39 pants
 Let CP of 1 pant = ₹1
 CP of 47 pants = ₹47 = SP of 39 pants
 SP of 1 pant = 47/39
 Profit per pant = 47/39 - 1 = 8/39
 Profit % = (8/39) × 100 = 20.51%

Question Number : 45 Question Id : 441009574279

A man sold an article for ₹345, thereby gaining 15%. The cost of the article (in ₹) was:

Options :

4410092252236. ✓ 300
 4410092252237. ✗ 290
 4410092252238. ✗ 285
 4410092252239. ✗ 260

Hints :

300

Question Number : 45 Question Id : 441009574279

એક વ્યક્તિએ એક વસ્તુ રૂ345માં વેચી, જેમાં તેને 15% નફો થયો. આ વસ્તુની પડતર કિંમત (₹ માં) કેટલી હતી?

Options :

4410092252236. ✓ 300

4410092252237. ✗ 290

4410092252238. ✗ 285

4410092252239. ✗ 260

Hints :

300

Question Number : 46 Question Id : 4410091738163

A jacket is marked at ₹2,400. After giving a discount, it is sold for ₹1,776. What is the discount percentage?

Options :

4410096854313. ✗ 22%

4410096854314. ✗ 24%

4410096854315. ✓ 26%

4410096854316. ✗ 28%

Hints :

Given: Marked price = ₹2,400, Selling price = ₹1,776

Discount = 2,400 - 1,776 = ₹624

Discount % = $(624/2,400) \times 100 = 26\%$ **Question Number : 46 Question Id : 4410091738163**

એક જોકેટની છાપેલી કિંમત રૂ2,400 છે. વળતર (ડિસ્કાઉન્ટ) આપ્યા પછી, તે રૂ1,776 માં વેચવામાં આવે છે. તો વળતર (ડિસ્કાઉન્ટ)ની ટકાવારી કેટલી છે?

Options :

4410096854313. ✗ 22%

4410096854314. ✗ 24%

4410096854315. ✓ 26%

4410096854316. ✗ 28%

Hints :

Given: Marked price = ₹2,400, Selling price = ₹1,776

Discount = 2,400 - 1,776 = ₹624

Discount % = $(624/2,400) \times 100 = 26\%$ **Question Number : 47 Question Id : 4410091740339**

A shopkeeper offers a “Buy 8 bags, get 2 bags free” scheme, where each bag has the same price. Find the effective percentage discount offered per bag.

Options :

4410096862960. ✗ 10%

4410096862961. ✗ 15%

4410096862962. ✓ 20%

4410096862963. ✗ 22%

Hints :

When a customer pays for 8 bags, he receives 10 bags.

Effective price per bag:

 $(\text{Amount paid for 8 bags})/(\text{Number of bags received})=8/10=0.8$

So, the customer pays 80% of the actual cost.

Discount = $100\% - 80\% = 20\%$ **Question Number : 47 Question Id : 4410091740339**

એક દુકાનદાર '8 બેગ ખરીદો, 2 બેગ મફત મેળવો' એવી સ્કીમ આપે છે, જ્યાં દરેક બેગની કિંમત સમાન છે. તો પ્રતિ બેગ આપવામાં આવતા અસરકારક વળતર (ડિસ્કાઉન્ટ)ની ટકાવારી શીધો.

Options :

4410096862960. ✗ 10%

4410096862961. ✗ 15%

4410096862962. ✓ 20%

4410096862963. ✗ 22%

Hints :

When a customer pays for 8 bags, he receives 10 bags.

Effective price per bag:

 $(\text{Amount paid for 8 bags})/(\text{Number of bags received})=8/10=0.8$

So, the customer pays 80% of the actual cost.

Discount = $100\% - 80\% = 20\%$

Question Number : 48 Question Id : 4410091738171

Find the fourth proportional to 0.5, 0.8, and 3.5.

Options :

4410096854345. ✓ 5.6

4410096854346. ✗ 5.8

4410096854347. ✗ 5.9

4410096854348. ✗ 5.4

Hints :

Given: Find fourth proportional to 0.5, 0.8, and 3.5

Let fourth proportional = x

$0.5 : 0.8 = 3.5 : x$

$x = (0.8 \times 3.5) \div 0.5 = 2.8 \div 0.5 = 5.6$

Question Number : 48 Question Id : 4410091738171

0.5, 0.8 અને 3.5 નું ચોથું પ્રમાણપદ શોધો.

Options :

4410096854345. ✓ 5.6

4410096854346. ✗ 5.8

4410096854347. ✗ 5.9

4410096854348. ✗ 5.4

Hints :

Given: Find fourth proportional to 0.5, 0.8, and 3.5

Let fourth proportional = x

$0.5 : 0.8 = 3.5 : x$

$x = (0.8 \times 3.5) \div 0.5 = 2.8 \div 0.5 = 5.6$

Question Number : 49 Question Id : 4410091742304

In a class, the ratio of the number of boys to girls is 7:9. The total number of students in the class is 144. Find the number of boys in the class.

Options :

4410096870889. ✗ 56

4410096870890. ✓ 63

4410096870891. ✗ 70

4410096870892. ✗ 77

Hints :

Total ratio parts = $7+9=16$

Number of boys = $(7/16) \times 144 = 63$

Question Number : 49 Question Id : 4410091742304

એક વર્ગમાં છોકરાઓ અને છોકરીઓની સંખ્યાનો ગુણોત્તર 7:9 છે. તે વર્ગમાં વિદ્યાર્થીઓની કુલ સંખ્યા 144 છે. તો વર્ગમાં છોકરાઓની સંખ્યા શોધો.

Options :

4410096870889. ✗ 56

4410096870890. ✓ 63

4410096870891. ✗ 70

4410096870892. ✗ 77

Hints :

Total ratio parts = $7+9=16$

Number of boys = $(7/16) \times 144 = 63$

Question Number : 50 Question Id : 4410091740451

Three partners P, Q, and R invest ₹10,000, ₹15,000, and ₹20,000, respectively, in a business. P keeps his investment for 1 year, Q for 8 months, and R for 6 months. In what ratio should the annual profit be divided?

Options :

4410096863312. ✗ 5:6:3

4410096863313. ✗ 4:1:3

4410096863314. ✗ 1:2:1

4410096863315. ✓ 1:1:1

Hints :

$P \rightarrow 10000 \times 12 = 120000$

$Q \rightarrow 15000 \times 8 = 120000$

$R \rightarrow 20000 \times 6 = 120000$

Profit ratio = 1 : 1 : 1

Question Number : 50 Question Id : 4410091740451

ત્રણ ભાગીદારો P, Q અને R એક વ્યવસાયમાં અનુક્રમે ₹10,000, ₹15,000 અને ₹20,000નું રોકાણ કરે છે. P તેનું રોકાણ 1 વર્ષ માટે રાખે છે, Q એ 8 મહિના માટે રાખે છે અને R એ 6 મહિના માટે રાખે છે. તો વાર્ષિક નફાની વહેંચણી કયા ગુણોત્તરમાં થવી જોઈએ?

Options :

4410096863312. ✖ 5:6:3

4410096863313. ✖ 4:1:3

4410096863314. ✖ 1:2:1

4410096863315. ✔ 1:1:1

Hints :

P → 10000×12=120000

Q → 15000×8=120000

R → 20000×6=120000

Profit ratio = 1 : 1 : 1

Question Number : 51 Question Id : 4410091740465

Amit can complete a construction task in 15 days, while Binod can complete the same task in 20 days. If both work together from the beginning, in how many days will the work be completed?

Options :4410096863368. ✖ $7\frac{4}{7}$ 4410096863369. ✔ $8\frac{4}{7}$ 4410096863370. ✖ $7\frac{3}{7}$ 4410096863371. ✖ $8\frac{5}{9}$ **Hints :**

8(4/7)

Question Number : 51 Question Id : 4410091740465

અમિત એક બાંધકામનું કાર્ય 15 દિવસમાં પૂર્ણ કરી શકે છે, જ્યારે બિનોદ તે જ કાર્ય 20 દિવસમાં પૂર્ણ કરી શકે છે. જો બંને શરૂઆતથી જ સાથે કામ કરે, તો તે કાર્ય કેટલા દિવસમાં પૂર્ણ થશે?

Options :4410096863368. ✖ $7\frac{4}{7}$ 4410096863369. ✔ $8\frac{4}{7}$ 4410096863370. ✖ $7\frac{3}{7}$ 4410096863371. ✖ $8\frac{5}{9}$ **Hints :**

8(4/7)

Question Number : 52 Question Id : 4410091740457

Pipe P can fill a water tank in 12 hours and Pipe Q can fill it in 18 hours. A leakage in the tank can empty the full tank in 36 hours. If all three (Pipe P, Pipe Q, and the leakage) are opened together, how long will the tank take to fill completely?

Options :

4410096863336. ✖ 7 hours

4410096863337. ✖ 7.5 hours

4410096863338. ✖ 8 hours

4410096863339. ✔ 9 hours

Hints :Net rate = $\frac{1}{12} + \frac{1}{18} - \frac{1}{36}$ $= \frac{3}{36} + \frac{2}{36} - \frac{1}{36} = \frac{4}{36} = \frac{1}{9}$

Time = 9 hours

Question Number : 52 Question Id : 4410091740457

પાઈપ P એક પાણીની ટાંકીને 12 કલાકમાં ભરી શકે છે અને પાઈપ Q તેને 18 કલાકમાં ભરી શકે છે. ટાંકીમાં રહેલ એક લીકેજ સંપૂર્ણ ભરેલી ટાંકીને 36 કલાકમાં ખાલી કરી શકે છે. જો ત્રણેય (પાઈપ P, પાઈપ Q અને લીકેજ)ને એકસાથે ખોલવામાં આવે, તો ટાંકીને સંપૂર્ણપણે ભરાતા કેટલો સમય લાગશે?

Options :

4410096863336. ✖ 7 કલાક

4410096863337. ✖ 7.5 કલાક

4410096863338. ✖ 8 કલાક

4410096863339. ✓ 9 કલાક

Hints :

Net rate = $\frac{1}{12} + \frac{1}{18} - \frac{1}{36}$
 $= \frac{3}{36} + \frac{2}{36} - \frac{1}{36} = \frac{4}{36} = \frac{1}{9}$
 Time = 9 hours

Question Number : 53 Question Id : 4410091740515

A vehicle travels one-third of a journey at 30 km/h and the remaining two-thirds at 60 km/h. What is the average speed for the whole journey?

Options :

4410096863580. ✗ 55 km/h
 4410096863581. ✗ 40 km/h
 4410096863582. ✓ 45 km/h
 4410096863583. ✗ 50 km/h

Hints :

Let total distance = 3 km
 Total Time = $\frac{1}{30} + \frac{2}{60} = \frac{1}{30} + \frac{1}{30} = \frac{2}{30} = \frac{1}{15}$ hour
 Average speed = Total distance/Total Time
 $= \frac{3}{(1/15)} = 45$ km/h

Question Number : 53 Question Id : 4410091740515

એક વાહન તેની મુસાફરીનું એક-તૃતીયાંશ અંતર 30 km/h ની ઝડપે અને બાકીનું બે-તૃતીયાંશ અંતર 60 km/h ની ઝડપે કાપે છે. તો સમગ્ર મુસાફરી દરમિયાન વાહનની સરેરાશ ઝડપ કેટલી છે?

Options :

4410096863580. ✗ 55 km/h
 4410096863581. ✗ 40 km/h
 4410096863582. ✓ 45 km/h
 4410096863583. ✗ 50 km/h

Hints :

Let total distance = 3 km
 Total Time = $\frac{1}{30} + \frac{2}{60} = \frac{1}{30} + \frac{1}{30} = \frac{2}{30} = \frac{1}{15}$ hour
 Average speed = Total distance/Total Time
 $= \frac{3}{(1/15)} = 45$ km/h

Question Number : 54 Question Id : 4410091742381

A delivery van travels at 45 km/h for 2 hours and then at 60 km/h for another 1.5 hours. Find the total distance travelled.

Options :

4410096871197. ✗ 160 km
 4410096871198. ✓ 180 km
 4410096871199. ✗ 200 km
 4410096871200. ✗ 220 km

Hints :

Total distance travelled = $45 \times 2 + 60 \times 1.5 = 90 + 90 = 180$ km

Question Number : 54 Question Id : 4410091742381

એક ડિલિવરી વેન 2 કલાકમાં 45 km/hની ઝડપે અને પછી અન્ય 1.5 કલાકમાં 60 km/hની ઝડપે મુસાફરી કરે છે. વેન દ્વારા કાપવામાં આવેલું કુલ અંતર શોધો.

Options :

4410096871197. ✗ 160 km
 4410096871198. ✓ 180 km
 4410096871199. ✗ 200 km
 4410096871200. ✗ 220 km

Hints :

Total distance travelled = $45 \times 2 + 60 \times 1.5 = 90 + 90 = 180$ km

Question Number : 55 Question Id : 4410091740553

Two trains of lengths 120 m and 180 m move in opposite directions at speeds 36 km/h and 54 km/h, respectively. In how many seconds will they completely cross each other?

Options :

4410096863732. ✗ 10
 4410096863733. ✓ 12
 4410096863734. ✗ 14
 4410096863735. ✗ 16

Hints :

Relative speed = $36+54 = 90 \text{ km/h} = 25 \text{ m/s}$
 Total length = 300 m
 Time = $300/25=12\text{s}$

Question Number : 55 Question Id : 4410091740553

120 m અને 180 m લંબાઈ ધરાવતી બે ટ્રેનો અનુક્રમે 36 km/h અને 54 km/hની ઝડપે વિરુદ્ધ દિશામાં ગતિ કરી રહી છે. કેટલી સેકન્ડમાં તેઓ એકબીજાને સંપૂર્ણપણે પાર કરશે?

Options :

4410096863732. ✖ 10

4410096863733. ✔ 12

4410096863734. ✖ 14

4410096863735. ✖ 16

Hints :

Relative speed = $36+54 = 90 \text{ km/h} = 25 \text{ m/s}$
 Total length = 300 m
 Time = $300/25=12\text{s}$

Question Number : 56 Question Id : 4410091226925

If $x = 8 + \sqrt{9}$ and $y = 8 - \sqrt{9}$ then the value of $x^2 + y^2$ is:

Options :

4410094841183. ✔ 146

4410094841184. ✖ 112

4410094841185. ✖ 113

4410094841186. ✖ 99

Hints :

6306801223497_Sealed
 GQA_M_3 Nov 24_Sheet8_AT

Question Number : 56 Question Id : 4410091226925

જો $x = 8 + \sqrt{9}$ અને $y = 8 - \sqrt{9}$ હોય, તો $x^2 + y^2$ નું મૂલ્ય શોધો.

Options :

4410094841183. ✔ 146

4410094841184. ✖ 112

4410094841185. ✖ 113

4410094841186. ✖ 99

Hints :

6306801223497_Sealed
 GQA_M_3 Nov 24_Sheet8_AT

Question Number : 57 Question Id : 441009903092

If $x + y = 6$, $y + z = 8$ and $z + x = 10$, then one-third of the sum of x , y and z will be:

Options :

4410093566182. ✖ 2

4410093566183. ✔ 4

4410093566184. ✖ 6

4410093566185. ✖ 8

Hints :

$x + y = 6$
 $y + z = 8$
 $z + x = 10$
 Adding,
 $x + y + y + z + z + x = 6 + 8 + 10 = 24$
 $x + y + z = 12$
 One-third of $(x + y + z) = 1/3$ of $12 = 4$

Question Number : 57 Question Id : 441009903092

જો $x + y = 6$, $y + z = 8$ અને $z + x = 10$ હોય, તો x , y અને z ના સરવાળાનું એક-તૃતીયાંશ કેટલું હશે?

Options :

4410093566182. ✖ 2

4410093566183. ✔ 4

4410093566184. ✖ 6

4410093566185. ✖ 8

Hints :

$$x + y = 6$$

$$y + z = 8$$

$$z + x = 10$$

Adding,

$$x + y + y + z + z + x = 6 + 8 + 10 = 24$$

$$x + y + z = 12$$

$$\text{One-third of } (x + y + z) = 1/3 \text{ of } 12 = 4$$

Question Number : 58 Question Id : 4410091221695

The cost of 3 pens and 4 notebooks is ₹54 and the cost of 5 pens and 9 notebooks ₹118. The cost of 6 pens and 6 notebooks is:

Options :

4410094820203. ✓ ₹84

4410094820204. ✗ ₹89

4410094820205. ✗ ₹81

4410094820206. ✗ ₹88

Hints :

a

Question Number : 58 Question Id : 4410091221695

3 પેન અને 4 નોટબુકની કિંમત ₹54 છે અને 5 પેન અને 9 નોટબુકની કિંમત ₹118 છે. તો 6 પેન અને 6 નોટબુકની કિંમત કેટલી થશે?

Options :

4410094820203. ✓ ₹84

4410094820204. ✗ ₹89

4410094820205. ✗ ₹81

4410094820206. ✗ ₹88

Hints :

a

Question Number : 59 Question Id : 4410091260656

Find the 10th term of the AP: 2, 5, 8, ...

Options :

4410094975480. ✗ 26

4410094975481. ✓ 29

4410094975482. ✗ 32

4410094975483. ✗ 34

Hints :

$$a + (n - 1) d = 2 + (9 \times 3) = 29$$

Question Number : 59 Question Id : 4410091260656

સમાંતર શ્રેણી : 2, 5, 8, ... નું 10મું પદ શોધો.

Options :

4410094975480. ✗ 26

4410094975481. ✓ 29

4410094975482. ✗ 32

4410094975483. ✗ 34

Hints :

$$a + (n - 1) d = 2 + (9 \times 3) = 29$$

Question Number : 60 Question Id : 4410091246103

Find the 7th term of the GP: 2, 6, 18, ...

Options :

4410094917690. ✓ 1458

4410094917691. ✗ 2187

4410094917692. ✗ 972

4410094917693. ✗ 1818

Hints :

First term $a = 2$, common ratio $r = 6/2 = 3$.

n -th term $= a \times r^{(n-1)}$.

$$7\text{th term} = 2 \times 3^6 = 2 \times 729 = 1458.$$

Question Number : 60 Question Id : 4410091246103

સમગુણોત્તર શ્રેણી: 2, 6, 18, ... નું 7મું પદ શોધો.

Options :

4410094917690. ✓ 1458
 4410094917691. ✗ 2187
 4410094917692. ✗ 972
 4410094917693. ✗ 1818

Hints :

First term $a = 2$, common ratio $r = 6/2 = 3$.
 n -th term $= a \times r^{(n-1)}$.
 7th term $= 2 \times 3^6 = 2 \times 729 = 1458$.

Is Section Default? :

No

Question Number : 61 Question Id : 441009393596

What is abolished under Article 17 of the Constitution of India?

Options :

4410091539877. ✗ Slavery
 4410091539878. ✗ Child labor
 4410091539879. ✓ Untouchability
 4410091539880. ✗ Discrimination in public employment

Hints :

6306801365112_Reviewed
<https://www.constitutionofindia.net/articles/article-17-abolition-of-untouchability/#::~:~:text=Article%2017%2C%20Constitution%20of%20India,punishable%20in%20accordance%20with%20law.>

Question Number : 61 Question Id : 441009393596

ભારતના બંધારણના અનુચ્છેદ 17 હેઠળ શું નાબૂદ કરવામાં આવ્યું છે?

Options :

4410091539877. ✗ ગુલામી
 4410091539878. ✗ બાળ મજૂરી
 4410091539879. ✓ અસ્પૃશ્યતા
 4410091539880. ✗ જાહેર રોજગારીમાં ભેદભાવ

Hints :

6306801365112_Reviewed
<https://www.constitutionofindia.net/articles/article-17-abolition-of-untouchability/#::~:~:text=Article%2017%2C%20Constitution%20of%20India,punishable%20in%20accordance%20with%20law.>

Question Number : 62 Question Id : 4410091398344

Who described the Directive Principles of State Policy as the “Novel Feature” of the Indian Constitution?

Options :

4410095523132. ✗ Jawaharlal Nehru
 4410095523133. ✗ K.M. Munshi
 4410095523134. ✗ Granville Austin
 4410095523135. ✓ Dr. B.R. Ambedkar

Hints :

https://nios.ac.in/media/documents/SrSec338New/338_Introduction_To_Law_Eng/338_Introduction_To_Law_Eng_L20.pdf

Question Number : 62 Question Id : 4410091398344

રાજ્યનીતિના માર્ગદર્શક સિદ્ધાંતોને ભારતીય બંધારણની "અનન્ય વિશેષતા (Novel Feature)" તરીકે કોણે વર્ણવ્યું હતું?

Options :

4410095523132. ✗ જવાહરલાલ નહેરુ
 4410095523133. ✗ કે. એમ. મુન્શી
 4410095523134. ✗ ગ્રેનવિલ ઓસ્ટિન
 4410095523135. ✓ ડૉ. બી. આર. આંબેડકર

Hints :

https://nios.ac.in/media/documents/SrSec338New/338_Introduction_To_Law_Eng/338_Introduction_To_Law_Eng_L20.pdf

Question Number : 63 Question Id : 4410091444242

Article 324 of the Indian Constitution relates to which of the following provisions?

Options :

4410095705585. ✖ Union Public Service Commission

4410095705586. ✔ Election Commission of India

4410095705587. ✖ Composition of Panchayats

4410095705588. ✖ Supreme Court of India

Hints :

Page217https://cdnbbsr.s3waas.gov.in/s380537a945c7aaa788ccfcd1b99b5d8f/uploads/2024/07/20240716890312078.pdf

Question Number : 63 Question Id : 4410091444242

ભારતીય બંધારણનો અનુચ્છેદ 324 નીચેનામાંથી કઈ જોગવાઈ સાથે સંબંધિત છે?

Options :

4410095705585. ✖

કેન્દ્રીય જાહેર સેવા આયોગ

4410095705586. ✔ ભારતનું ચૂંટણી પંચ

4410095705587. ✖ પંચાયતોની રચના

4410095705588. ✖ ભારતની સર્વોચ્ચ અદાલત

Hints :

Page217https://cdnbbsr.s3waas.gov.in/s380537a945c7aaa788ccfcd1b99b5d8f/uploads/2024/07/20240716890312078.pdf

Question Number : 64 Question Id : 4410091236468

Which Article of the Constitution deals with National Emergency in India?

Options :

4410094879449. ✖ Article 350

4410094879450. ✔ Article 352

4410094879451. ✖ Article 354

4410094879452. ✖ Article 356

Hints :

Laxmikanth, M. (2020). Indian polity (7th ed.). McGraw Hill Education.

Question Number : 64 Question Id : 4410091236468

ભારતીય બંધારણનો કયો અનુચ્છેદ રાષ્ટ્રીય કટોકટી (National Emergency) સાથે સંબંધિત છે?

Options :

4410094879449. ✖ અનુચ્છેદ 350

4410094879450. ✔ અનુચ્છેદ 352

4410094879451. ✖ અનુચ્છેદ 354

4410094879452. ✖ અનુચ્છેદ 356

Hints :

Laxmikanth, M. (2020). Indian polity (7th ed.). McGraw Hill Education.

Question Number : 65 Question Id : 44100968745

How long is the term of a Rajya Sabha member?

Options :

441009273611. ✖ 3 years

441009273612. ✖ 5 years

441009273613. ✔ 6 years

441009273614. ✖ 7 years

Hints :

Rajya Sabha members serve for a term of six years, with one-third of the members retiring every two years, ensuring continuity in the House .
https://ncert.nic.in/textbook/pdf/keps205.pdf (Page 106)

Question Number : 65 Question Id : 44100968745

રાજ્યસભાના સભ્યનો કાર્યકાળ કેટલો લાંબો હોય છે?

Options :

441009273611. ✖ 3 વર્ષ

441009273612. ✖ 5 વર્ષ

441009273613. ✔ 6 વર્ષ

441009273614. ✖ 7 વર્ષ

Hints :

Rajya Sabha members serve for a term of six years, with one-third of the members retiring every two years, ensuring continuity in the House .
https://ncert.nic.in/textbook/pdf/keps205.pdf (Page 106)

Question Number : 66 Question Id : 441009665219

When did the Government of India abrogated Article 370 from Indian constitution?

Options :

4410092614911. ✖ 2015
 4410092614912. ✖ 2018
 4410092614913. ✖ 2021
 4410092614914. ✔ 2019

Hints :

<https://www.britannica.com/topic/Article-370-of-the-Constitution-of-India>

Question Number : 66 Question Id : 441009665219

ભારત સરકારે ભારતીય બંધારણમાંથી અનુચ્છેદ 370 ની નાબૂદી ક્યારે કરી હતી?

Options :

4410092614911. ✖ 2015
 4410092614912. ✖ 2018
 4410092614913. ✖ 2021
 4410092614914. ✔ 2019

Hints :

<https://www.britannica.com/topic/Article-370-of-the-Constitution-of-India>

Question Number : 67 Question Id : 441009685980

Which Article of the Indian Constitution addresses inconsistencies between laws made by Parliament and those made by State Legislatures?

Options :

4410092697876. ✖ Article 145
 4410092697877. ✔ Article 254
 4410092697878. ✖ Article 306
 4410092697879. ✖ Article 395

Hints :

www.constitutionofindia.net/articles/article-254-inconsistency-between-laws-made-by-parliament-and-laws-made-by-the-legislatures-of-states/

Question Number : 67 Question Id : 441009685980

ભારતીય બંધારણનો કયો અનુચ્છેદ, સંસદ દ્વારા બનાવવામાં આવેલા કાયદાઓ અને રાજ્ય વિધાનમંડળો દ્વારા બનાવવામાં આવેલા કાયદાઓ વચ્ચેની અસંગતતાઓને સંબોધિત કરે છે?

Options :

4410092697876. ✖ અનુચ્છેદ 145
 4410092697877. ✔ અનુચ્છેદ 254
 4410092697878. ✖ અનુચ્છેદ 306
 4410092697879. ✖ અનુચ્છેદ 395

Hints :

www.constitutionofindia.net/articles/article-254-inconsistency-between-laws-made-by-parliament-and-laws-made-by-the-legislatures-of-states/

Question Number : 68 Question Id : 44100985190

The Supreme Court of India is the guardian of which of the following regarding Indian Constitution?

Options :

441009338468. ✖ Directive Principles of State Policy
 441009338469. ✔ Fundamental Rights
 441009338470. ✖ Fundamental Duties
 441009338471. ✖ Preamble

Hints :

<https://www.sci.gov.in/jurisdiction/>

Question Number : 68 Question Id : 44100985190

ભારતીય બંધારણના સંદર્ભમાં, સર્વોચ્ચ અદાલત નીચેનામાંથી કોના સંરક્ષક (Guardian) તરીકે કાર્ય કરે છે?

Options :

441009338468. ✖ રાજ્યનીતિના માર્ગદર્શક સિદ્ધાંતો
 441009338469. ✔ મૂળભૂત અધિકારો
 441009338470. ✖ મૂળભૂત ફરજો
 441009338471. ✖ આમુખ

Hints :

<https://www.sci.gov.in/jurisdiction/>

Question Number : 69 Question Id : 4410091288726

In the Indian hierarchy of subordinate civil courts, decisions of which of the following courts are final and not subject to appeal?

Options :

4410095086774. ✖ Court of the District Judge
 4410095086775. ✖ Court of Sub-Judge
 4410095086776. ✔ Court of Small Causes
 4410095086777. ✖ Family Court

Hints :

In India, Small Causes Courts decide cases involving petty amounts, and their judgments are final — no appeal is allowed against them.
<https://nios.ac.in/media/documents/srsec317newE/317EL15.pdf> (Pg 161)

Question Number : 69 Question Id : 4410091288726

તાબાની દીવાની અદાલતોના ભારતીય અધિક્રમમાં, નીચેની કઈ અદાલતના નિર્ણયો અંતિમ છે અને અપીલને આધિન નથી?

Options :

4410095086774. ✖ જિલ્લા ન્યાયાધીશની અદાલત
 4410095086775. ✖ પેટા-ન્યાયાધીશની અદાલત (Court of Sub-Judge)
 4410095086776. ✔ લઘુવાદ અદાલત (Court of Small Causes)
 4410095086777. ✖ પારિવારિક અદાલત

Hints :

In India, Small Causes Courts decide cases involving petty amounts, and their judgments are final — no appeal is allowed against them.
<https://nios.ac.in/media/documents/srsec317newE/317EL15.pdf> (Pg 161)

Question Number : 70 Question Id : 4410091471984

Which of the following Articles of the Indian Constitution empowers the High Courts to exercise the power of judicial review?

Options :

4410095815823. ✖ Articles 221
 4410095815824. ✖ Articles 214
 4410095815825. ✔ Articles 226
 4410095815826. ✖ Articles 233

Hints :

Page135 <https://cdnbbsr.s3waas.gov.in/s380537a945c7aaa788ccfd1b99b5d8f/uploads/2024/07/20240716890312078.pdf>
<https://www.seconline.com/blog/post/2025/04/10/high-courts-territorial-jurisdiction-under-articles-226-and-227-over-orders-passed-by-appellate-tribunals-a-need-for-course-correction/>

Question Number : 70 Question Id : 4410091471984

ભારતીય બંધારણની નીચેનામાંથી કયો અનુચ્છેદ ઉચ્ચ ન્યાયાલયોને ન્યાયિક પુનરાવલોકન (judicial review) કરવાની સત્તા આપે છે?

Options :

4410095815823. ✖ અનુચ્છેદ 221
 4410095815824. ✖ અનુચ્છેદ 214
 4410095815825. ✔ અનુચ્છેદ 226
 4410095815826. ✖ અનુચ્છેદ 233

Hints :

Page135 <https://cdnbbsr.s3waas.gov.in/s380537a945c7aaa788ccfd1b99b5d8f/uploads/2024/07/20240716890312078.pdf>
<https://www.seconline.com/blog/post/2025/04/10/high-courts-territorial-jurisdiction-under-articles-226-and-227-over-orders-passed-by-appellate-tribunals-a-need-for-course-correction/>

Is Section Default? :

No

Question Number : 71 Question Id : 4410091303891

Which country developed and claimed 100 percent efficacy and safety in clinical trials of its mRNA-based vaccine 'Enteromix' for the treatment of cancer?

Options :

4410095147504. ✖ USA
 4410095147505. ✔ Russia
 4410095147506. ✖ Japan
 4410095147507. ✖ France

Hints :

<https://www.ndtv.com/health/russias-enteromix-cancer-vaccine-shows-100-efficacy-in-early-trials-9235033>

Question Number : 71 Question Id : 4410091303891

કયા દેશે કેન્સરની સારવાર માટે તેની mRNA-આધારિત રસી 'એન્ટરોમિક્સ (Enteromix)' વિકસિત કરી અને તેના ક્લિનિકલ ટ્રાયલ્સમાં 100 ટકા અસરકારકતા (efficacy) અને સલામતી અંગે દાવો કર્યો?

Options :

4410095147504. ✖ USA
 4410095147505. ✔ રશિયા
 4410095147506. ✖ જાપાન
 4410095147507. ✖ ફ્રાન્સ

Hints :

<https://www.ndtv.com/health/russias-enteromix-cancer-vaccine-shows-100-efficacy-in-early-trials-9235033>

Question Number : 72 Question Id : 4410091433540

In which of the following countries was the ICC Women's Cricket World Cup 2025 held?

Options :

4410095662709. ✖ India and Australia
 4410095662710. ✖ India and England
 4410095662711. ✔ India and Sri Lanka
 4410095662712. ✖ India and Bangladesh

Hints :

<https://www.olympics.com/en/news/icc-women-odi-cricket-world-cup-2025-schedule-fixtures-match-list>

Question Number : 72 Question Id : 4410091433540

નીચેનામાંથી કયા દેશમાં ICC મહિલા ક્રિકેટ વર્લ્ડ કપ 2025 યોજાયો હતો?

Options :

4410095662709. ✖ ભારત અને ઓસ્ટ્રેલિયા
 4410095662710. ✖ ભારત અને ઇંગ્લેન્ડ
 4410095662711. ✔ ભારત અને શ્રીલંકા
 4410095662712. ✖ ભારત અને બાંગ્લાદેશ

Hints :

<https://www.olympics.com/en/news/icc-women-odi-cricket-world-cup-2025-schedule-fixtures-match-list>

Question Number : 73 Question Id : 4410091454165

Which Indian state hosted the International AAINBALL Conference 2025?

Options :

4410095744973. ✔ Gujarat
 4410095744974. ✖ Maharashtra
 4410095744975. ✖ Kerala
 4410095744976. ✖ Rajasthan

Hints :

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2184108>

Question Number : 73 Question Id : 4410091454165

કયા ભારતીય રાજ્યએ આંતરરાષ્ટ્રીય AAINBALL કોન્ફરન્સ 2025 નું આયોજન કર્યું હતું?

Options :

4410095744973. ✔ ગુજરાત
 4410095744974. ✖ મહારાષ્ટ્ર
 4410095744975. ✖ કેરળ
 4410095744976. ✖ રાજસ્થાન

Hints :

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2184108>

Question Number : 74 Question Id : 441009925992

In how many phases has the Government of India scheduled the Population Census- 2027 to be conducted?

Options :

4410093658036. ✔ Two
 4410093658037. ✖ Three
 4410093658038. ✖ Four
 4410093658039. ✖ Five

Hints :

It has been decided to conduct Population Census-2027 in two phases along with enumeration of castes. The reference date for Population Census - 2027 will be 00:00 hours of the first day of March, 2027. For the Union Territory of Ladakh and the non-synchronous snow-bound areas of the UT of Jammu and Kashmir and

States of Himachal Pradesh and Uttarakhand, the reference date will be 00.00 hours of the first day of October, 2026.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2133845>

Question Number : 74 Question Id : 441009925992

ભારત સરકારે વસ્તી ગણતરી- 2027 કેટલા તબક્કામાં યોજવાનું નિર્ધારિત કર્યું છે?

Options :

4410093658036. ✓ બે

4410093658037. ✗ ત્રણ

4410093658038. ✗ ચાર

4410093658039. ✗ પાંચ

Hints :

It has been decided to conduct Population Census-2027 in two phases along with enumeration of castes. The reference date for Population Census - 2027 will be 00:00 hours of the first day of March, 2027. For the Union Territory of Ladakh and the non-synchronous snow-bound areas of the UT of Jammu and Kashmir and States of Himachal Pradesh and Uttarakhand, the reference date will be 00.00 hours of the first day of October, 2026.

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2133845>

Question Number : 75 Question Id : 4410091296441

The Cauvery conflict between which two states resurfaces whenever there's a shortfall in the Southwest Monsoon in the region?

Options :

4410095117882. ✗ Telangana and Karnataka

4410095117883. ✗ Andhra Pradesh and Karnataka

4410095117884. ✓ Tamil Nadu and Karnataka

4410095117885. ✗ Tamil Nadu and Kerala

Hints :

https://economictimes.indiatimes.com/news/how-to/explained-what-is-the-cauvery-water-dispute-why-is-karnataka-not-giving-water-to-tamil-nadu/articleshow/103954029.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Question Number : 75 Question Id : 4410091296441

કયા બે રાજ્યો વચ્ચે કાવેરી સંઘર્ષ (Cauvery conflict) ત્યારે ફરી ઉદભવે છે, જ્યારે પ્રદેશમાં દક્ષિણ-પશ્ચિમ યોમાસામાં ઘટાડો થાય છે?

Options :

4410095117882. ✗ તેલંગાણા અને કર્ણાટક

4410095117883. ✗ આંધ્ર પ્રદેશ અને કર્ણાટક

4410095117884. ✓ તમિલનાડુ અને કર્ણાટક

4410095117885. ✗ તમિલનાડુ અને કેરળ

Hints :

https://economictimes.indiatimes.com/news/how-to/explained-what-is-the-cauvery-water-dispute-why-is-karnataka-not-giving-water-to-tamil-nadu/articleshow/103954029.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Question Number : 76 Question Id : 4410091339399

In the 2025 Sustainable Development Report, what was India's global rank in SDG performance?

Options :

4410095289683. ✗ 89th

4410095289684. ✓ 99th

4410095289685. ✗ 109th

4410095289686. ✗ 119th

Hints :

https://indianexpress.com/article/trending/top-10-listing/sustainable-development-goals-index-2025-10-best-and-worst-countries-10089326/?utm_source=chatgpt.com

Question Number : 76 Question Id : 4410091339399

2025 નાં સસ્ટેનેબલ ડેવલપમેન્ટ રિપોર્ટમાં, SDG પરફોર્મન્સમાં ભારતનો વૈશ્વિક ક્રમ (global rank) કયો રહ્યો હતો?

Options :

4410095289683. ✗ 89મો

4410095289684. ✓ 99મો

4410095289685. ✗ 109મો

4410095289686. ✗ 119મો

Options :

4410095663656. ✖ સુરત
 4410095663657. ✖ ગાંધીનગર
 4410095663658. ✔ અમદાવાદ
 4410095663659. ✖ વડોદરા

Hints :

<https://indianexpress.com/article/cities/ahmedabad/gujarat-cm-inaugurates-asian-aquatics-championship-welcomes-athletes-from-29-countries-to-ahmedabad-10277172/>

Question Number : 80 Question Id : 4410091450198

In August 2025, which of the following states received the National Organ and Tissue Transplant Organization (NOTTO) award for Promotion of Organ Donation?

Options :

4410095729310. ✔ Gujarat
 4410095729311. ✖ Odisha
 4410095729312. ✖ Haryana
 4410095729313. ✖ Kerala

Hints :

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2151756>

Question Number : 80 Question Id : 4410091450198

ઓગસ્ટ 2025માં, નીચેનામાંથી કયા રાજ્યને અંગદાનને પ્રોત્સાહન આપવા બદલ નેશનલ ઓર્ગન એન્ડ ટિસ્યુ ટ્રાન્સપ્લાન્ટ ઓર્ગનાઇઝેશન (NOTTO) પુરસ્કાર મળ્યો હતો?

Options :

4410095729310. ✔ ગુજરાત
 4410095729311. ✖ ઓડિશા
 4410095729312. ✖ હરિયાણા
 4410095729313. ✖ કેરળ

Hints :

<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2151756>

Is Section Default? :

No

Question Id : 4410091331977 Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix**Question Numbers : (81 to 85)**

નીચે આપેલા ફકરાના આધારે પ્રશ્નોના જવાબ આપો.

આપણી પાસે બુદ્ધિની અને જ્ઞાનની આટલી બધી શક્તિઓ છે, છતાં જીવનનાં રહસ્યો વિશે આપણે ઓછું જાણીએ છીએ. એની ગુપ્ત પ્રક્રિયાઓ વિશે તો માત્ર કલ્પના જ કરી શકીએ છીએ, પણ જીવનનું જે સૌંદર્ય છે તેનો આનંદ તો આપણે માણી શકીએ છીએ. આપણે ભલે દુર્બળ દેવ જેવું સર્જનકાર્ય પણ કરી શકીએ છીએ. આપણે ભલે દુર્બળ અને ભૂલો કરતાં મનુષ્યો હોઈએ, આપણો જીવનપટ ભલે નાનકડો અને અસ્થિરતાથી ભરેલો હોય, છતાં આપણામાં અમર દેવોના જેવું કોઈક તત્ત્વ પણ છે. એટલે આપણે માનવ છીએ અને મર્ત્ય છીએ માટે માનવની રીતના અને મર્ત્ય તરીકેના જ વિચાર કરવા જોઈએ તેવું કહેનારની વાત માનવાની જરૂર નથી. આપણાથી બની શકે તેટલી આપણે અમરતાની સાધના કરવી જોઈએ અને આપણામાં જે સર્વોત્તમ મહત્ત્વ રહેલું છે તેની સાથે મેળમાં રહીને જીવવાનો સંપૂર્ણ પુરુષાર્થ કરવો જોઈએ.

Sub questions**Question Number : 81 Question Id : 4410091331978**

ફકરામાંથી યોગ્ય શીર્ષક શોધો.

Options :

4410095259493. ✖ આપણી કલ્પના શક્તિ
 4410095259494. ✔ આપણી શક્તિ
 4410095259495. ✖ આત્મશક્તિ
 4410095259496. ✖ આપણી શૈક્ષણિક શક્તિ

Hints :

as per passage

Question Number : 82 Question Id : 4410091331979

ફકરામાંથી વિષય શોધો.

Options :

4410095259497. ✖ આપણી જોડે શક્તિ નથી
 4410095259498. ✖ બીજા જોડે શક્તિ છે
 4410095259499. ✔ જીવનના રહસ્ય વિશે ઓછું જાણીએ છીએ
 4410095259500. ✖ સંપૂર્ણ પુરુષાર્થ ન કરવો

Hints :

as per passage

Question Number : 83 Question Id : 4410091331980

આપણો જીવનપટ શેનાથી ભરેલો છે ?

Options :

4410095259501. ✓ અસ્થિરતા
 4410095259502. ✗ આતુરતા
 4410095259503. ✗ સુસ્થિર
 4410095259504. ✗ સુસ્થિરતા

Hints :

as per passage

Question Number : 84 Question Id : 4410091331981

'સર્વોત્તમ' શબ્દનો સમાનાર્થી શબ્દ શોધો.

Options :

4410095259505. ✗ સારું
 4410095259506. ✗ ઉત્તમ
 4410095259507. ✗ પ્રથમ
 4410095259508. ✓ ઉત્કૃષ્ટ

Hints :

as per passage

Question Number : 85 Question Id : 4410091331982

'સ્થિર' શબ્દનો વિરોધી શબ્દ શોધો.

Options :

4410095259509. ✗ સમાન
 4410095259510. ✗ સરખું
 4410095259511. ✓ અસ્થિર
 4410095259512. ✗ સમતોલ

Hints :

as per passage

Question Id : 4410091331977 Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix**Question Numbers : (81 to 85)**

નીચે આપેલા ફકરાના આધારે પ્રશ્નોના જવાબ આપો.

આપણી પાસે બુદ્ધિની અને જ્ઞાનની આટલી બધી શક્તિઓ છે, છતાં જીવનનાં રહસ્યો વિશે આપણે ઓછું જાણીએ છીએ. એની ગુપ્ત પ્રક્રિયાઓ વિશે તો માત્ર કલ્પના જ કરી શકીએ છીએ, પણ જીવનનું જે સૌંદર્ય છે તેનો આનંદ તો આપણે માણી શકીએ છીએ. આપણે ભલે દુર્બળ દેવ જેવું સર્જનકાર્ય પણ કરી શકીએ છીએ. આપણે ભલે દુર્બળ અને ભૂલો કરતાં મનુષ્યો હોઈએ, આપણો જીવનપટ ભલે નાનકડો અને અસ્થિરતાથી ભરેલો હોય, છતાં આપણામાં અમર દેવોના જેવું કોઈક તત્ત્વ પણ છે. એટલે આપણે માનવ છીએ અને મર્ત્ય છીએ માટે માનવની રીતના અને મર્ત્ય તરીકેના જ વિચાર કરવા જોઈએ તેવું કહેનારની વાત માનવાની જરૂર નથી. આપણાથી બની શકે તેટલી આપણે અમરતાની સાધના કરવી જોઈએ અને આપણામાં જે સર્વોત્તમ મહત્ત્વ રહેલું છે તેની સાથે મેળમાં રહીને જીવવાનો સંપૂર્ણ પુરુષાર્થ કરવો જોઈએ.

Sub questions**Question Number : 81 Question Id : 4410091331978**

ફકરામાંથી યોગ્ય શીર્ષક શોધો.

Options :

4410095259493. ✗ આપણી કલ્પના શક્તિ
 4410095259494. ✓ આપણી શક્તિ
 4410095259495. ✗ આત્મશક્તિ
 4410095259496. ✗ આપણી શૈક્ષણિક શક્તિ

Hints :

as per passage

Question Number : 82 Question Id : 4410091331979

ફકરામાંથી વિષય શોધો.

Options :

4410095259497. ✗ આપણી જોડે શક્તિ નથી
 4410095259498. ✗ બીજા જોડે શક્તિ છે
 4410095259499. ✓ જીવનના રહસ્ય વિશે ઓછું જાણીએ છીએ
 4410095259500. ✗ સંપૂર્ણ પુરુષાર્થ ન કરવો

Hints :

as per passage

Question Number : 83 Question Id : 4410091331980

આપણો જીવનપટ શેનાથી ભરેલો છે ?

Options :

4410095259501. ✓ અસ્થિરતા

4410095259502. ✗ આતુરતા

4410095259503. ✗ સુસ્થિર

4410095259504. ✗ સુસ્થિરતા

Hints :

as per passage

Question Number : 84 Question Id : 4410091331981

'સર્વોત્તમ' શબ્દનો સમાનાર્થી શબ્દ શોધો.

Options :

4410095259505. ✗ સારું

4410095259506. ✗ ઉત્તમ

4410095259507. ✗ પ્રથમ

4410095259508. ✓ ઉત્કૃષ્ટ

Hints :

as per passage

Question Number : 85 Question Id : 4410091331982

'સ્થિર' શબ્દનો વિરોધી શબ્દ શોધો.

Options :

4410095259509. ✗ સમાન

4410095259510. ✗ સરખું

4410095259511. ✓ અસ્થિર

4410095259512. ✗ સમતોલ

Hints :

as per passage

Is Section Default? :

No

Question Id : 441009195003 Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (86 to 90)

Read the given passage carefully and answer the questions that follow.

Mother Teresa was a humanitarian devoted to helping the poor, sick, and helpless. She was born as Agnes Gonxha Bojaxhiu on 26 August 1910 in the Ottoman Empire. After her father's death, she was raised by her mother. At 18, she joined the Sisters of Loreto and began missionary work in Darjeeling, India, learning Bengali and teaching at a local school. She took her first vows as a nun and, at 36, felt a divine calling to serve the poor. In 1948, with minimal support and basic medical training, she began helping the sick, often going hungry and begging for food. She later founded the Missionaries of Charity, which grew into a global organisation. In 1979, she received the Nobel Peace Prize for her work. After years of dedicated service, she died on 5 September 1997. She was beatified in 2003, a step toward sainthood in the Catholic Church.

Sub questions

Question Number : 86 Question Id : 441009195004

When did Mother Teresa begin her missionary work in India?

Options :

441009767943. ✗ After completing her training in the Vatican

441009767944. ✗ Immediately after taking her final vows as a nun

441009767945. ✓ At the age of eighteen years

441009767946. ✗ After founding the Missionaries of Charity

Question Number : 87 Question Id : 441009195005

Which of the following events occurred after Mother Teresa received basic medical training?

Options :

441009767947. ✓ She was awarded the Nobel Peace Prize

441009767948. ✗ She joined the Sisters of Loreto

441009767949. ✗ She began teaching in Darjeeling

441009767950. ✗ She was ostracized by the Catholic Church

Question Number : 88 Question Id : 441009195006

Which of the following best describes the long-term outcome of Mother Teresa's decision to serve the poor?

Options :

441009767951. ✗ She gained immediate recognition from international leaders.

441009767952. ✗ She created a small organisation that dissolved after her death.

441009767953. ✓ Her work led to the formation of a global charitable movement.

441009767954. ✖ She became the head of the Catholic Church in India.

Question Number : 89 Question Id : 441009195007

Select the most appropriate ANTONYM of the word 'devoted' as used in the passage.

Options :

441009767955. ✖ Distracted

441009767956. ✖ Charitable

441009767957. ✖ Thoughtful

441009767958. ✔ Indifferent

Question Number : 90 Question Id : 441009195008

What is the overall tone of the passage about Mother Teresa?

Options :

441009767959. ✖ Sarcastic and dismissive

441009767960. ✔ Admiring and respectful

441009767961. ✖ Neutral and objective

441009767962. ✖ Bitter and regretful

Question Id : 441009195003 Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (86 to 90)

Read the given passage carefully and answer the questions that follow.

Mother Teresa was a humanitarian devoted to helping the poor, sick, and helpless. She was born as Agnes Gonxha Bojaxhiu on 26 August 1910 in the Ottoman Empire. After her father's death, she was raised by her mother. At 18, she joined the Sisters of Loreto and began missionary work in Darjeeling, India, learning Bengali and teaching at a local school. She took her first vows as a nun and, at 36, felt a divine calling to serve the poor. In 1948, with minimal support and basic medical training, she began helping the sick, often going hungry and begging for food. She later founded the Missionaries of Charity, which grew into a global organisation. In 1979, she received the Nobel Peace Prize for her work. After years of dedicated service, she died on 5 September 1997. She was beatified in 2003, a step toward sainthood in the Catholic Church.

Sub questions

Question Number : 86 Question Id : 441009195004

When did Mother Teresa begin her missionary work in India?

Options :

441009767943. ✖ After completing her training in the Vatican

441009767944. ✖ Immediately after taking her final vows as a nun

441009767945. ✔ At the age of eighteen years

441009767946. ✖ After founding the Missionaries of Charity

Question Number : 87 Question Id : 441009195005

Which of the following events occurred after Mother Teresa received basic medical training?

Options :

441009767947. ✔ She was awarded the Nobel Peace Prize

441009767948. ✖ She joined the Sisters of Loreto

441009767949. ✖ She began teaching in Darjeeling

441009767950. ✖ She was ostracized by the Catholic Church

Question Number : 88 Question Id : 441009195006

Which of the following best describes the long-term outcome of Mother Teresa's decision to serve the poor?

Options :

441009767951. ✖ She gained immediate recognition from international leaders.

441009767952. ✖ She created a small organisation that dissolved after her death.

441009767953. ✔ Her work led to the formation of a global charitable movement.

441009767954. ✖ She became the head of the Catholic Church in India.

Question Number : 89 Question Id : 441009195007

Select the most appropriate ANTONYM of the word 'devoted' as used in the passage.

Options :

441009767955. ✖ Distracted

441009767956. ✖ Charitable

441009767957. ✖ Thoughtful

441009767958. ✔ Indifferent

Question Number : 90 Question Id : 441009195008

What is the overall tone of the passage about Mother Teresa?

Options :

441009767959. ❌ Sarcastic and dismissive
 441009767960. ✅ Admiring and respectful
 441009767961. ❌ Neutral and objective
 441009767962. ❌ Bitter and regretful

Part B Technical Qualification

Maximum Instruction Time :

0

Is Section Default? :

No

Question Number : 91 Question Id : 4410091832419

If a person shows symptoms of poor night vision and frequent infections, which nutrient deficiency might be considered?

Options :

4410097223686. ✅ Vitamin A
 4410097223687. ❌ Vitamin C
 4410097223688. ❌ Iron
 4410097223689. ❌ Calcium

Hints :

Author: Darshan Sohi
 Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students
 Publisher: Jaypee
 Year of Publication:2018
 Edition: 2nd edition

Question Number : 91 Question Id : 4410091832419

જો કોઈ વ્યક્તિને રાત્રે ઓછું દેખાવા (રતાંધળાપણા)ની સમસ્યા હોય અને વારંવાર ચેપ (Infection) લાગતો હોય, તો તેના શરીરમાં કયા પોષકતત્વની ઊણપ હોઈ શકે છે?

Options :

4410097223686. ✅
 વિટામિન A
 4410097223687. ❌
 વિટામિન C
 4410097223688. ❌
 આયર્ન
 4410097223689. ❌ કેલ્શિયમ

Hints :

Author: Darshan Sohi
 Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students
 Publisher: Jaypee
 Year of Publication:2018
 Edition: 2nd edition

Question Number : 92 Question Id : 4410091711036

Which food group is primarily responsible for providing energy in the daily diet?

Options :

4410096748452. ✅ Cereals and grains
 4410096748453. ❌ Fruits and vegetables
 4410096748454. ❌ Milk and milk products
 4410096748455. ❌ Meat and pulses

Hints :

Hint - Think about which group forms the base of most meals and provides bulk energy.

Know More - Cereals and grains are the main source of carbohydrates, which provide energy. Fruits and vegetables mainly provide vitamins and minerals, while milk and milk products are rich in calcium and protein. Meat and pulses are primarily sources of protein, not the main energy providers.

Reference : Book - Food Science ,Author - Sumati R Mudambi ,Chapter: 4 page 38-45

Question Number : 92 Question Id : 4410091711036

દૈનિક આહારમાં ઊર્જા પૂરી પાડવા માટે મુખ્યત્વે કયું ખોરાક જૂથ જવાબદાર છે?

Options :

4410096748452. ✅
 અનાજ અને ધાન્ય
 4410096748453. ❌ ફળો અને શાકભાજી

4410096748454. ✖ દૂધ અને દૂધની બનાવટો

4410096748455. ✖ માંસ અને કઠોળ

Hints :

Hint - Think about which group forms the base of most meals and provides bulk energy.

Know More - Cereals and grains are the main source of carbohydrates, which provide energy. Fruits and vegetables mainly provide vitamins and minerals, while milk and milk products are rich in calcium and protein. Meat and pulses are primarily sources of protein, not the main energy providers.

Reference : Book - Food Science ,Author - Sumati R Mudambi ,Chapter: 4 page 38-45

Question Number : 93 Question Id : 4410091711125

What does RDA stand for in the context of nutrition?

Options :

4410096748808. ✔ Recommended Dietary Allowance

4410096748809. ✖ Registered Dietitian Association

4410096748810. ✖ Required Daily Amount

4410096748811. ✖ Recommended Dietary Analysis

Hints :

Hint - Focus on the term that directly relates to daily nutrition guidelines, not professional organizations or analyses.

Know More - Recommended Dietary Allowance is the correct answer because RDA refers to the average daily intake level sufficient to meet the nutrient requirements of nearly all healthy individuals. 'Registered Dietitian Association' and 'Required Daily Amount' are incorrect as they are not official terms in nutrition. 'Recommended Dietary Analysis' is also incorrect since it does not refer to nutrient intake guidelines.

Ref: Book :A Text Book Of Nutrition By Vidya & D.B. Rao, Chapter : 11 ,page 160

https://www.google.co.in/books/edition/_/veOyMrXA29AC?hl=en&gbpv=1&kptab=getbook

Question Number : 93 Question Id : 4410091711125

પોષણના સંદર્ભમાં RDAનું પૂર્ણ નામ શું છે?

Options :

4410096748808. ✔ રેકમેન્ડેડ ડાયેટરી એલાઉન્સ (Recommended Dietary Allowance)

4410096748809. ✖ રજિસ્ટર્ડ ડાયેટિશિયન એસોસિએશન (Registered Dietitian Association)

4410096748810. ✖ રિક્વાયર્ડ ડેઇલી એમાઉન્ટ (Required Daily Amount)

4410096748811. ✖ રેકમેન્ડેડ ડાયેટરી એનાલિસિસ (Recommended Dietary Analysis)

Hints :

Hint - Focus on the term that directly relates to daily nutrition guidelines, not professional organizations or analyses.

Know More - Recommended Dietary Allowance is the correct answer because RDA refers to the average daily intake level sufficient to meet the nutrient requirements of nearly all healthy individuals. 'Registered Dietitian Association' and 'Required Daily Amount' are incorrect as they are not official terms in nutrition. 'Recommended Dietary Analysis' is also incorrect since it does not refer to nutrient intake guidelines.

Ref: Book :A Text Book Of Nutrition By Vidya & D.B. Rao, Chapter : 11 ,page 160

https://www.google.co.in/books/edition/_/veOyMrXA29AC?hl=en&gbpv=1&kptab=getbook

Question Number : 94 Question Id : 4410091745225

Which method is most appropriate for assessing the average nutrient needs of a group, rather than individual requirements?

Options :

4410096882513. ✔ Estimated Average Requirement

4410096882514. ✖ Recommended Dietary Allowance

4410096882515. ✖ Tolerable Upper Intake Level

4410096882516. ✖ Adequate Intake

Hints :

Hint - Consider which method is meant for groups, not individuals or safety limits.

Know More - Estimated Average Requirement (EAR) is designed to assess the nutrient needs of populations or groups, not individuals. Recommended Dietary Allowance (RDA) targets individuals; Tolerable Upper Intake Level (UL) refers to the maximum daily intake, and Adequate Intake (AI) is used when insufficient evidence exists to set an EAR. Thus, EAR is specifically structured for group-level evaluation, making other options incorrect.

Reference- Srilakshmi, B. (2018). Nutrition Science (15th ed., p. 14). New Delhi: New Age International

Question Number : 94 Question Id : 4410091745225

વ્યક્તિગત જરૂરિયાતોને બદલે, જૂથ (group)ની સરેરાશ પોષકતત્વોની જરૂરિયાતોનું મૂલ્યાંકન કરવા માટે કઈ પદ્ધતિ સૌથી વધુ યોગ્ય છે?

Options :

4410096882513. ✔

એસ્ટીમેટેડ એવરેજ રિક્વાયરમેન્ટ (Estimated Average Requirement)

4410096882514. ✖ રેકમેન્ડેડ ડાયેટરી એલાઉન્સ (Recommended Dietary Allowance)

4410096882515. ✖ ટોલરેબલ અપર ઇન્ટેક લેવલ (Tolerable Upper Intake Level)

4410096882516. ✖ એડિક્વેટ ઇન્ટેક (Adequate Intake)

Hints :

Hint - Consider which method is meant for groups, not individuals or safety limits.

Know More - Estimated Average Requirement (EAR) is designed to assess the nutrient needs of populations or groups, not individuals. Recommended Dietary Allowance (RDA) targets individuals; Tolerable Upper Intake Level (UL) refers to the maximum daily intake, and Adequate Intake (AI) is used when insufficient evidence exists to set an EAR. Thus, EAR is specifically structured for group-level evaluation, making other options incorrect.

Reference- Srilakshmi, B. (2018). Nutrition Science (15th ed., p. 14). New Delhi: New Age International

Question Number : 95 Question Id : 4410091832369

Which of the following is considered a complete protein source, containing all nine essential amino acids in sufficient proportions, while also being a high-quality source of dietary fiber?

Options :

4410097223486. ✖ Whole Milk

4410097223487. ✔ Soybeans

4410097223488. ✖ Lentils

4410097223489. ✖ Eggs

Hints :

Author: Darshan Sohi

Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students

Publisher: Jaypee

Year of Publication: 2018

Edition: 2nd edition

Question Number : 95 Question Id : 4410091832369

નીચેનામાંથી કયું એક 'સંપૂર્ણ પ્રોટીન' નો સ્રોત ગણાય છે, જે તમામ નવ આવશ્યક એમિનો એસિડ પૂરતા પ્રમાણમાં ધરાવે છે અને સાથે આહાર ફાઇબર (Dietary fiber)નો પણ ઉચ્ચ ગુણવત્તા ધરાવતો સ્રોત છે?

Options :

4410097223486. ✖ આખું દૂધ (Whole Milk)

4410097223487. ✔ સોયાબીન

4410097223488. ✖ કઠોળ (Lentils)

4410097223489. ✖ ઇંડા

Hints :

Author: Darshan Sohi

Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students

Publisher: Jaypee

Year of Publication: 2018

Edition: 2nd edition

Question Number : 96 Question Id : 4410091832679

Which nerve is primarily responsible for controlling the diaphragm?

Options :

4410097224725. ✔ Phrenic nerve

4410097224726. ✖ Vagus nerve

4410097224727. ✖ Sciatic nerve

4410097224728. ✖ Facial nerve

Hints :

Author: PR Ashalatha, G Deepa

Title: Textbook of Anatomy and Physiology

Publisher: Jaypee

Year of Publication: 2011

Edition: 3

Question Number : 96 Question Id : 4410091832679

ડાયોફ્રામ (diaphragm)ને નિયંત્રિત કરવા માટે મુખ્યત્વે કઈ ચેતલ (nerve) જવાબદાર છે?

Options :

4410097224725. ✔ ફ્રેનિક ચેતલ (Phrenic nerve)

4410097224726. ✖ વેગસ ચેતલ (Vagus nerve)

4410097224727. ✖ સાઇટીક ચેતલ (Sciatic nerve)

4410097224728. ✖ ફેશિયલ ચેતલ (Facial nerve)

Hints :

Author: PR Ashalatha, G Deepa

Title: Textbook of Anatomy and Physiology

Publisher: Jaypee

Year of Publication: 2011

Edition: 3

Question Number : 97 Question Id : 4410091719811

Which type of cell is primarily responsible for producing antibodies in the immune response?

Options :

4410096782558. ✓ B lymphocytes

4410096782559. ✗ T lymphocytes

4410096782560. ✗ Macrophages

4410096782561. ✗ Neutrophils

Hints :

Hint - Consider which cell type plays a central role in humoral immunity by generating specific proteins.

Know More - B lymphocytes are responsible for producing antibodies as part of the adaptive immune response. T lymphocytes are involved in cell-mediated immunity, macrophages perform phagocytosis and antigen presentation, and neutrophils mainly provide early defense against infection through phagocytosis, not antibody production.

<https://www.ncbi.nlm.nih.gov/books/NBK26884/>
Question Number : 97 Question Id : 4410091719811

રોગપ્રતિકારક પ્રતિભાવમાં એન્ટિબોડીઝ ઉત્પન્ન કરવા માટે કયા પ્રકારનો કોષ મુખ્યત્વે જવાબદાર છે?

Options :

4410096782558. ✓ B લસિકાકણો (B lymphocytes)

4410096782559. ✗ T લસિકાકણો (T lymphocytes)

4410096782560. ✗ ભક્ષકકોષો (Macrophages)

4410096782561. ✗ તટસ્થકણો (Neutrophils)

Hints :

Hint - Consider which cell type plays a central role in humoral immunity by generating specific proteins.

Know More - B lymphocytes are responsible for producing antibodies as part of the adaptive immune response. T lymphocytes are involved in cell-mediated immunity, macrophages perform phagocytosis and antigen presentation, and neutrophils mainly provide early defense against infection through phagocytosis, not antibody production.

<https://www.ncbi.nlm.nih.gov/books/NBK26884/>
Question Number : 98 Question Id : 4410091745270

Which of the following is NOT a function of the cell membrane?

Options :

4410096882693. ✗ Selective permeability

4410096882694. ✗ Absorptive function

4410096882695. ✗ Protective function

4410096882696. ✓ Synthesis of proteins

Hints :

Hint - Consider what the cell membrane does versus what internal cell structures accomplish.

Know More - Synthesis of proteins is performed by the endoplasmic reticulum, not the cell membrane. Selective permeability, absorptive function, and protective function are established roles of the cell membrane. Therefore, 'Synthesis of proteins' is the only option that does not match the cell membrane's functions, while the other options are correct functions.

Reference- Sembulingam K, Sembulingam P (2012). Essentials of Medical Physiology. In General Physiology. (6th ed., p. 6). Jaypee Brothers Medical Publishers.

Question Number : 98 Question Id : 4410091745270

નીચેનામાંથી કયું, કોષપટલ (Cell membrane)નું એક કાર્ય નથી?

Options :

4410096882693. ✗ વરણાત્મક પારગમ્યતા (Selective permeability)

4410096882694. ✗ અવશોષી કાર્ય (Absorptive function)

4410096882695. ✗ રક્ષણાત્મક કાર્ય

4410096882696. ✓ પ્રોટીનનું સંશ્લેષણ

Hints :

Hint - Consider what the cell membrane does versus what internal cell structures accomplish.

Know More - Synthesis of proteins is performed by the endoplasmic reticulum, not the cell membrane. Selective permeability, absorptive function, and protective function are established roles of the cell membrane. Therefore, 'Synthesis of proteins' is the only option that does not match the cell membrane's functions, while the other options are correct functions.

Reference- Sembulingam K, Sembulingam P (2012). Essentials of Medical Physiology. In General Physiology. (6th ed., p. 6). Jaypee Brothers Medical Publishers.

Question Number : 99 Question Id : 4410091718547

Which organ acts as the main site for the maturation of T lymphocytes?

Options :

4410096777848. ✓ Thymus

4410096777849. ✗ Spleen

4410096777850. ✗ Bone marrow

4410096777851. ✗ Lymph node

Hints :

Hint - Think about the organ most associated with early immune cell development, particularly for T cells.

Know More - The thymus is the primary site for T lymphocyte maturation. The spleen mainly filters blood and helps with immune responses but does not mature T cells. Bone marrow is where B lymphocytes mature, while the lymph nodes filter lymph and support immune cell activation but are not the main site for T cell maturation.

Reference :Textbook of Physiology for Allied Health Sciences and Paramedical Courses By Priscilla Johnson ,Chap: 2.3 page no 20-22-25

Question Number : 99 Question Id : 4410091718547

T લસિકાકણો (T lymphocytes)ની પરિપક્વતા માટે કયું અંગ મુખ્ય સ્થળ તરીકે કાર્ય કરે છે?

Options :

4410096777848. ✓ થાઇમસ

4410096777849. ✗ બરોળ

4410096777850. ✗ અસ્થિમજ્જા

4410096777851. ✗ લસિકાગાંઠ

Hints :

Hint - Think about the organ most associated with early immune cell development, particularly for T cells.

Know More - The thymus is the primary site for T lymphocyte maturation. The spleen mainly filters blood and helps with immune responses but does not mature T cells. Bone marrow is where B lymphocytes mature, while the lymph nodes filter lymph and support immune cell activation but are not the main site for T cell maturation.

Reference :Textbook of Physiology for Allied Health Sciences and Paramedical Courses By Priscilla Johnson ,Chap: 2.3 page no 20-22-25

Question Number : 100 Question Id : 4410091731253

If a food handler wants to keep vegetables fresh for several days, which practice should they choose?

Options :

4410096827388. ✓ Refrigeration

4410096827389. ✗ Boiling

4410096827390. ✗ Salting

4410096827391. ✗ Baking

Hints :

Hint - Consider the method that maintains freshness without cooking or altering taste.

Know More - Refrigeration slows down spoilage and keeps vegetables fresh for days. Boiling is for cooking, not preservation. Salting is used for long-term preservation but changes the taste. Baking is not a method for keeping vegetables fresh.

Reference:Food Science by Norman Poirter ,Chapter 9

Question Number : 100 Question Id : 4410091731253

જો કોઈ ફૂડ હેન્ડલર (Food handler) શાકભાજીને કેટલાક દિવસો સુધી તાજી રાખવા માંગતો હોય, તો તેણે કઈ પદ્ધતિ પસંદ કરવી જોઈએ?

Options :

4410096827388. ✓ રેફ્રિજરેશન (Refrigeration)

4410096827389. ✗ બોઇલિંગ (Boiling)

4410096827390. ✗ સોલ્ટિંગ (Salting)

4410096827391. ✗ બેકિંગ (Baking)

Hints :

Hint - Consider the method that maintains freshness without cooking or altering taste.

Know More - Refrigeration slows down spoilage and keeps vegetables fresh for days. Boiling is for cooking, not preservation. Salting is used for long-term preservation but changes the taste. Baking is not a method for keeping vegetables fresh.

Reference: Food Science by Norman Poirter, Chapter 9

Question Number : 101 Question Id : 4410091832458

To meet the daily requirement of omega-3 fatty acids, which meal combination is most effective for an adult?

Options :

4410097223849. ✓ Grilled salmon with walnut salad
 4410097223850. ✗ Fried eggs with sautéed mushrooms
 4410097223851. ✗ Roasted chicken with sweet corn
 4410097223852. ✗ Baked potato with cottage cheese

Hints :

Author: Darshan Sohi
 Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students
 Publisher: Jaypee
 Year of Publication: 2018
 Edition: 2nd edition

Question Number : 101 Question Id : 4410091832458

ઓમેગા-૩ ફેટી એસિડ્સની દૈનિક જરૂરિયાત પૂરી કરવા માટે, પુખ્ત વયના એક વ્યક્તિ માટે નીચેનામાંથી કયો આહારનો કોમ્બિનેશન (Meal combination) સૌથી વધુ અસરકારક છે?

Options :

4410097223849. ✓ વોલન્ટ સલાડ સાથે ગ્રીલ્ડ સેલ્મોન (Grilled salmon)
 4410097223850. ✗ સાંતળેલા મશરૂમ (Sautéed mushrooms) સાથે તળેલા ઇંડા (Fried eggs)
 4410097223851. ✗ સ્વીટ કોર્ન સાથે રોસ્ટેડ ચિકન (Roasted chicken)
 4410097223852. ✗ કોટેજ ચીઝ (Cottage cheese) સાથે બેક કરેલા બટાટા (Baked potato)

Hints :

Author: Darshan Sohi
 Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students
 Publisher: Jaypee
 Year of Publication: 2018
 Edition: 2nd edition

Question Number : 102 Question Id : 4410091832463

Which of the following is a safe way to thaw frozen meat?

Options :

4410097223869. ✓ Placing the meat in the refrigerator to thaw
 4410097223870. ✗ Leaving the meat on the kitchen counter to thaw
 4410097223871. ✗ Soaking the meat in hot water directly to thaw it
 4410097223872. ✗ Keeping meat in a bowl of water near the sink to thaw

Hints :

To prevent cross-contamination and facilitate safe thawing, frozen foods should be thawed in

- The refrigerator below 4°C or thawing cabinets at temperatures ranging from 10–15°C
- Potable running water at 21°C or below, within 90 minutes, while it is still in the packet
- The microwave oven when it is to be cooked immediately

Roday S, Food Science and Nutrition, 2024, Oxford University Press, p. 189

Question Number : 102 Question Id : 4410091832463

નીચેનીમાંથી કઈ રીત થીજવેલા માંસ (Frozen meat)ને ઓગાળવા (Thaw) માટે સલામત છે?

Options :

4410097223869. ✓ માંસને થો (Thaw) કરવા માટે રેફ્રિજરેટરમાં મૂકવું
 4410097223870. ✗ માંસને થો કરવા માટે રસોડાના કાઉન્ટર પર છોડી દેવું
 4410097223871. ✗ માંસને થો કરવા માટે તેને સીધું ગરમ પાણીમાં પલાળવું
 4410097223872. ✗ માંસને થો કરવા માટે તેને સિંક (Sink)ની નજીક પાણીના એક બોલમાં રાખવું

Hints :

To prevent cross-contamination and facilitate safe thawing, frozen foods should be thawed in

- The refrigerator below 4°C or thawing cabinets at temperatures ranging from 10–15°C
- Potable running water at 21°C or below, within 90 minutes, while it is still in the packet
- The microwave oven when it is to be cooked immediately

Roday S, Food Science and Nutrition, 2024, Oxford University Press, p. 189

Question Number : 103 Question Id : 4410091748600

Which principle explains why blanching vegetables before freezing preserves their color and texture?

Options :

4410096895831. ✓ Blanching inactivates enzymes responsible for deterioration.
4410096895832. ✗ Blanching removes all moisture from vegetables.
4410096895833. ✗ Blanching increases vitamin content in vegetables.
4410096895834. ✗ Blanching destroys all microorganisms in vegetables.

Hints :

Hint - Think about what happens to enzymes in vegetables when exposed to heat briefly before freezing.

Know More - Blanching inactivates enzymes responsible for deterioration, preserving color and texture. 'Blanching removes all moisture' is incorrect; it only reduces some moisture. 'Blanching increases vitamin content' is wrong as it can cause some loss. 'Blanching destroys all microorganisms' is incorrect because it mainly inactivates enzymes, not all microbes.

Reference- Adetoro, A. O., Opara, U. L., & Fawole, O. A. (2021). Effect of Blanching on Enzyme Inactivation, Physicochemical Attributes and Antioxidant Capacity of Hot-Air Dried Pomegranate (*Punica granatum* L.) Arils (cv. Wonderful). *Processes*, 9(1), 25. <https://doi.org/10.3390/pr9010025>

Question Number : 103 Question Id : 4410091748600

કયો સિદ્ધાંત સમજાવે છે કે શાકભાજીને થીજવતા (freezing) પહેલાં બ્લેન્ચિંગ (blanching) કરવાથી તેનો રંગ અને ટેક્સચર જળવાઈ રહે છે?

Options :

4410096895831. ✓ બ્લેન્ચિંગ બગાડ માટે જવાબદાર ઉત્સેચકોને નિષ્ક્રિય કરે છે.
4410096895832. ✗ બ્લેન્ચિંગ શાકભાજીમાંથી બધો જ ભેજ દૂર કરે છે.
4410096895833. ✗ બ્લેન્ચિંગ શાકભાજીમાં વિટામિનનું પ્રમાણ વધારે છે.
4410096895834. ✗ બ્લેન્ચિંગ શાકભાજીમાં રહેલા તમામ સૂક્ષ્મજીવોનો નાશ કરે છે.

Hints :

Hint - Think about what happens to enzymes in vegetables when exposed to heat briefly before freezing.

Know More - Blanching inactivates enzymes responsible for deterioration, preserving color and texture. 'Blanching removes all moisture' is incorrect; it only reduces some moisture. 'Blanching increases vitamin content' is wrong as it can cause some loss. 'Blanching destroys all microorganisms' is incorrect because it mainly inactivates enzymes, not all microbes.

Reference- Adetoro, A. O., Opara, U. L., & Fawole, O. A. (2021). Effect of Blanching on Enzyme Inactivation, Physicochemical Attributes and Antioxidant Capacity of Hot-Air Dried Pomegranate (*Punica granatum* L.) Arils (cv. Wonderful). *Processes*, 9(1), 25. <https://doi.org/10.3390/pr9010025>

Question Number : 104 Question Id : 4410091832645

Why does a high salt concentration in food reduce microbial growth?

Options :

4410097224589. ✓ It removes water from microorganisms
4410097224590. ✗ It increases food temperature
4410097224591. ✗ It changes food color rapidly
4410097224592. ✗ It adds a strong aroma to food

Hints :

Author: R. Ananthanarayan, C K Jayaram Panicker

Title: Textbook of Microbiology

Publisher: University Press

Year of Publication: 2022

Edition: 12

Question Number : 104 Question Id : 4410091832645

ખોરાકમાં મીઠાની વધુ સાંદ્રતા (High salt concentration) સૂક્ષ્મજીવાણુઓની વૃદ્ધિને કેમ ઘટાડે છે?

Options :

4410097224589. ✓ તે સૂક્ષ્મજીવોમાંથી પાણી દૂર કરે છે.
 4410097224590. ✗ તે ખોરાકનું તાપમાન વધારે છે.
 4410097224591. ✗ તે ખોરાકનો રંગ ઝડપથી બદલે છે.
 4410097224592. ✗ તે ખોરાકમાં પ્રબળ સુગંધ ઉમેરે છે.

Hints :

Author: R. Ananthanarayan, C K Jayaram Panicker

Title: Textbook of Microbiology

Publisher: University Press

Year of Publication: 2022

Edition: 12

Question Number : 105 Question Id : 4410091745324

What is the mass of branching, intertwined filaments that makes up the mold thallus called?

Options :

4410096882905. ✗ Sclerotia
 4410096882906. ✗ Septate
 4410096882907. ✓ Hyphae
 4410096882908. ✗ Conidia

Hints :

Hint: Focus on the basic structural unit of molds, not specialized or grouped forms.

Explanation: The correct answer is Hyphae, as the mold thallus is specifically described as a mass of branching, intertwined filaments called hyphae. 'Sclerotia' are specialized, thick-walled structures produced by some molds, not the basic filaments. 'Septate' describes a type of hyphae with cross walls, but it is not the name of the filaments. 'Conidia' which are asexual spores produced by molds, not structural filaments at all.

Reference- Frazier, W.C, Westhoff, D.C. (2014). Food Microbiology. 5th Edition. Microorganisms important in food microbiology. Pg 33. McGraw Hill Education (India) Private Limited.

Question Number : 105 Question Id : 4410091745324

શાખાઓવાળા, એકબીજામાં ગૂંથાયેલા તંતુઓના સમૂહને શું કહેવામાં આવે છે, જે મોલ્ડ થેલસ (mold thallus)નું નિર્માણ કરે છે?

Options :

4410096882905. ✗ સ્ક્લેરોટિયા (Sclerotia)
 4410096882906. ✗ સેપ્ટેટ (Septate)
 4410096882907. ✓ હાઈફાઈ (Hyphae)
 4410096882908. ✗ કોનિડિયા (Conidia)

Hints :

Hint: Focus on the basic structural unit of molds, not specialized or grouped forms.

Explanation: The correct answer is Hyphae, as the mold thallus is specifically described as a mass of branching, intertwined filaments called hyphae. 'Sclerotia' are specialized, thick-walled structures produced by some molds, not the basic filaments. 'Septate' describes a type of hyphae with cross walls, but it is not the name of the filaments. 'Conidia' which are asexual spores produced by molds, not structural filaments at all.

Reference- Frazier, W.C, Westhoff, D.C. (2014). Food Microbiology. 5th Edition. Microorganisms important in food microbiology. Pg 33. McGraw Hill Education (India) Private Limited.

Question Number : 106 Question Id : 4410091746870

Why is combining UV irradiation with chilling storage effective in food preservation?

Options :

4410096889018. ✓ It lengthens the keeping time.
 4410096889019. ✗ It increases flavour.
 4410096889020. ✗ It increases package size.
 4410096889021. ✗ It increases temperature.

Hints :

Hint - Consider how each method affects microbes and shelf life when used together.

Know More - UV irradiation kills surface microbes, while chilling slows their growth. Together, they make food last longer. UV alone doesn't address internal microbes, chilling alone is less effective, and increasing temperature would encourage microbial growth.

Reference- Teng, S., Gan, J., Chen, Y., Yang, L., & Ye, K. (2023). The Application of Ultraviolet Treatment to Prolong the Shelf Life of Chilled Beef. Foods (Basel, Switzerland), 12(12), 2410. <https://doi.org/10.3390/foods12122410>

Question Number : 106 Question Id : 4410091746870

શા માટે અલ્ટ્રાવાયોલેટ કિરણ (UV irradiation) અને ચિલિંગ સ્ટોરેજ (chilling storage)નું સંયોજન ખોરાકની જાળવણી (preservation)માં અસરકારક છે?

Options :

4410096889018. ✓ તે જાળવણીના સમયગાળા (keeping time)માં વધારો કરે છે.
 4410096889019. ✗ તે સ્વાદમાં વધારો કરે છે.
 4410096889020. ✗ તે પેકેજિંગ કદ (package size)માં વધારો કરે છે.
 4410096889021. ✗ તે તાપમાનમાં વધારો કરે છે.

Hints :

Hint - Consider how each method affects microbes and shelf life when used together.

Know More - UV irradiation kills surface microbes, while chilling slows their growth. Together, they make food last longer. UV alone doesn't address internal microbes, chilling alone is less effective, and increasing temperature would encourage microbial growth.

Reference- Teng, S., Gan, J., Chen, Y., Yang, L., & Ye, K. (2023). The Application of Ultraviolet Treatment to Prolong the Shelf Life of Chilled Beef. Foods (Basel, Switzerland), 12(12), 2410. <https://doi.org/10.3390/foods12122410>

Question Number : 107 Question Id : 4410091722894

A manufacturer wants to preserve a high-acid fruit juice without refrigeration. Which method is most suitable for ensuring both safety and shelf life?

Options :

4410096794741. ✓ Aseptic packaging after pasteurization
 4410096794742. ✗ Addition of chemical preservatives
 4410096794743. ✗ Addition of carbon dioxide
 4410096794744. ✗ Sulphitation

Hints :

Hint - Consider which method allows ambient storage while maintaining product safety.

Know More - Aseptic packaging after pasteurization is correct because it allows the product to be shelf-stable without refrigeration and maintains safety by eliminating most pathogens. Refrigerated storage is unnecessary for high-acid products. Chemical preservatives are less desirable due to possible regulatory and sensory issues. Freezing is not practical for ambient storage.

Fellows, P. J. (2017). *Food processing technology: Principles and practice* (4th ed., pp. 421–425). Woodhead Publishing.

Question Number : 107 Question Id : 4410091722894

એક ઉત્પાદક રેફ્રિજરેશન વિના ઉચ્ચ-એસિડયુક્ત ફળના રસને જાળવી (પ્રિઝર્વ કરી) રાખવા માંગે છે. સલામતી અને શેલ્ફ લાઇફ (shelf life) બંને સુનિશ્ચિત કરવા માટે કઈ પદ્ધતિ સૌથી યોગ્ય છે?

Options :

4410096794741. ✓ પાશ્ચરાઇઝેશન પછી એસેપ્ટિક પેકેજિંગ (Aseptic packaging after pasteurization)
 4410096794742. ✗ રાસાયણિક પ્રિઝર્વેટિવ્સનો ઉમેરો
 4410096794743. ✗ કાર્બન ડાયોક્સાઇડનો ઉમેરો
 4410096794744. ✗ સલ્ફિટેશન (Sulphitation)

Hints :

Hint - Consider which method allows ambient storage while maintaining product safety.

Know More - Aseptic packaging after pasteurization is correct because it allows the product to be shelf-stable without refrigeration and maintains safety by eliminating most pathogens. Refrigerated storage is unnecessary for high-acid products. Chemical preservatives are less desirable due to possible regulatory and sensory issues. Freezing is not practical for ambient storage.

Fellows, P. J. (2017). *Food processing technology: Principles and practice* (4th ed., pp. 421–425). Woodhead Publishing.

Question Number : 108 Question Id : 4410091719385

A food technologist must preserve a fruit juice with minimal alteration to taste and nutrients. Which method should they prioritize?

Options :

4410096780871. ✓ High pressure processing
 4410096780872. ✗ Ultra-high temperature (UHT) treatment
 4410096780873. ✗ Smoking
 4410096780874. ✗ Freeze drying

Hints :

Hint - Consider which technique avoids heat and maintains the natural qualities of the juice.

Know More - High pressure processing is correct because it effectively preserves juices while maintaining taste and nutrients, as it does not rely on heat. UHT treatment uses high temperature, which can affect flavor and nutrients. Smoking is unsuitable for juices and would drastically change taste. Freeze drying is more appropriate for solid foods and can affect texture and some nutrients.

Reference: Food Microbiology by Martin R Adams ,Maurice O Moss, Chapter 4 ,4.3,page no 90

Question Number : 108 Question Id : 4410091719385

હૂડ ટેક્નોલોજિસ્ટે સ્વાદ અને પોષક તત્વોમાં ઓછામાં ઓછો ફેરફાર થાય તે રીતે ફળોના રસને સાચવવો જોઈએ. તેમણે કઈ પદ્ધતિને પ્રાધાન્ય આપવું જોઈએ?

Options :

4410096780871. ✓ હાઈ પ્રેશર પ્રોસેસિંગ
 4410096780872. ✗ અલ્ટ્રા-હાઈ ટેમ્પરેચર (UHT) ટ્રીટમેન્ટ
 4410096780873. ✗ સ્મોકિંગ
 4410096780874. ✗ ફ્રીઝ ડ્રાયિંગ

Hints :

Hint - Consider which technique avoids heat and maintains the natural qualities of the juice.

Know More - High pressure processing is correct because it effectively preserves juices while maintaining taste and nutrients, as it does not rely on heat. UHT treatment uses high temperature, which can affect flavor and nutrients. Smoking is unsuitable for juices and would drastically change taste. Freeze drying is more appropriate for solid foods and can affect texture and some nutrients.

Reference: Food Microbiology by Martin R Adams ,Maurice O Moss, Chapter 4 ,4.3,page no 90

Question Number : 109 Question Id : 4410091725724

Which process converts glucose into pyruvate during cellular metabolism?

Options :

4410096805947. ✓ Glycolysis
 4410096805948. ✗ Beta-oxidation
 4410096805949. ✗ Gluconeogenesis
 4410096805950. ✗ Urea Cycle

Hints :

Hint - Focus on the pathway that produces pyruvate from glucose, not from fats or proteins.

Know More - Glycolysis is the pathway that transforms glucose into pyruvate. Beta-oxidation breaks down fatty acids, not glucose. Gluconeogenesis produces glucose from non-carbohydrate precursors, and the Urea Cycle handles nitrogen waste, not glucose metabolism.

Reference : Lehninger Principles of Biochemistry
 Fourth Edition
 David L. Nelson (U. of Wisconsin–Madison)
 Michael M. Cox (U. of Wisconsin–Madison)
 Chapter 14 ,14.1 page no 522

Question Number : 109 Question Id : 4410091725724

કોષીય ચયાપચય (Cellular metabolism) દરમિયાન કઈ પ્રક્રિયા દ્વારા ગ્લુકોઝનું પાયરુવેટ (pyruvate)માં રૂપાંતરણ થાય છે?

Options :

4410096805947. ✓ ગ્લાયકોલિસિસ (Glycolysis)
 4410096805948. ✗ બીટા-ઓક્સિડેશન (Beta-oxidation)
 4410096805949. ✗ ગ્લુકોનિયોજેનેસિસ (Gluconeogenesis)
 4410096805950. ✗ યુરિયા ચક્ર (Urea Cycle)

Hints :

Hint - Focus on the pathway that produces pyruvate from glucose, not from fats or proteins.

Know More - Glycolysis is the pathway that transforms glucose into pyruvate. Beta-oxidation breaks down fatty acids, not glucose. Gluconeogenesis produces glucose from non-carbohydrate precursors, and the Urea Cycle handles nitrogen waste, not glucose metabolism.

Reference : Lehninger Principles of Biochemistry
 Fourth Edition
 David L. Nelson (U. of Wisconsin–Madison)

Michael M. Cox (U. of Wisconsin–Madison)
Chapter 14 ,14.1 page no 522

Question Number : 110 Question Id : 4410091744901

Which of the following is an example of a pentose sugar?

Options :

4410096881241. ✖ D-Glucose
4410096881242. ✖ D-Galactose
4410096881243. ✖ D-Mannose
4410096881244. ✔ D-Ribose

Hints :

Hint - Consider the number of carbon atoms present in each sugar; pentoses have five, hexoses have six.

Know More - D-Ribose is a pentose sugar, meaning it contains five carbon atoms. D-Glucose, D-Galactose, and D-Mannose are all hexose sugars, which have six carbon atoms. Only D-Ribose fits the criteria for a pentose sugar, making it the correct answer.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Carbohydrates. (4th ed., p.11). Elsevier.

Question Number : 110 Question Id : 4410091744901

નીચેનામાંથી કયું પેન્ટોઝ શર્કરા (pentose sugar)નું એક ઉદાહરણ છે?

Options :

4410096881241. ✖ ડી-ગ્લુકોઝ (D-Glucose)
4410096881242. ✖ ડી-ગેલેક્ટોઝ (D-Galactose)
4410096881243. ✖ ડી-મેનોઝ (D-Mannose)
4410096881244. ✔ ડી-રાઇબોઝ (D-Ribose)

Hints :

Hint - Consider the number of carbon atoms present in each sugar; pentoses have five, hexoses have six.

Know More - D-Ribose is a pentose sugar, meaning it contains five carbon atoms. D-Glucose, D-Galactose, and D-Mannose are all hexose sugars, which have six carbon atoms. Only D-Ribose fits the criteria for a pentose sugar, making it the correct answer.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Carbohydrates. (4th ed., p.11). Elsevier.

Question Number : 111 Question Id : 4410091744699

Which enzyme is defective in von-Gierke's disease?

Options :

4410096880425. ✖ Muscle glycogen phosphorylase
4410096880426. ✖ Liver glycogen phosphorylase
4410096880427. ✖ Phosphofructokinase
4410096880428. ✔ Glucose-6 phosphatase

Hints :

Hint - Eliminate options linked to McArdle's, Her's, or Tarui's diseases.

Know More - Glucose-6 phosphatase is the enzyme defective in von-Gierke's disease, leading to impaired glucose release from the liver. Muscle glycogen phosphorylase deficiency causes McArdle's disease, not von-Gierke's. Liver glycogen phosphorylase deficiency is linked to Her's disease, while phosphofructokinase deficiency is involved in Tarui's disease. Thus, only glucose-6 phosphatase is correct for von-Gierke's disease, and the others are associated with different glycogen storage disorders.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Metabolism of Carbohydrates. (4th ed., p.269). Elsevier.

Question Number : 111 Question Id : 4410091744699

વોન-ગિયરકે રોગ (von-Gierke's disease)માં કયો એન્ઝાઇમ (ઉત્સેચક) ખામીયુક્ત હોય છે?

Options :

4410096880425. ✖ મસલ ગ્લાયકોજેન ફોસ્ફોરીલેઝ (Muscle glycogen phosphorylase)
4410096880426. ✖ લીવર ગ્લાયકોજેન ફોસ્ફોરીલેઝ (Liver glycogen phosphorylase)
4410096880427. ✖ ફોસ્ફોફ્રુક્ટોકીનેઝ (Phosphofructokinase)
4410096880428. ✔ ગ્લુકોઝ-6-ફોસ્ફેટેઝ (Glucose-6 phosphatase)

Hints :

Hint - Eliminate options linked to McArdle's, Her's, or Tarui's diseases.

Know More - Glucose-6 phosphatase is the enzyme defective in von-Gierke's disease, leading to impaired glucose release from the liver. Muscle glycogen phosphorylase deficiency causes McArdle's disease, not von-Gierke's. Liver glycogen phosphorylase deficiency is linked to Her's disease, while phosphofructokinase deficiency is involved in Tarui's disease. Thus, only glucose-6 phosphatase is correct for von-Gierke's disease, and the others are associated with different glycogen storage disorders.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Metabolism of Carbohydrates. (4th ed., p.269). Elsevier.

Question Number : 112 Question Id : 4410091744875

Which pathway is an alternative oxidative pathway for glucose?

Options :

- 4410096881141. ✓ Uronic acid pathway
- 4410096881142. ✗ Glycogenesis
- 4410096881143. ✗ Gluconeogenesis
- 4410096881144. ✗ Lipogenesis

Hints :

Hint - Think about which pathway actually modifies glucose through oxidation rather than synthesis or reversal.

Know More - The uronic acid pathway is an alternative oxidative pathway for glucose because it involves the oxidation of glucose to yield uronic acids. Glycogenesis and lipogenesis are both synthetic pathways that convert glucose into glycogen and fatty acids, respectively, and do not involve oxidation. Gluconeogenesis is the process of synthesizing glucose from non-carbohydrate sources and is essentially the reverse of glycolysis, not an oxidative pathway for glucose.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Metabolism of Carbohydrates. (4th ed., p.245). Elsevier.

Question Number : 112 Question Id : 4410091744875

ગ્લુકોઝ માટે વૈકલ્પિક ઓક્સિડેટીવ પાથવે (alternative oxidative pathway) કયો છે?

Options :

- 4410096881141. ✓ યુરોનિક એસિડ પાથવે (Uronic acid pathway)
- 4410096881142. ✗ ગ્લાયકોજેનેસિસ (Glycogenesis)
- 4410096881143. ✗ ગ્લુકોનિયોજેનેસિસ (Gluconeogenesis)
- 4410096881144. ✗ લિપોજેનેસિસ (Lipogenesis)

Hints :

Hint - Think about which pathway actually modifies glucose through oxidation rather than synthesis or reversal.

Know More - The uronic acid pathway is an alternative oxidative pathway for glucose because it involves the oxidation of glucose to yield uronic acids. Glycogenesis and lipogenesis are both synthetic pathways that convert glucose into glycogen and fatty acids, respectively, and do not involve oxidation. Gluconeogenesis is the process of synthesizing glucose from non-carbohydrate sources and is essentially the reverse of glycolysis, not an oxidative pathway for glucose.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Metabolism of Carbohydrates. (4th ed., p.245). Elsevier.

Question Number : 113 Question Id : 4410091744320

Which nutrient is most important during the early periconceptional period to support embryonic tissue development?

Options :

- 4410096878909. ✗ Vitamin A
- 4410096878910. ✓ Folate
- 4410096878911. ✗ Vitamin B1
- 4410096878912. ✗ Vitamin C

Hints :

Hint - Consider which nutrient is linked to preventing neural tube defects in early pregnancy.

Know More - Folate is the correct answer because it is essential during the early periconceptional period, especially from 2 months before conception to week 6 of gestation, for embryonic tissue development and neural tube formation. Vitamin A, Vitamin B1, and Vitamin C are important nutrients, but they do not play a direct role in neural tube formation during this critical period.

Reference- Nix, S. (2017). Kidney Disease. In *William's Basic Nutrition and Diet Therapy* (15th ed., p. 150). Elsevier.

Question Number : 113 Question Id : 4410091744320

ગર્ભાવસ્થાના શરૂઆતના સમયગાળા (early periconceptional period) દરમિયાન ભ્રૂણના પેશીઓના વિકાસને ટેકો આપવા માટે કયું પોષકતત્વ સૌથી મહત્વનું છે?

Options :

- 4410096878909. ✗ વિટામિન A
- 4410096878910. ✓ ફોલેટ (Folate)
- 4410096878911. ✗ વિટામિન B1 (Vitamin B1)
- 4410096878912. ✗ વિટામિન C

Hints :

Hint - Consider which nutrient is linked to preventing neural tube defects in early pregnancy.

Know More - Folate is the correct answer because it is essential during the early periconceptional period, especially from 2 months before conception to week 6 of gestation, for embryonic tissue development and neural tube formation. Vitamin A, Vitamin B1, and Vitamin C are important nutrients, but they do not play a direct role in neural tube formation during this critical period.

Reference- Nix, S. (2017). Kidney Disease. In *William's Basic Nutrition and Diet Therapy* (15th ed., p. 150). Elsevier.

Question Number : 114 Question Id : 4410091723137

Which of the following dietary modifications is most recommended for elderly individuals to reduce sarcopenia risk?

Options :

- 4410096795713. ✖ Lower fat intake
- 4410096795714. ✔ Increase high-quality protein intake
- 4410096795715. ✖ Decrease carbohydrate consumption
- 4410096795716. ✖ Increase sodium intake

Hints :

Hint - Focus on what helps maintain muscle mass in older adults.

Know More - High-quality protein intake supports muscle synthesis and reduces sarcopenia risk. Lowering fat or carbohydrate intake does not address muscle loss directly, and increased sodium can worsen cardiovascular health in elderly.

World Health Organization. (2012). Guideline: Sodium intake for adults and children. World Health Organization. <https://apps.who.int/iris/handle/10665/77985>

Question Number : 114 Question Id : 4410091723137

વૃદ્ધ વ્યક્તિઓમાં સાર્કોપેનિયા (sarcopenia)ના જોખમને ઘટાડવા માટે નીચેનામાંથી કયા આહાર ફેરફાર (dietary modifications)ની સૌથી વધુ ભલામણ કરવામાં આવે છે?

Options :

- 4410096795713. ✖ ચરબીનું સેવન ઘટાડવું.
- 4410096795714. ✔ ઉચ્ચ ગુણવત્તાયુક્ત પ્રોટીનનું સેવન વધારવું.
- 4410096795715. ✖ કાર્બોહાઇડ્રેટનું સેવન ઘટાડવું.
- 4410096795716. ✖ સોડિયમનું સેવન વધારવું.

Hints :

Hint - Focus on what helps maintain muscle mass in older adults.

Know More - High-quality protein intake supports muscle synthesis and reduces sarcopenia risk. Lowering fat or carbohydrate intake does not address muscle loss directly, and increased sodium can worsen cardiovascular health in elderly.

World Health Organization. (2012). Guideline: Sodium intake for adults and children. World Health Organization. <https://apps.who.int/iris/handle/10665/77985>

Question Number : 115 Question Id : 4410091744289

Which of the following is a neural tube defect associated with the malformation of the embryonic brain or spinal cord?

Options :

- 4410096878789. ✖ Clubfoot
- 4410096878790. ✖ Congenital heart disease
- 4410096878791. ✔ Spina bifida
- 4410096878792. ✖ Cleft lip

Hints :

Hint - Consider which option directly involves the nervous system during early development.

Know More - Spina bifida is classified as a neural tube defect because it involves improper development of the embryonic spinal cord or brain. Clubfoot is a deformity of the foot, not related to neural tube formation. Congenital heart disease affects the heart's structure and function, and cleft lip is a facial abnormality, neither are neural tube defects.

Reference- Nix, S. (2017). Kidney Disease. In *William's Basic Nutrition and Diet Therapy* (15th ed., p. 150). Elsevier.

Question Number : 115 Question Id : 4410091744289

નીચેનામાંથી કઈ ન્યુરલ ટ્યુબ ડિફેક્ટ (neural tube defect) ભૂણના મગજ અથવા કરોડરજ્જુના વિકાસમાં થતી ખામી સાથે સંકળાયેલી છે?

Options :

- 4410096878789. ✖ ક્લબફૂટ (Clubfoot)
- 4410096878790. ✖ જન્મજાત હૃદયરોગ (Congenital heart disease)
- 4410096878791. ✔ સ્પિના બિફિડા (Spina bifida)
- 4410096878792. ✖ ક્લેફ્ટ લિપ (Cleft lip)

Hints :

Hint - Consider which option directly involves the nervous system during early development.

Know More - Spina bifida is classified as a neural tube defect because it involves improper development of the embryonic spinal cord or brain. Clubfoot is a deformity of the foot, not related to neural tube formation. Congenital heart disease affects the heart's structure and function, and cleft lip is a facial abnormality, neither are neural tube defects.

Reference- Nix, S. (2017). Kidney Disease. In *William's Basic Nutrition and Diet Therapy* (15th ed., p. 150). Elsevier.

Question Number : 116 Question Id : 4410091734832

During early pregnancy, which primary nutrient deficiency leads to neural tube defects (NTDs)?

Options :

4410096841400. ✖ Protein
 4410096841401. ✔ Folic Acid
 4410096841402. ✖ Calcium
 4410096841403. ✖ Fat

Hints :

reference: Nutrition and Diet Therapy by Linda Kelly deBruyne, chapter 11, page no -293-294

Question Number : 116 Question Id : 4410091734832

ગર્ભવસ્થાના શરૂઆતના સમયગાળા દરમિયાન, કયા મુખ્ય પોષક તત્વની ઉણપને કારણે ન્યુરલ ટ્યુબ ડિફેક્ટ્સ (NTDs) થાય છે?

Options :

4410096841400. ✖ પ્રોટીન
 4410096841401. ✔ ફોલિક એસિડ
 4410096841402. ✖ કેલ્શિયમ
 4410096841403. ✖ ચરબી

Hints :

reference: Nutrition and Diet Therapy by Linda Kelly deBruyne, chapter 11, page no -293-294

Question Number : 117 Question Id : 4410091722645

Which social factor is most likely to affect a person's frequency of health service utilization?

Options :

4410096793773. ✖ Government health policies
 4410096793774. ✖ Physical infrastructure of hospitals
 4410096793775. ✔ Family support and general networks
 4410096793776. ✖ Age of the population

Hints :

Hint - Think about what encourages individuals to continue accessing health services over time.

Know More - Family support and social networks are known to influence whether individuals seek care regularly and adhere to medical advice. Government health policies, while important, affect access on a larger scale. Physical infrastructure relates more to availability than to frequency of use. Age alone does not determine frequency unless combined with other social factors.

<https://www.ncbi.nlm.nih.gov/books/NBK500097/>

Question Number : 117 Question Id : 4410091722645

કયું સામાજિક પરિબળ એ વ્યક્તિના આરોગ્ય સેવાના ઉપયોગ (health service utilization)ની આવૃત્તિને સૌથી વધુ અસર કરે તેવી સંભાવના છે?

Options :

4410096793773. ✖ સરકારની આરોગ્ય નીતિઓ
 4410096793774. ✖ હોસ્પિટલોની ભૌતિક માળખાગત સુવિધાઓ (Physical infrastructure)
 4410096793775. ✔ પારિવારિક સપોર્ટ અને સામાન્ય નેટવર્ક્સ
 4410096793776. ✖ વસ્તીની ઉંમર (Age of the population)

Hints :

Hint - Think about what encourages individuals to continue accessing health services over time.

Know More - Family support and social networks are known to influence whether individuals seek care regularly and adhere to medical advice. Government health policies, while important, affect access on a larger scale. Physical infrastructure relates more to availability than to frequency of use. Age alone does not determine frequency unless combined with other social factors.

<https://www.ncbi.nlm.nih.gov/books/NBK500097/>

Question Number : 118 Question Id : 4410091734907

According to Erving Goffman, how does stigma affect individuals with illness in society?

Options :

4410096841708. ✔ It leads to social exclusion and discrimination
 4410096841709. ✖ It improves social support networks
 4410096841710. ✖ It enhances self-identity and confidence
 4410096841711. ✖ It facilitates health-seeking behavior

Hints :

Hint - Consider how negative labeling impacts someone's social relationships and opportunities.

Know More - Stigma, per Goffman, results in social exclusion and discrimination toward individuals with illness. 'It improves social support networks' is incorrect as stigma reduces support. 'It enhances self-identity' is wrong because stigma undermines self-esteem. 'It facilitates health-seeking behavior' is incorrect as stigma can

deter individuals from seeking care.

Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. Prentice-Hall, pp. 3–12, 42–51.

Question Number : 118 Question Id : 4410091734907

એર્વિંગ ગોફમેન (Erving Goffman)ના મતે, સમાજમાં માંદગી ધરાવતા વ્યક્તિઓને સ્ટીગ્મા (stigma) કેવી રીતે અસર કરે છે?

Options :

4410096841708. ✓ તે સામાજિક બહિષ્કાર (exclusion) અને ભેદભાવ તરફ દોરી જાય છે.

4410096841709. ✗

તે સામાજિક સહાયક નેટવર્ક્સ (social support networks)માં સુધારો કરે છે.

4410096841710. ✗

તે સ્વ-ઓળખ (self-identity) અને આત્મવિશ્વાસમાં વધારો કરે છે.

4410096841711. ✗ તે સ્વાસ્થ્ય સેવાઓ મેળવવાના વલણ (health-seeking behavior)ને સુગમ બનાવે છે.

Hints :

Hint - Consider how negative labeling impacts someone's social relationships and opportunities.

Know More - Stigma, per Goffman, results in social exclusion and discrimination toward individuals with illness. 'It improves social support networks' is incorrect as stigma reduces support. 'It enhances self-identity' is wrong because stigma undermines self-esteem. 'It facilitates health-seeking behavior' is incorrect as stigma can deter individuals from seeking care.

Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. Prentice-Hall, pp. 3–12, 42–51.

Question Number : 119 Question Id : 4410091744207

In sociology, illness is often seen as a form of:

Options :

4410096878465. ✓ Social deviance

4410096878466. ✗ Social conformity

4410096878467. ✗ Social integration

4410096878468. ✗ Social stratification

Hints :

Hint - Think about how illness affects a person's ability to meet social norms or expectations.

Know More - Illness is considered social deviance because it disrupts normal functioning and societal expectations. Social conformity, social integration, and social stratification are not directly linked to the sociological definition of illness, making them incorrect.

Reference- Amzat, J., & Razum, O. (2014). Sociology and Health. Medical Sociology in Africa, 1–19. https://doi.org/10.1007/978-3-319-03986-2_1

Question Number : 119 Question Id : 4410091744207

સમાજશાસ્ત્રમાં, બીમારી (illness)ને ધણીવાર _____ ના સ્વરૂપ તરીકે જોવામાં આવે છે.

Options :

4410096878465. ✓ સામાજિક વિચલન (Social deviance)

4410096878466. ✗ સામાજિક અનુરૂપતા (Social conformity)

4410096878467. ✗ સામાજિક સંકલન (Social integration)

4410096878468. ✗ સામાજિક સ્તરીકરણ (Social stratification)

Hints :

Hint - Think about how illness affects a person's ability to meet social norms or expectations.

Know More - Illness is considered social deviance because it disrupts normal functioning and societal expectations. Social conformity, social integration, and social stratification are not directly linked to the sociological definition of illness, making them incorrect.

Reference- Amzat, J., & Razum, O. (2014). Sociology and Health. Medical Sociology in Africa, 1–19. https://doi.org/10.1007/978-3-319-03986-2_1

Question Number : 120 Question Id : 4410091743994

Which approach is most effective in encouraging positive health-seeking behavior among Indian communities?

Options :

4410096877625. ✗ Advertising campaigns

4410096877626. ✗ Offering free medicines

4410096877627. ✗ Government regulations

4410096877628. ✓ Community-based health education programs

Hints :

Hint - Think about strategies that directly engage and inform the population.

Know More - Community-based health education programs are effective because they address local beliefs and misconceptions, providing information in a culturally sensitive manner. Advertising campaigns may not reach rural populations as effectively. Offering free medicines is helpful, but does not change behavior. Government

regulations can support change, but education is key to altering health seeking behavior.

Reference- Kumar, S., & Preetha, G. (2012). Health promotion: an effective tool for global health. Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine, 37(1), 5–12. <https://doi.org/10.4103/0970-0218.94009>

Question Number : 120 Question Id : 4410091743994

ભારતીય સમુદાયોમાં સકારાત્મક સ્વાસ્થ્ય-શોધક વ્યવહાર (Positive Health-Seeking Behavior)ને પ્રોત્સાહિત કરવા માટે કયો અભિગમ સૌથી વધુ અસરકારક છે?

Options :

4410096877625. ✖ જાહેરાત ઝુંબેશ (Advertising campaigns)

4410096877626. ✖ દવાઓનું નિઃશુલ્ક વિતરણ

4410096877627. ✖

સરકારી નિયમનો (Government regulations)

4410096877628. ✔ સમુદાય આધારિત આરોગ્ય શિક્ષણ કાર્યક્રમો

Hints :

Hint - Think about strategies that directly engage and inform the population.

Know More - Community-based health education programs are effective because they address local beliefs and misconceptions, providing information in a culturally sensitive manner. Advertising campaigns may not reach rural populations as effectively. Offering free medicines is helpful, but does not change behavior. Government regulations can support change, but education is key to altering health seeking behavior.

Reference- Kumar, S., & Preetha, G. (2012). Health promotion: an effective tool for global health. Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine, 37(1), 5–12. <https://doi.org/10.4103/0970-0218.94009>

Question Number : 121 Question Id : 4410091766636

Which sociological concept explains the unequal distribution of health resources among different social groups?

Options :

4410096966476. ✖ Social mobility

4410096966477. ✖ Medicalization

4410096966478. ✖ Collective conscience

4410096966479. ✔ Social stratification

Hints :

Hint - Look for the term that relates to social hierarchy and access.

Know More - Social stratification refers to the hierarchical arrangement of individuals in society that leads to unequal access to health resources. Social mobility is movement between classes, medicalization is labeling aspects of life as medical problems, and collective conscience is shared societal beliefs, none directly explain resource distribution.

Reference : Textbook of Applied Sociology and psychology for bsc nursing students chapter 5

Question Number : 121 Question Id : 4410091766636

કઈ સમાજશાસ્ત્રીય વિભાવના (sociological concept) સમાજમાં વિવિધ સામાજિક જૂથો વચ્ચે આરોગ્ય સંસાધનોની અસમાન વહેંચણીને સમજાવે છે?

Options :

4410096966476. ✖ સામાજિક ગતિશીલતા (Social mobility)

4410096966477. ✖ તબીબીકરણ (Medicalization)

4410096966478. ✖ સમૂહિક ચેતના (Collective conscience)

4410096966479. ✔ સામાજિક સ્તરીકરણ (Social stratification)

Hints :

Hint - Look for the term that relates to social hierarchy and access.

Know More - Social stratification refers to the hierarchical arrangement of individuals in society that leads to unequal access to health resources. Social mobility is movement between classes, medicalization is labeling aspects of life as medical problems, and collective conscience is shared societal beliefs, none directly explain resource distribution.

Reference : Textbook of Applied Sociology and psychology for bsc nursing students chapter 5

Question Number : 122 Question Id : 4410091729676

In monitoring nutritional trends in population groups, which of the following is the most useful for identifying chronic malnutrition?

Options :

4410096821242. ✔ Stunting rates

4410096821243. ✖ Wasting rates

4410096821244. ✖ Underweight prevalence

4410096821245. ✖ Overweight prevalence

Hints :

Hint - Think about which indicator is linked to prolonged, rather than recent, nutritional deficiencies.

Know More - Stunting rates are most useful for identifying chronic malnutrition, as they reflect long-term deficiencies affecting growth. Wasting rates indicate acute malnutrition, underweight combines both chronic and acute, and overweight is unrelated to chronic undernutrition.

Reference- Reinhardt, K., & Fanzo, J. (2014). Addressing chronic malnutrition through multi-sectoral, sustainable approaches: A review of the causes and consequences. *Frontiers in Nutrition*, 1, 13. doi:10.3389/fnut.2014.00013

Question Number : 122 Question Id : 4410091729676

વસ્તી જૂથોમાં પોષણના વલણોનું નિરીક્ષણ કરતી વખતે, 'દીર્ઘકાલીન કુપોષણ' (Chronic malnutrition) ને ઓળખવા માટે નીચેનામાંથી કયું સૌથી વધુ ઉપયોગી છે?

Options :

4410096821242. ✓

સ્ટન્ટિંગનો દર (Stunting rates)

4410096821243. ✗

વેસ્ટિંગનો દર (Wasting rates)

4410096821244. ✗ ઓછા વજનનો વ્યાપ (Underweight prevalence)

4410096821245. ✗ વધુ પડતા વજનનો વ્યાપ (Overweight prevalence)

Hints :

Hint - Think about which indicator is linked to prolonged, rather than recent, nutritional deficiencies.

Know More - Stunting rates are most useful for identifying chronic malnutrition, as they reflect long-term deficiencies affecting growth. Wasting rates indicate acute malnutrition, underweight combines both chronic and acute, and overweight is unrelated to chronic undernutrition.

Reference- Reinhardt, K., & Fanzo, J. (2014). Addressing chronic malnutrition through multi-sectoral, sustainable approaches: A review of the causes and consequences. *Frontiers in Nutrition*, 1, 13. doi:10.3389/fnut.2014.00013

Question Number : 123 Question Id : 4410091727529

Which technique would best identify early signs of protein-energy malnutrition in a community survey?

Options :

4410096812703. ✗ Clinical examination

4410096812704. ✗ Dietary recall

4410096812705. ✓ Anthropometric measurements

4410096812706. ✗ Biochemical tests

Hints :

Hint - Think about methods that can be used easily in large groups and detect physical changes.

Know More - Anthropometric measurements such as height-for-age, weight-for-age, and BMI can detect early signs of protein-energy malnutrition in a population. Clinical examination may miss subclinical cases, dietary recall assesses intake but not nutritional status, and biochemical tests are resource-intensive and not always practical for surveys.

Text Book of Nutrition Science by B.Srilakshmi

Question Number : 123 Question Id : 4410091727529

સામુદાયિક સર્વેક્ષણમાં પ્રોટીન-ઊર્જા કુપોષણ (protein-energy malnutrition)ના પ્રારંભિક લક્ષણો (early signs) ઓળખવા માટે કઈ તકનીક સૌથી શ્રેષ્ઠ છે?

Options :

4410096812703. ✗ ક્લિનિકલ એક્ઝામિનેશન (Clinical examination)

4410096812704. ✗ ડાયેટરી રિકોલ (Dietary recall)

4410096812705. ✓ એન્થ્રોપોમેટ્રિક માપન (Anthropometric measurements)

4410096812706. ✗ જૈવરાસાયણિક પરીક્ષણો (Biochemical tests)

Hints :

Hint - Think about methods that can be used easily in large groups and detect physical changes.

Know More - Anthropometric measurements such as height-for-age, weight-for-age, and BMI can detect early signs of protein-energy malnutrition in a population. Clinical examination may miss subclinical cases, dietary recall assesses intake but not nutritional status, and biochemical tests are resource-intensive and not always practical for surveys.

Text Book of Nutrition Science by B.Srilakshmi

Question Number : 124 Question Id : 4410091755202

Which of the following is a key indicator in identifying groups at risk of undernutrition?

Options :

4410096921560. ✓ Body Mass Index (BMI)

4410096921561. ✗ Dietary diversity score

4410096921562. ✗ Food frequency questionnaire

4410096921563. ✗ Waist circumference

Hints :

Hint - Look for the option that involves both weight and height to identify risk.

Know More - Body Mass Index (BMI) is a fundamental indicator used to assess undernutrition risk by comparing weight and height. Dietary diversity score, food frequency questionnaires, and waist circumference are relevant but BMI is especially crucial in identifying undernutrition. Dietary diversity score and food frequency questionnaires assess intake, while waist circumference is more associated with obesity risk

Reference: Community science (home science) Unit 5 ,Page 72 .

Question Number : 124 Question Id : 4410091755202

અલ્પપોષણ (Undernutrition)ની જોખમ હેઠળના જૂથોની ઓળખ કરવા માટે નીચેનામાંથી કયું એક મુખ્ય સૂચક છે?

Options :

4410096921560. ✓ બોડી માસ ઇન્ડેક્સ (BMI)

4410096921561. ✗ આહાર વૈવિધ્ય સ્કોર (Dietary diversity score)

4410096921562. ✗ ખોરાક આવૃત્તિ પ્રશ્નાવલી (Food frequency questionnaire)

4410096921563. ✗ કમરનો ઘેરાવો (Waist circumference)

Hints :

Hint - Look for the option that involves both weight and height to identify risk.

Know More - Body Mass Index (BMI) is a fundamental indicator used to assess undernutrition risk by comparing weight and height. Dietary diversity score, food frequency questionnaires, and waist circumference are relevant but BMI is especially crucial in identifying undernutrition. Dietary diversity score and food frequency questionnaires assess intake, while waist circumference is more associated with obesity risk

Reference: Community science (home science) Unit 5 ,Page 72 .

Question Number : 125 Question Id : 4410091735083

Evaluate the following scenario.

An individual with hypertension switches to a Mediterranean diet. Which aspect of this diet most contributes to blood pressure reduction?

Options :

4410096842404. ✓ High intake of fruits, vegetables, and unsaturated fats

4410096842405. ✗ High dairy and red meat consumption

4410096842406. ✗ Excess alcohol intake

4410096842407. ✗ Low carbohydrate and high protein intake

Hints :

Hint - Focus on the core components of the Mediterranean diet rather than peripheral elements.

Know More - The Mediterranean diet's emphasis on fruits, vegetables, and unsaturated fats (like olive oil) lowers blood pressure. The diet is low in sodium, but its main feature is the healthy fat and plant-based focus. High dairy and red meat are not central to Mediterranean diet. Alcohol is included in moderation, not high amounts.

Mahan, L. K., & Raymond, J. L. (2020). Krause's food & the nutrition care process (15th ed.). Elsevier. Chapter 11: Nutrition and cardiovascular disease, pp. 169–174

Question Number : 125 Question Id : 4410091735083

નીચે આપેલી પરિસ્થિતિનું મૂલ્યાંકન કરો.

હાયપરટેન્શન (hypertension) ધરાવતો એક વ્યક્તિ મેડિટેરેનિયન આહાર (Mediterranean diet) વેવાનું શરૂ કરે છે. આ આહારનું કયું પાસું બ્લડ પ્રેશર ઘટાડવામાં સૌથી વધુ ફાળો આપે છે?

Options :

4410096842404. ✓ ફળો, શાકભાજી અને અસંતૃપ્ત ચરબીનું વધુ સેવન

4410096842405. ✗ ડેરી પદાર્થો અને લાલ માંસનો વધુ ઉપયોગ

4410096842406. ✗ વધુ પડતા આલ્કોહોલનું સેવન

4410096842407. ✗

કાર્બોહાઇડ્રેટનું ઓછું અને પ્રોટીનનું વધુ સેવન

Hints :

Hint - Focus on the core components of the Mediterranean diet rather than peripheral elements.

Know More - The Mediterranean diet's emphasis on fruits, vegetables, and unsaturated fats (like olive oil) lowers blood pressure. The diet is low in sodium, but its main feature is the healthy fat and plant-based focus. High dairy and red meat are not central to Mediterranean diet. Alcohol is included in moderation, not high amounts.

Mahan, L. K., & Raymond, J. L. (2020). Krause's food & the nutrition care process (15th ed.). Elsevier. Chapter 11: Nutrition and cardiovascular disease, pp. 169–174

Question Number : 126 Question Id : 4410091737341

Which technique primarily involves evaluating body measurements to assess nutritional status?

Options :

4410096851108. ✓ Anthropometric assessment

4410096851109. ✗ Biochemical assessment

4410096851110. ✗ Dietary assessment

4410096851111. ✗ Clinical assessment

Hints :

Hint - Consider which method uses tools like scales and measuring tapes rather than lab tests or diet records.

Know More - Anthropometric assessment is the correct answer because it specifically refers to the measurement of physical dimensions and composition of the human body, such as height, weight, and BMI, to determine nutritional status. Biochemical assessment involves laboratory analysis of blood or urine, dietary assessment focuses on food intake, and clinical assessment examines physical signs and symptoms. Each incorrect option represents a different method, not primarily focused on body measurements.

Reference: KRAUSE'S
FOOD & THE NUTRITION
CARE PROCESS 14 EDITION
Chapter:7 ,Page no : 111

Question Number : 126 Question Id : 4410091737341

પોષણની સ્થિતિ (Nutritional status)નું આકલન કરવા માટે શરીરના માપનનું મૂલ્યાંકન કરવામાં કઈ પદ્ધતિનો સમાવેશ થાય છે?

Options :

4410096851108. ✓ એન્થ્રોપોમેટ્રિક આકલન (Anthropometric assessment)

4410096851109. ✗ બાયોકેમિકલ આકલન (Biochemical assessment)

4410096851110. ✗ ડાયટરી આકલન (Dietary assessment)

4410096851111. ✗ ક્લિનિકલ આકલન (Clinical assessment)

Hints :

Hint - Consider which method uses tools like scales and measuring tapes rather than lab tests or diet records.

Know More - Anthropometric assessment is the correct answer because it specifically refers to the measurement of physical dimensions and composition of the human body, such as height, weight, and BMI, to determine nutritional status. Biochemical assessment involves laboratory analysis of blood or urine, dietary assessment focuses on food intake, and clinical assessment examines physical signs and symptoms. Each incorrect option represents a different method, not primarily focused on body measurements.

Reference: KRAUSE'S
FOOD & THE NUTRITION
CARE PROCESS 14 EDITION
Chapter:7 ,Page no : 111

Question Number : 127 Question Id : 4410091733579

Which macronutrient is primarily responsible for building and repairing body tissues?

Options :

4410096836436. ✗ Carbohydrates

4410096836437. ✗ Lipids

4410096836438. ✓ Proteins

4410096836439. ✗ Calcium

Hints :

Hint- Think of this macronutrient as the "building blocks" of your body.

Know more- Proteins are composed of amino acids, which the body uses to synthesize new tissues and repair damaged ones. Calcium is a micronutrient.

Mudambi, SR; Rajagopal, MV (2007). Fundamentals of Foods, Nutrition and Diet Therapy. In Principles of Diet Therapy and Therapeutic Nutrition. (5th ed., p. 7). New Age International Publishers.

Question Number : 127 Question Id : 4410091733579

કયો બૃહત્ પોષકતત્વ (macronutrient) મુખ્યત્વે શરીરની પેશીઓના નિર્માણ અને સમારકામ (repairing) માટે જવાબદાર છે?

Options :

4410096836436. ✗ કાર્બોહાઇડ્રેટ્સ

4410096836437. ✗ લિપિડ્સ

4410096836438. ✓ પ્રોટીન્સ

પ્રોટીન્સ

4410096836439. ✗ કેલ્શિયમ

Hints :

Hint- Think of this macronutrient as the "building blocks" of your body.

Know more- Proteins are composed of amino acids, which the body uses to synthesize new tissues and repair damaged ones. Calcium is a micronutrient.

Mudambi, SR; Rajagopal, MV (2007). Fundamentals of Foods, Nutrition and Diet Therapy. In Principles of Diet Therapy and Therapeutic Nutrition. (5th ed., p. 7). New Age International Publishers.

Question Number : 128 Question Id : 4410091733623

Which of the following is a primary function of carbohydrates in the human body?

Options :

4410096836611. ✓ Providing energy
 4410096836612. ✗ Building muscle
 4410096836613. ✗ Regulating body temperature
 4410096836614. ✗ Maintaining bone structure

Hints :

Hint - Think about which nutrient is most quickly used by the body for daily activities.

Know More - Providing energy is the main function of carbohydrates because they are broken down into glucose, which fuels bodily processes. Building muscle is mainly associated with proteins, not carbohydrates. Regulating body temperature is not a direct function of carbohydrates; it's managed through other mechanisms. Maintaining bone structure is primarily the role of minerals like calcium, not carbohydrates.

Reference : Food Science by Sumati R Mudambi Chapter 3 , page 19

Question Number : 128 Question Id : 4410091733623

માનવ શરીરમાં કાર્બોહાઇડ્રેટ્સ (carbohydrates)નું પ્રાથમિક કાર્ય નીચેનામાંથી કયું છે?

Options :

4410096836611. ✓ ઊર્જા (energy) પૂરી પાડવી
 4410096836612. ✗ સ્નાયુઓનું નિર્માણ કરવું
 4410096836613. ✗ શરીરના તાપમાનનું નિયમન કરવું
 4410096836614. ✗ હાડકાની સંરચના (bone structure) જાળવવી

Hints :

Hint - Think about which nutrient is most quickly used by the body for daily activities.

Know More - Providing energy is the main function of carbohydrates because they are broken down into glucose, which fuels bodily processes. Building muscle is mainly associated with proteins, not carbohydrates. Regulating body temperature is not a direct function of carbohydrates; it's managed through other mechanisms. Maintaining bone structure is primarily the role of minerals like calcium, not carbohydrates.

Reference : Food Science by Sumati R Mudambi Chapter 3 , page 19

Question Number : 129 Question Id : 4410091735283

Which functional property of proteins is most adversely affected by extensive glycation during food processing?

Options :

4410096843204. ✓ Solubility
 4410096843205. ✗ Emulsification
 4410096843206. ✗ Foaming
 4410096843207. ✗ Thermal stability

Hints :

Hint - Consider which property relies most on protein being dispersed and not aggregated.

Know More - Extensive glycation decreases protein solubility due to the formation of large, cross-linked structures. Emulsification and foaming can also be affected but are less sensitive to glycation than solubility. Thermal stability may actually increase due to cross-linking.

Damodaran, S., Parkin, K. L., & Fennema, O. R. (2017). Fennema's food chemistry (5th ed.). CRC Press. Chapter 6: Nonenzymatic browning reactions; Chapter 9: Functional properties of proteins, pp. 356–362, 487–492.

Question Number : 129 Question Id : 4410091735283

હૂડ પ્રોસેસિંગ દરમિયાન વ્યાપક ગ્લાયકેશન (extensive glycation)થી પ્રોટીનનાં કયા કાર્યાત્મક ગુણધર્મ પર સૌથી વધુ પ્રતિકૂળ રીતે (adversely) અસર થાય છે?

Options :

4410096843204. ✓ દ્રાવ્યતા (Solubility)
 4410096843205. ✗ પાચીકરણ (Emulsification)
 4410096843206. ✗ ફીણીકરણ (Foaming)
 4410096843207. ✗ ઉષ્મીય સ્થિરતા (Thermal stability)

Hints :

Hint - Consider which property relies most on protein being dispersed and not aggregated.

Know More - Extensive glycation decreases protein solubility due to the formation of large, cross-linked structures. Emulsification and foaming can also be affected but are less sensitive to glycation than solubility. Thermal stability may actually increase due to cross-linking.

Damodaran, S., Parkin, K. L., & Fennema, O. R. (2017). Fennema's food chemistry (5th ed.). CRC Press. Chapter 6: Nonenzymatic browning reactions; Chapter 9: Functional properties of proteins, pp. 356–362, 487–492.

Question Number : 130 Question Id : 4410091735329

What structural feature is common to both aromatic hydrocarbons and phenols?

Options :

4410096843384. ✓ Benzene ring
 4410096843385. ✗ Methyl group
 4410096843386. ✗ Carboxyl group
 4410096843387. ✗ Hydroxyl group

Hints :

Hint - Focus on the ring system present in both compounds, not the substituents.

Know More - Both aromatic hydrocarbons and phenols possess a benzene ring, making this the correct answer. Hydroxyl group is only present in phenols, while methyl and carboxyl groups are not defining features of either class.

Nelson, D. L., & Cox, M. M. (2017). Lehninger principles of biochemistry (7th ed.). W. H. Freeman. Chapter 21: Lipid-soluble vitamins – Section on Vitamin K, pp. 944–946.

Question Number : 130 Question Id : 4410091735329

એરોમેટિક હાઇડ્રોકાર્બન્સ (aromatic hydrocarbons) અને ફિનોલ્સ (phenols) બંનેમાં કઈ સંરચનાત્મક લાક્ષણિકતા (structural feature) સામાન્ય છે?

Options :

4410096843384. ✓ બેન્ઝીન રિંગ (Benzene ring)
 4410096843385. ✗ મિથાઇલ ગ્રુપ (Methyl group)
 4410096843386. ✗ કાર્બોક્સિલ ગ્રુપ (Carboxyl group)
 4410096843387. ✗ હાઇડ્રોક્સિલ ગ્રુપ (Hydroxyl group)

Hints :

Hint - Focus on the ring system present in both compounds, not the substituents.

Know More - Both aromatic hydrocarbons and phenols possess a benzene ring, making this the correct answer. Hydroxyl group is only present in phenols, while methyl and carboxyl groups are not defining features of either class.

Nelson, D. L., & Cox, M. M. (2017). Lehninger principles of biochemistry (7th ed.). W. H. Freeman. Chapter 21: Lipid-soluble vitamins – Section on Vitamin K, pp. 944–946.

Question Number : 131 Question Id : 4410091728281

Which micronutrient is required for the activation of clotting factors in the blood?

Options :

4410096815717. ✓ Vitamin K
 4410096815718. ✗ Vitamin A
 4410096815719. ✗ Vitamin C
 4410096815720. ✗ Vitamin E

Hints :

Hint - Think about which vitamin is commonly associated with preventing excessive bleeding.

Know More - Vitamin K is correct as it is essential for activating clotting factors. Vitamin A is necessary for vision, vitamin C is needed for collagen synthesis, and vitamin E is an antioxidant; none of these are directly involved in blood clotting.

Text Book of Nutrition Science by B.Srilakshmi

Question Number : 131 Question Id : 4410091728281

લોહી ગંઠાઈ જવાની પરિબળો (clotting factors)ને સક્રિય કરવા માટે કયા સૂક્ષ્મપોષકતત્વની જરૂર પડે છે?

Options :

4410096815717. ✓ વિટામિન K
 4410096815718. ✗ વિટામિન A
 4410096815719. ✗ વિટામિન C
 4410096815720. ✗ વિટામિન E

Hints :

Hint - Think about which vitamin is commonly associated with preventing excessive bleeding.

Know More - Vitamin K is correct as it is essential for activating clotting factors. Vitamin A is necessary for vision, vitamin C is needed for collagen synthesis, and vitamin E is an antioxidant; none of these are directly involved in blood clotting.

Text Book of Nutrition Science by B.Srilakshmi

Question Number : 132 Question Id : 4410091728240

Which chemical structure describes the primary form of Vitamin A found in plant-based sources like carrots?

Options :

4410096815553. ✗ Preformed active retinol molecules

4410096815554. ✖ Hydrophilic acetic acid polymers
 4410096815555. ✔ Precursor hydrocarbon carotenoids
 4410096815556. ✖ Saturated phosphoric acid esters

Hints :

The chemical structure that describes the primary form of Vitamin A in plant-based sources like carrots is Beta carotene.
<https://www.sciencedirect.com/topics/food-science/vitamin-a#:~:text=Vitamin%20A%20in%20foods%20is,A.C.%20Ross>

Question Number : 132 Question Id : 4410091728240

ગાજર જેવા વનસ્પતિ-આધારિત સ્ત્રોતોમાં જોવા મળતા વિટામિન A ના પ્રાથમિક સ્વરૂપનું વર્ણન કર્યું રાસાયણિક બંધારણ (Chemical structure) કરે છે?

Options :

4410096815553. ✖ પૂર્વ-નિર્મિત સક્રિય રેટિનોલ અણુઓ (Preformed active retinol molecules)
 4410096815554. ✖ હાઇડ્રોફિલિક એસિટિક એસિડ પોલિમર્સ (Hydrophilic acetic acid polymers)
 4410096815555. ✔ પ્રિકર્સર હાઇડ્રોકાર્બન કેરોટિનોઇડ્સ (Precursor hydrocarbon carotenoids)
 4410096815556. ✖ સંતૃપ્ત ફોસ્ફોરિક એસિડ એસ્ટર્સ (Saturated phosphoric acid esters)

Hints :

The chemical structure that describes the primary form of Vitamin A in plant-based sources like carrots is Beta carotene.
<https://www.sciencedirect.com/topics/food-science/vitamin-a#:~:text=Vitamin%20A%20in%20foods%20is,A.C.%20Ross>

Question Number : 133 Question Id : 4410091733993

Which micronutrient is essential for the formation of hemoglobin in the blood?

Options :

4410096838074. ✔ Iron
 4410096838075. ✖ Calcium
 4410096838076. ✖ Vitamin C
 4410096838077. ✖ Zinc

Hints :

Hint - Consider which nutrient is directly involved in oxygen transport within the blood.

Know More - Iron is essential for hemoglobin formation because it binds oxygen for transport in the blood. Calcium, Vitamin C, and Zinc are also micronutrients but do not play a direct role in hemoglobin formation. Calcium is important for bones, Vitamin C aids in collagen synthesis and immune function, and Zinc supports immune and enzyme activities.

Reference: Biochemistry by U Satyanarayan ,Chapter : 18

Question Number : 133 Question Id : 4410091733993

લોહીમાં હિમોગ્લોબિન (hemoglobin)ની રચના માટે કયો સૂક્ષ્મ પોષકતત્વ (micronutrient) આવશ્યક છે?

Options :

4410096838074. ✔ આયર્ન
 4410096838075. ✖ કેલ્શિયમ
 4410096838076. ✖ વિટામિન C
 4410096838077. ✖ ઝિંક

Hints :

Hint - Consider which nutrient is directly involved in oxygen transport within the blood.

Know More - Iron is essential for hemoglobin formation because it binds oxygen for transport in the blood. Calcium, Vitamin C, and Zinc are also micronutrients but do not play a direct role in hemoglobin formation. Calcium is important for bones, Vitamin C aids in collagen synthesis and immune function, and Zinc supports immune and enzyme activities.

Reference: Biochemistry by U Satyanarayan ,Chapter : 18

Question Number : 134 Question Id : 4410091735360

Which micronutrient is crucial for the activation of glutathione peroxidase, a key antioxidant enzyme in human cells?

Options :

4410096843504. ✔ Selenium
 4410096843505. ✖ Zinc
 4410096843506. ✖ Copper
 4410096843507. ✖ Manganese

Hints :

Hint - Consider which mineral is directly linked to protection against oxidative damage in cells, not just general enzyme activation.

Know More - Selenium is essential for glutathione peroxidase activity, making it crucial for cellular antioxidant defense. Zinc, copper, and manganese are important for other antioxidant enzymes (like superoxide dismutase), but not for glutathione peroxidase specifically. Therefore, only selenium directly activates glutathione peroxidase.

Nelson, D. L., & Cox, M. M. (2017). Lehninger principles of biochemistry (7th ed.). W. H. Freeman. Chapter 21: Biosynthesis of amino acids and specialized

products – Section on selenium and selenoproteins, pp. 929–931.

Question Number : 134 Question Id : 4410091735360

માનવ કોષોમાં એક મુખ્ય એન્ટીઓક્સિડન્ટ એન્ઝાઇમ (Antioxidant enzyme) ગ્લુટાથિયોન પેરોક્સિડેઝ (glutathione peroxidase) ની સક્રિયકરણ માટે કયું સૂક્ષ્મ પોષકતત્વ (Micronutrient) મહત્વપૂર્ણ છે?

Options :

4410096843504. ✓ સેલેનિયમ (Selenium)
 4410096843505. ✗ ઝિંક (Zinc)
 4410096843506. ✗ કોપર (Copper)
 4410096843507. ✗ મેંગેનીઝ (Manganese)

Hints :

Hint - Consider which mineral is directly linked to protection against oxidative damage in cells, not just general enzyme activation.

Know More - Selenium is essential for glutathione peroxidase activity, making it crucial for cellular antioxidant defense. Zinc, copper, and manganese are important for other antioxidant enzymes (like superoxide dismutase), but not for glutathione peroxidase specifically. Therefore, only selenium directly activates glutathione peroxidase.

Nelson, D. L., & Cox, M. M. (2017). Lehninger principles of biochemistry (7th ed.). W. H. Freeman. Chapter 21: Biosynthesis of amino acids and specialized products – Section on selenium and selenoproteins, pp. 929–931.

Question Number : 135 Question Id : 4410091735408

What is the spoilage of fat that may occur during storage called?

Options :

4410096843688. ✓ Rancidity
 4410096843689. ✗ Fermentation
 4410096843690. ✗ Caramelization
 4410096843691. ✗ Pasteurization

Hints :

Hint - Focus on what causes off-flavors in oils or butter during long storage, not changes in sugars or heat treatments.

Know More - Rancidity is the correct term for fat spoilage, characterized by undesirable changes in flavor and odor. The other options, fermentation, caramelization, and pasteurization, do not describe fat spoilage: fermentation is microbial conversion of carbohydrates, caramelization is browning of sugars, and pasteurization is a heat treatment to kill pathogens.

Reference- Srilakshmi, B. (2018). Food Science (7th ed., p. 235). New Delhi: New Age International

Question Number : 135 Question Id : 4410091735408

સંગ્રહ દરમિયાન ચરબીમાં થતા બગાડ (Spoilage of fat) ને શું કહેવાય છે?

Options :

4410096843688. ✓ રેન્સિડિટી (Rancidity)
 4410096843689. ✗ ફર્મેન્ટેશન (Fermentation)
 4410096843690. ✗ કેરેમેલાઇઝેશન (Caramelization)
 4410096843691. ✗ પેશ્ચુરાઇઝેશન (Pasteurization)

Hints :

Hint - Focus on what causes off-flavors in oils or butter during long storage, not changes in sugars or heat treatments.

Know More - Rancidity is the correct term for fat spoilage, characterized by undesirable changes in flavor and odor. The other options, fermentation, caramelization, and pasteurization, do not describe fat spoilage: fermentation is microbial conversion of carbohydrates, caramelization is browning of sugars, and pasteurization is a heat treatment to kill pathogens.

Reference- Srilakshmi, B. (2018). Food Science (7th ed., p. 235). New Delhi: New Age International

Question Number : 136 Question Id : 4410091728321

Which novel processing method is best suited for reducing pathogens in packaged foods without opening the package?

Options :

4410096815873. ✗ Irradiation
 4410096815874. ✓ High-pressure processing
 4410096815875. ✗ Cold plasma
 4410096815876. ✗ Pulsed electric field

Hints :

Blanching is a heat treatment applied to vegetables before freezing to inactivate endogenous enzymes. Enzymes such as peroxidase and catalase can continue to function at low temperatures and cause deterioration in flavor, color, and texture during frozen storage. Freezing alone slows enzymatic activity but does not completely stop it. Therefore, blanching is necessary to preserve quality during storage by preventing enzymatic spoilage.

Fellows, P. J. (2017). Food processing technology: Principles and practice (4th ed., Chapter 21: Freezing and frozen storage, pp. 533–536). Woodhead Publishing.

Question Number : 136 Question Id : 4410091728321

પેકેજ્ડ ફૂડને ખોલ્યા વગર જ તેમાં રહેલા રોગકારકો (pathogens)ને ઘટાડવા માટે કઈ નવી પ્રોસેસિંગ પદ્ધતિ (novel processing method) સૌથી વધુ અનુકૂળ છે?

Options :

- 4410096815873. ✖ વિકિરણ (Irradiation)
- 4410096815874. ✔ હાઈ-પ્રેશર પ્રોસેસિંગ (High-pressure processing)
- 4410096815875. ✖ કોલ્ડ પ્લાઝ્મા (Cold Plasma)
- 4410096815876. ✖ પલ્સ્ડ ઇલેક્ટ્રિક ફિલ્ડ (Pulsed Electric Field)

Hints :

Blanching is a heat treatment applied to vegetables before freezing to inactivate endogenous enzymes. Enzymes such as peroxidase and catalase can continue to function at low temperatures and cause deterioration in flavor, color, and texture during frozen storage. Freezing alone slows enzymatic activity but does not completely stop it. Therefore, blanching is necessary to preserve quality during storage by preventing enzymatic spoilage.

Fellows, P. J. (2017). Food processing technology: Principles and practice (4th ed., Chapter 21: Freezing and frozen storage, pp. 533–536). Woodhead Publishing.

Question Number : 137 Question Id : 4410091731440

How does pasteurization contribute to food safety?

Options :

- 4410096828132. ✖ Prevents color change
- 4410096828133. ✔ Destroys harmful microorganisms
- 4410096828134. ✖ Adds preservatives to food
- 4410096828135. ✖ Alters texture of food

Hints :

Hint - Think about what happens to milk before it reaches the market.

Know More - Pasteurization is the correct answer as it destroys harmful microorganisms, making food safer, while maintaining its taste and quality. It does not add preservatives, nor does it change the texture or color significantly. Therefore, only the correct option describes the main purpose of pasteurization.

Reference: Food Science by Potter chapter: 8

Question Number : 137 Question Id : 4410091731440

પાશ્ચરાઈઝેશન (Pasteurization) બાદ સુરક્ષા (food safety)માં કેવી રીતે ફાળો આપે છે?

Options :

- 4410096828132. ✖ રંગ પરિવર્તન અટકાવે છે.
- 4410096828133. ✔ હાનિકારક સુક્ષ્મસજીવો (microorganisms)નો નાશ કરે છે.
- 4410096828134. ✖ બાદ પદાર્થમાં પ્રિઝર્વેટિવ્સ (preservatives) ઉમેરે છે.
- 4410096828135. ✖ બાદ પદાર્થના ટેક્સચરમાં ફેરફાર કરે છે.

Hints :

Hint - Think about what happens to milk before it reaches the market.

Know More - Pasteurization is the correct answer as it destroys harmful microorganisms, making food safer, while maintaining its taste and quality. It does not add preservatives, nor does it change the texture or color significantly. Therefore, only the correct option describes the main purpose of pasteurization.

Reference: Food Science by Potter chapter: 8

Question Number : 138 Question Id : 4410091731732

What is a key advantage of Pulsed Electric Field (PEF) processing over conventional thermal pasteurization?

Options :

- 4410096829280. ✔ Better preservation of flavor and nutrients
- 4410096829281. ✖ Increased shelf-life compared to all methods
- 4410096829282. ✖ Improved texture and color uniformity
- 4410096829283. ✖ Lower equipment cost

Hints :

Hint - Think about what happens to food quality when heat is minimized during processing.

Know More - PEF processing preserves flavor and nutrients because it does not use high temperatures. Increased shelf-life can occur with both methods, but thermal pasteurization may negatively impact flavor and nutrients. Improved texture and color uniformity are not specific advantages of PEF over thermal methods. Lower equipment cost is not a typical benefit.

Reference :Food Processing Technology .Principles and Practices 2 edition by P J Fellows ,Chap : 9

Question Number : 138 Question Id : 4410091731732

પરંપરાગત ધર્મવ પેશ્ચરાઇઝેશન (thermal pasteurization) કરતાં પલ્સ ઇલેક્ટ્રિક ફિલ્ડ (PEF) પ્રોસેસિંગનો મુખ્ય ફાયદો શું છે?

Options :

4410096829280. ✓ સ્વાદ અને પોષકતત્વોની વધુ સારી જાળવણી

4410096829281. ✗ તમામ પદ્ધતિઓની સરખામણીમાં શેલ્ફ-લાઇફમાં વધારો

4410096829282. ✗ ટેક્સચર અને રંગની એકરૂપતામાં સુધારો

4410096829283. ✗ ઓછો સાધન ખર્ચ

Hints :

Hint - Think about what happens to food quality when heat is minimized during processing.

Know More - PEF processing preserves flavor and nutrients because it does not use high temperatures. Increased shelf-life can occur with both methods, but thermal pasteurization may negatively impact flavor and nutrients. Improved texture and color uniformity are not specific advantages of PEF over thermal methods. Lower equipment cost is not a typical benefit.

Reference :Food Processing Technology .Principles and Practices 2 edition by P J Fellows ,Chap : 9

Question Number : 139 Question Id : 4410091736115

Which type of material is safe and recommended for storing wheat to achieve complete elimination of *Liposcelis* (book lice) for long-term storage?

Options :

4410096846472. ✓ Hermetic bags

4410096846473. ✗ Jute sacks

4410096846474. ✗ Plain paper bags

4410096846475. ✗ Lindane-impregnated bags

Hints :

Hermetic technologies as an alternative to traditional and chemical control methods have gained significant interest among farmers, the private sector, governments, and development agencies. The plastic inner liners of the hermetic bag are designed to limit or sensibly reduce the permeability of gases to ensure that the low oxygen environment inside the bag is maintained to levels that hinder the development of all life stages of insects. The use of Lindane is highly discouraged or banned in many regions due to toxicity, environmental persistence, and residues in food.

References

Razaq, S., Hussain, M., Waqar Hassan, M., Sarwar, G., Anwar, T., Qureshi, H., ... Alharbi, S. (03 2025). Evaluating the pest control efficiency of wheat storage bags and polypropylene liners against *Trogoderma granarium* and *Tribolium castaneum*. International Journal of Tropical Insect Science. doi:10.1007/s42690-025-01483-x

Baributsa D, Baoua IB. Hermetic Bags Help Afghan Rural Women Preserve Wheat Flour during Winter. Insects. 2022 Feb 27;13(3):237. doi: 10.3390/insects13030237. PMID: 35323535; PMCID: PMC8953509.

Question Number : 139 Question Id : 4410091736115

ઘઉંના લાંબા ગાળાના સંગ્રહ માટે લિપોસેલિસ (બુક લાઇસ) [*Liposcelis* (Book Lice)]ની સંપૂર્ણ નાબૂદી સુનિશ્ચિત કરવા માટે કયા પ્રકારની સામગ્રી સલામત છે અને ભલામણ કરવામાં આવે છે?

Options :

4410096846472. ✓

હર્મેટિક બેગ્સ (Hermetic bags)

4410096846473. ✗

શણની કોથળીઓ (Jute sacks)

4410096846474. ✗

સાદી કાગળની કોથળીઓ (Plain paper bags)

4410096846475. ✗

લિન્ડેન-ઇમ્પ્રેગનેટેડ બેગ્સ (Lindane-impregnated bags)

Hints :

Hermetic technologies as an alternative to traditional and chemical control methods have gained significant interest among farmers, the private sector, governments, and development agencies. The plastic inner liners of the hermetic bag are designed to limit or sensibly reduce the permeability of gases to ensure that the low oxygen environment inside the bag is maintained to levels that hinder the development of all life stages of insects. The use of Lindane is highly discouraged or banned in many regions due to toxicity, environmental persistence, and residues in food.

References

Razaq, S., Hussain, M., Waqar Hassan, M., Sarwar, G., Anwar, T., Qureshi, H., ... Alharbi, S. (03 2025). Evaluating the pest control efficiency of wheat storage bags and polypropylene liners against *Trogoderma granarium* and *Tribolium castaneum*. International Journal of Tropical Insect Science. doi:10.1007/s42690-025-01483-x

Baributsa D, Baoua IB. Hermetic Bags Help Afghan Rural Women Preserve Wheat Flour during Winter. Insects. 2022 Feb 27;13(3):237. doi: 10.3390/insects13030237. PMID: 35323535; PMCID: PMC8953509.

Question Number : 140 Question Id : 4410091731668

Which Sustainable Development Goal's targets include promoting sustainable food production systems and resilient agricultural practices?

Options :

4410096829032. ✗ Affordable and Clean Energy

4410096829033. ✓ Zero Hunger

4410096829034. ✖ Peace, Justice and Strong Institutions

4410096829035. ✖ Reduced Inequalities

Hints :

Hint - Think about which SDG is most relevant to farming and food production sustainability.

Know More - Zero Hunger includes targets for sustainable food production and resilient agriculture. Affordable and Clean Energy focuses on energy provision, not agriculture. Peace, Justice and Strong Institutions addresses governance, not food production. Reduced Inequalities is about social and economic gaps, not agricultural practices.

<https://globalgoals.org/goals/2-zero-hunger/>

Question Number : 140 Question Id : 4410091731668

કયા સસ્ટેનેબલ ડેવલપમેન્ટ ગોલના લક્ષ્યાંકમાં ટકાઉ ખાદ્ય ઉત્પાદન પ્રણાલીઓ (Systems) અને રેઝિલિયન્ટ કૃષિ પદ્ધતિઓ (Resilient agricultural practices)ને પ્રોત્સાહન આપવાનો સમાવેશ થાય છે?

Options :

4410096829032. ✖ પરવડે તેવી અને સ્વચ્છ ઊર્જા (Affordable and Clean Energy)

4410096829033. ✔ શૂન્ય ભૂખમરો (Zero Hunger)

4410096829034. ✖ શાંતિ, ન્યાય અને મજબૂત સંસ્થાઓ

4410096829035. ✖ અસમાનતામાં ઘટાડો

Hints :

Hint - Think about which SDG is most relevant to farming and food production sustainability.

Know More - Zero Hunger includes targets for sustainable food production and resilient agriculture. Affordable and Clean Energy focuses on energy provision, not agriculture. Peace, Justice and Strong Institutions addresses governance, not food production. Reduced Inequalities is about social and economic gaps, not agricultural practices.

<https://globalgoals.org/goals/2-zero-hunger/>

Question Number : 141 Question Id : 4410091731678

How can public policies help communities achieve global health targets related to micronutrient deficiencies?

Options :

4410096829072. ✔ Mandatory food fortification programs

4410096829073. ✖ Encouraging voluntary supplementation

4410096829074. ✖ Providing nutrition education

4410096829075. ✖ Offering free clinical screening

Hints :

Hint - Think about which approach ensures a wide population receives essential nutrients without individual effort.

Know More - Mandatory food fortification programs are effective because they systematically add micronutrients to common foods, reaching a broad population. Encouraging voluntary supplementation relies on individual action and is less comprehensive. Nutrition education improves awareness but does not directly address deficiencies. Free clinical screening identifies deficiencies but does not prevent them.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC8066912/>

Question Number : 141 Question Id : 4410091731678

જાહેર નીતિઓ એ સમુદાયોને સૂક્ષ્મ પોષકતત્વોની ઊણપ (Micronutrient deficiencies) સંબંધિત વૈશ્વિક આરોગ્ય લક્ષ્યાંકો પ્રાપ્ત કરવામાં કેવી રીતે મદદ કરી શકે છે?

Options :

4410096829072. ✔ ફરજિયાત ખાદ્ય ફોર્ટિફિકેશન (Food fortification) કાર્યક્રમો દ્વારા

4410096829073. ✖ સ્વૈચ્છિક સપ્લિમેન્ટેશન (Voluntary supplementation)ને પ્રોત્સાહન આપીને

4410096829074. ✖ પોષણ સંબંધિત શિક્ષણ પૂરું પાડીને

4410096829075. ✖ નિઃશુલ્ક ક્લિનિકલ સ્ક્રીનિંગ પ્રદાન કરીને

Hints :

Hint - Think about which approach ensures a wide population receives essential nutrients without individual effort.

Know More - Mandatory food fortification programs are effective because they systematically add micronutrients to common foods, reaching a broad population. Encouraging voluntary supplementation relies on individual action and is less comprehensive. Nutrition education improves awareness but does not directly address deficiencies. Free clinical screening identifies deficiencies but does not prevent them.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC8066912/>

Question Number : 142 Question Id : 4410091833865

A new policy mandates the fortification of staple grains with iron to reduce anemia prevalence. Which effect best demonstrates this policy's positive impact on community nutrition and global health targets?

Options :

4410097229364. ✔ Improved hemoglobin levels among women of childbearing age

4410097229365. ✖ Decreased incidence of pellagra and cretinism in children

4410097229366. ✖ Higher incidence of leukocytosis and thrombocytopenia in elderly men

4410097229367. ✖ Lower the prevalence of vitiligo and hirsutism in adult females

Hints :

Author: Darshan Sohi

Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students

Publisher: Jaypee

Year of Publication: 2018

Edition: 2nd edition

Question Number : 142 Question Id : 4410091833865

એનિમિયાની વ્યાપકતાને ઘટાડવા માટે મુખ્ય અનાજ (Staple grains)ને આયર્નથી ફોર્ટિફિકેશન કરવાની નવી નીતિને ફરજિયાત કરવામાં આવી છે. તો કઈ અસર સામુદાયિક પોષણ અને વૈશ્વિક આરોગ્ય લક્ષ્યાંકો પર આ નીતિની સકારાત્મક અસરને શ્રેષ્ઠ રીતે દર્શાવે છે?

Options :

4410097229364. ✔ પ્રજનનક્ષમ વય (Childbearing age)ની સ્ત્રીઓમાં હિમોગ્લોબિનના સ્તરમાં સુધારો

4410097229365. ✖ બાળકોમાં પેલાગ્રા (Pellagra) અને કેટિનિઝમ (Cretinism)ની ઘટનાઓમાં ઘટાડો

4410097229366. ✖ મોટી ઉંમરના પુરુષોમાં લ્યુકોસાઇટોસિસ (Leukocytosis) અને થ્રોમ્બોસાઇટોપેનિયા (Thrombocytopenia)ની વધુ ઘટનાઓ

4410097229367. ✖ પુખ્ત સ્ત્રીઓમાં વિટિલિગો (Vitiligo) અને હિર્સુટિઝમ (Hirsutism)ના વ્યાપમાં ઘટાડો

Hints :

Author: Darshan Sohi

Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students

Publisher: Jaypee

Year of Publication: 2018

Edition: 2nd edition

Question Number : 143 Question Id : 4410091736235

Why does a pregnant woman require an increased kilocalorie intake during the second and third trimesters?

Options :

4410096846924. ✖ To prevent dehydration

4410096846925. ✖ To decrease fat storage

4410096846926. ✖ To enhance vitamin absorption

4410096846927. ✔ To support metabolic demands

Hints :

Hint - Think about both energy and growth needs during pregnancy.

Know More - The correct answer is 'To support metabolic demands ' because increased fuel is needed for both the mother and fetus. 'To prevent dehydration' is incorrect as hydration needs are not specifically tied to kilocalorie intake. 'To decrease fat storage' is not relevant; fat storage is not a primary concern here. 'To enhance vitamin absorption' does not directly relate to kilocalorie needs during pregnancy.

Reference- Nix, S. (2017). Kidney Disease. In William's Basic Nutrition and Diet Therapy (15th ed., p. 147). Elsevier.

Question Number : 143 Question Id : 4410091736235

ગર્ભવતી મહિલાને ગર્ભાવસ્થાના બીજા અને ત્રીજા ત્રિમાસિક ગાળા દરમિયાન કિલોકેલરીનું પ્રમાણ વધારવાની આવશ્યકતા શા માટે હોય છે?

Options :

4410096846924. ✖ નિર્જલીકરણને રોકવા માટે

4410096846925. ✖ ચરબીનો સંગ્રહ ઘટાડવા માટે

4410096846926. ✖ વિટામિનનું શોષણ વધારવા માટે

4410096846927. ✔ ચયાપચયની માંગોને પૂરી કરવા માટે

Hints :

Hint - Think about both energy and growth needs during pregnancy.

Know More - The correct answer is 'To support metabolic demands ' because increased fuel is needed for both the mother and fetus. 'To prevent dehydration' is incorrect as hydration needs are not specifically tied to kilocalorie intake. 'To decrease fat storage' is not relevant; fat storage is not a primary concern here. 'To enhance vitamin absorption' does not directly relate to kilocalorie needs during pregnancy.

Reference- Nix, S. (2017). Kidney Disease. In William's Basic Nutrition and Diet Therapy (15th ed., p. 147). Elsevier.

Question Number : 144 Question Id : 4410091833927

A community health nurse is tasked with evaluating the effectiveness of a new childhood nutrition intervention. Which approach best utilizes a nutritional surveillance system for ongoing program monitoring and improvement?

Options :

4410097229604. ✔ Collecting regular anthropometric data on target children

4410097229605. ✖ Conducting a single dietary recall after program completion

4410097229606. ✖ Reporting only on initial program participation rates

4410097229607. ✖ Relying on self-reported health status assessments

Hints :

Author: Darshan Sohi
 Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students
 Publisher: Jaypee
 Year of Publication: 2018
 Edition: 2nd edition

Question Number : 144 Question Id : 4410091833927

એક સામુદાયિક આરોગ્ય નર્સ (Community Health Nurse) ને બાળ પોષણ અંગેના નવા હસ્તક્ષેપ (Childhood Nutrition Intervention) ની અસરકારકતાનું મૂલ્યાંકન કરવાની જવાબદારી સોંપવામાં આવી છે. પોષણ સંબંધી સર્વેલન્સ સિસ્ટમ (Nutritional Surveillance System) નો ઉપયોગ કરીને, પ્રોગ્રામની ઓનગોઇંગ મોનિટરિંગ (ongoing monitoring) અને સુધારણા માટે નીચેનામાંથી કયો અભિગમ શ્રેષ્ઠ છે?

Options :

4410097229604. ✓ લક્ષિત બાળકો (target children) નો નિયમિત એન્થ્રોપોમેટ્રિક ડેટા એકત્રિત કરવો.
 4410097229605. ✗ પ્રોગ્રામ પૂરું થયા પછી એકલ ડાયેટરી રિકોલ (single dietary recall) કરવી.
 4410097229606. ✗ માત્ર પ્રોગ્રામમાં શરૂઆતના ભાગીદારીના દર (initial program participation rates) નો અહેવાલ આપવો.
 4410097229607. ✗ સ્વ-અહેવાલિત (self-reported) સ્વાસ્થ્ય સ્થિતિના મૂલ્યાંકન પર આધાર રાખવો.

Hints :

Author: Darshan Sohi
 Title: A Comprehensive Textbook of Applied Nutrition and Dietetics for BSc Nursing Students
 Publisher: Jaypee
 Year of Publication: 2018
 Edition: 2nd edition

Question Number : 145 Question Id : 4410091736054

Which method is best for estimating energy requirements in critically ill patients with respiratory failure?

Options :

4410096846236. ✗ Harris-Benedict equation
 4410096846237. ✗ Weight-based formula
 4410096846238. ✓ Indirect calorimetry
 4410096846239. ✗ Mifflin-St Jeor equation

Hints :

Hint - Consider which method involves direct measurement rather than predictive estimation.

Know More - Indirect calorimetry measures oxygen consumption and CO₂ production, giving precise energy needs. Harris-Benedict equation is less accurate in critical illness. The Mifflin-St Jeor equation is designed for healthy adults. Weight-based formulas are quick but can be inaccurate in severe illness.

Mahan, L. K., & Raymond, J. L. (2020). *Krause's food & the nutrition care process* (15th ed.). Elsevier. Chapter 9: Nutrition in metabolic stress and critical illness, pp. 209–214.

Question Number : 145 Question Id : 4410091736054

શ્વસન નિષ્ફળતા ધરાવતા ગંભીર રીતે બીમાર દર્દીઓમાં ઊર્જાની જરૂરિયાતોનો અંદાજ કાઢવા માટે કઈ પદ્ધતિ શ્રેષ્ઠ છે?

Options :

4410096846236. ✗ હેરિસ-બેનેડિક્ટ સમીકરણ (Harris-Benedict equation)
 4410096846237. ✗ વજન-આધારિત સૂત્ર (Weight-based formula)
 4410096846238. ✓ ઇન્ડાયરેક્ટ કેલરીમેટ્રી (Indirect calorimetry)
 4410096846239. ✗ મિફ્લિન-સેન્ટ જોર સમીકરણ (Mifflin-St Jeor equation)

Hints :

Hint - Consider which method involves direct measurement rather than predictive estimation.

Know More - Indirect calorimetry measures oxygen consumption and CO₂ production, giving precise energy needs. Harris-Benedict equation is less accurate in critical illness. The Mifflin-St Jeor equation is designed for healthy adults. Weight-based formulas are quick but can be inaccurate in severe illness.

Mahan, L. K., & Raymond, J. L. (2020). *Krause's food & the nutrition care process* (15th ed.). Elsevier. Chapter 9: Nutrition in metabolic stress and critical illness, pp. 209–214.

Question Number : 146 Question Id : 4410091731717

When developing a nutrition intervention for renal disease, which factor should be prioritized?

Options :

4410096829224. ✓ Individualized protein requirements based on renal function
 4410096829225. ✗ Restriction of fluid intake for all patients
 4410096829226. ✗ Avoidance of potassium-rich foods in every meal
 4410096829227. ✗ Emphasis on increased dietary fiber intake

Hints :

Hint - Think about which nutrient is most affected by impaired kidney function.

Know More - Individualized protein requirements based on renal function must be prioritized, as renal disease impacts protein metabolism. Fluid restriction (option B) is important but only relevant in certain cases. Avoidance of potassium-rich foods (option C) is sometimes necessary but not always primary. Increased fiber (option D) is beneficial for many but not directly related to renal function. Thus, the correct answer addresses the core issue.

<https://www.ncbi.nlm.nih.gov/books/NBK225303/>

Question Number : 146 Question Id : 4410091731717

રેનલ રોગ (Renal disease) માટે પોષણ હસ્તક્ષેપ (Nutrition intervention)ને જ્યારે વિકસાવવામાં આવે, ત્યારે કયા પરિબલને પ્રાથમિકતા આપવી જોઈએ?

Options :

4410096829224. ✓

રેનલ ફંક્શન (Renal function)ના આધારે વ્યક્તિગત પ્રોટીનની જરૂરિયાતો

4410096829225. ✗

તમામ દર્દીઓ માટે પ્રવાહી પદાર્થો (Fluid)ના સેવન પર પ્રતિબંધ

4410096829226. ✗

દરેક ભોજનમાં પોટેશિયમયુક્ત ખોરાક (Potassium-rich foods) લેવાનું ટાળવું

4410096829227. ✗

આહારમાં ફાઇબરના સેવન (Dietary fiber intake)માં વધારો કરવા પર ભાર મૂકવો

Hints :

Hint - Think about which nutrient is most affected by impaired kidney function.

Know More - Individualized protein requirements based on renal function must be prioritized, as renal disease impacts protein metabolism. Fluid restriction (option B) is important but only relevant in certain cases. Avoidance of potassium-rich foods (option C) is sometimes necessary but not always primary. Increased fiber (option D) is beneficial for many but not directly related to renal function. Thus, the correct answer addresses the core issue.

<https://www.ncbi.nlm.nih.gov/books/NBK225303/>

Question Number : 147 Question Id : 4410091757140

When planning diets for severely malnourished patients, what should be avoided to prevent refeeding syndrome?

Options :

4410096929105. ✓ Rapid carbohydrate loading

4410096929106. ✗ Gradual introduction of nutrients

4410096929107. ✗ Monitoring electrolytes regularly

4410096929108. ✗ Cautious introduction of fluids

Hints :

Hint - Think about which feeding practice leads to rapid metabolic changes and complications.

Know More - Sudden introduction of large amounts of carbohydrates or rapid carbohydrate loading should be avoided to prevent refeeding syndrome. Gradual introduction of nutrients, monitoring electrolytes, and cautious introduction of fluids are safer approaches; introducing large amounts quickly triggers the syndrome.

Reference- Nix, S. (2017). Gastrointestinal and Accessory Organ Problems. In William's Basic Nutrition and Diet Therapy (15th ed., p. 317). Elsevier.

Question Number : 147 Question Id : 4410091757140

ગંભીર રીતે કુપોષિત દર્દીઓ માટે આહારનું આયોજન (planning) કરતી વખતે, રિફીડિંગ સિન્ડ્રોમ (refeeding syndrome)ને નિવારવા માટે શું ટાળવું જોઈએ?

Options :

4410096929105. ✓ ઝડપી કાર્બોહાઇડ્રેટ લોડિંગ (Rapid carbohydrate loading)

4410096929106. ✗ પોષક તત્વો આપવાની ધીમે ધીમે શરૂઆત કરવી (Gradual introduction of nutrients)

4410096929107. ✗ ઇલેક્ટ્રોલાઇટ્સની નિયમિત દેખરેખ રાખવી (Monitoring electrolytes regularly)

4410096929108. ✗ સાવધાની સાથે તરલ આપવાની શરૂઆત (Cautious introduction of fluids)

Hints :

Hint - Think about which feeding practice leads to rapid metabolic changes and complications.

Know More - Sudden introduction of large amounts of carbohydrates or rapid carbohydrate loading should be avoided to prevent refeeding syndrome. Gradual introduction of nutrients, monitoring electrolytes, and cautious introduction of fluids are safer approaches; introducing large amounts quickly triggers the syndrome.

Reference- Nix, S. (2017). Gastrointestinal and Accessory Organ Problems. In William's Basic Nutrition and Diet Therapy (15th ed., p. 317). Elsevier.

Question Number : 148 Question Id : 4410091757038

Which amino acid must individuals with PKU obtain directly from their diet because they cannot synthesize it from phenylalanine?

Options :

4410096928757. ✓ Tyrosine

4410096928758. ✗ Phenylalanine

4410096928759. ✗ Methionine

4410096928760. ✗ Tryptophan

Hints :

Hint - Consider which amino acid's production is disrupted by the genetic disorder PKU.

Know More - Tyrosine must be obtained directly from the diet in PKU because the enzyme for its synthesis from phenylalanine is missing. Phenylalanine, methionine, and tryptophan are not affected in this way by PKU.

Reference- Nix, S. (2017). Introduction to Basic Principles of Nutrition Science. In William's Basic Nutrition and Diet Therapy (15th ed., p. 42). Elsevier.

Question Number : 148 Question Id : 4410091757038

PKU ધરાવતી વ્યક્તિઓએ કયા એમિનો એસિડને સીધું તેમના આહારમાંથી મેળવવું જોઈએ કારણ કે તેઓ તેને ફિનાઇલએલેનિન (phenylalanine)માંથી સંશ્લેષિત કરી શકતા નથી?

Options :

4410096928757. ✓ ટાયરોસિન (Tyrosine)

4410096928758. ✗ ફિનાઇલએલેનિન (phenylalanine)

4410096928759. ✗ મેથિઓનિન (Methionine)

4410096928760. ✗ ટ્રિપ્ટોફેન (Tryptophan)

Hints :

Hint - Consider which amino acid's production is disrupted by the genetic disorder PKU.

Know More - Tyrosine must be obtained directly from the diet in PKU because the enzyme for its synthesis from phenylalanine is missing. Phenylalanine, methionine, and tryptophan are not affected in this way by PKU.

Reference- Nix, S. (2017). Introduction to Basic Principles of Nutrition Science. In William's Basic Nutrition and Diet Therapy (15th ed., p. 42). Elsevier.

Question Number : 149 Question Id : 4410091757261

Which dietary component should be specifically evaluated for tolerance in patients with irritable bowel syndrome (IBS)?

Options :

4410096929553. ✗ Gluten

4410096929554. ✓ FODMAPs

4410096929555. ✗ Sodium

4410096929556. ✗ Saturated fats

Hints :

Hint - Look for the option that refers to a group of fermentable carbohydrates associated with digestive discomfort.

Know More - FODMAPs are fermentable oligo-, di-, and monosaccharides and polyols, which should be evaluated for tolerance in IBS patients. Gluten, sodium, and saturated fats are not specifically for IBS management. The focus is on FODMAPs due to their potential to cause symptoms.

Reference- Nix, S. (2017). Clinical Nutrition. In William's Basic Nutrition and Diet Therapy (15th ed., p. 318). Elsevier.

Question Number : 149 Question Id : 4410091757261

ઇરિટેબલ બોવેલ સિન્ડ્રોમ (Irritable bowel syndrome) (IBS) ધરાવતી દર્દીઓમાં સહિષ્ણુતા (Tolerance) માટે કયા આહાર ઘટકનું ખાસ મૂલ્યાંકન કરવું જોઈએ?

Options :

4410096929553. ✗ ગ્લુટેન

4410096929554. ✓ ફોડમેપ્સ (FODMAPs)

4410096929555. ✗ સોડિયમ

4410096929556. ✗ સંતૃપ્ત ચરબી (Saturated fats)

Hints :

Hint - Look for the option that refers to a group of fermentable carbohydrates associated with digestive discomfort.

Know More - FODMAPs are fermentable oligo-, di-, and monosaccharides and polyols, which should be evaluated for tolerance in IBS patients. Gluten, sodium, and saturated fats are not specifically for IBS management. The focus is on FODMAPs due to their potential to cause symptoms.

Reference- Nix, S. (2017). Clinical Nutrition. In William's Basic Nutrition and Diet Therapy (15th ed., p. 318). Elsevier.

Question Number : 150 Question Id : 4410091725838

Which pathway allows the body to synthesize glucose from non-carbohydrate sources?

Options :

4410096806403. ✓ Gluconeogenesis

4410096806404. ✗ Glycolysis

4410096806405. ✗ Glycogenolysis

4410096806406. ✗ Lipogenesis

Hints :

Hint - Look for the pathway that creates, not breaks down, glucose.

Know More - Gluconeogenesis synthesizes glucose from substances like amino acids or glycerol. Glycolysis breaks down glucose. Glycogenolysis releases glucose from glycogen, and lipogenesis produces fat, not glucose.

Reference:

Lehninger Principles of Biochemistry

Fourth Edition

David L. Nelson (U. of Wisconsin–Madison)

Michael M. Cox (U. of Wisconsin–Madison)

Chapter 14,14.4.Page no 543

Question Number : 150 Question Id : 4410091725838

કયો પાથવે (pathway) શરીરને બિન-કાર્બોહાઇડ્રેટ સ્ત્રોતોમાંથી ગ્લુકોઝનું સંશ્લેષણ કરવાની મંજૂરી આપે છે?

Options :

4410096806403. ✓ ગ્લુકોનિયોજેનેસિસ (Gluconeogenesis)

4410096806404. ✗ ગ્લાયકોલિસિસ (Glycolysis)

4410096806405. ✗ ગ્લાયકોજેનોલિસિસ (Glycogenolysis)

4410096806406. ✗ લિપોજેનેસિસ (Lipogenesis)

Hints :

Hint - Look for the pathway that creates, not breaks down, glucose.

Know More - Gluconeogenesis synthesizes glucose from substances like amino acids or glycerol. Glycolysis breaks down glucose. Glycogenolysis releases glucose from glycogen, and lipogenesis produces fat, not glucose.

Reference:

Lehninger Principles of Biochemistry

Fourth Edition

David L. Nelson (U. of Wisconsin–Madison)

Michael M. Cox (U. of Wisconsin–Madison)

Chapter 14,14.4.Page no 543

Question Number : 151 Question Id : 4410091731744

Which vitamin is essential as a coenzyme for carboxylation reactions in nutrient metabolism?

Options :

4410096829328. ✓ Biotin

4410096829329. ✗ Vitamin C

4410096829330. ✗ Vitamin B12

4410096829331. ✗ Vitamin D

Hints :

Hint - Look for the vitamin commonly linked to carboxylase enzyme activity.

Know More - Biotin serves as a coenzyme for carboxylase enzymes, facilitating carboxylation reactions. Vitamin C is mainly involved in hydroxylation, not carboxylation. Vitamin B12 and Vitamin D are not coenzymes for carboxylation reactions; B12 is essential for methylation and D for calcium metabolism.

<https://www.ncbi.nlm.nih.gov/books/NBK547751/>
Question Number : 151 Question Id : 4410091731744

પોષકતત્વોના ચયાપચયમાં કાર્બોક્સિલેશન પ્રક્રિયાઓ (carboxylation reactions) માટે સહઉત્સેયક (coenzyme) તરીકે કયું વિટામિન આવશ્યક છે?

Options :

4410096829328. ✓ બાયોટિન

4410096829329. ✗ વિટામિન C

4410096829330. ✗ વિટામિન B12

4410096829331. ✗ વિટામિન D

Hints :

Hint - Look for the vitamin commonly linked to carboxylase enzyme activity.

Know More - Biotin serves as a coenzyme for carboxylase enzymes, facilitating carboxylation reactions. Vitamin C is mainly involved in hydroxylation, not carboxylation. Vitamin B12 and Vitamin D are not coenzymes for carboxylation reactions; B12 is essential for methylation and D for calcium metabolism.

<https://www.ncbi.nlm.nih.gov/books/NBK547751/>
Question Number : 152 Question Id : 4410091757582

Which organ is responsible for the first hydroxylation of cholecalciferol at the 25th position?

Options :

4410096930587. ✗ Kidney

4410096930588. ✗ Intestine

4410096930589. ✓ Liver

4410096930590. ✗ Heart

Hints :

Hint - Think about which organ is known for initiating vitamin D metabolism.

Know More - The liver hydroxylates cholecalciferol at the 25th position, forming 25-hydroxycholecalciferol. The kidney does the second hydroxylation at the 1st position, not the first. The intestine and heart are not involved in this specific hydroxylation step.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Vitamins. (4th ed., p.124) Elsevier.

Question Number : 152 Question Id : 4410091757582

25મી સ્થાન (25th position) પર કોલેકેલ્સીફેરોલ (Cholecalciferol)ની પ્રથમ હાઈડ્રોક્સિલેશન માટે કયું અંગ જવાબદાર છે?

Options :

4410096930587. ✖ મૂત્રપિંડ

4410096930588. ✖ આંતરડા

4410096930589. ✔ યકૃત

4410096930590. ✖ હૃદય

Hints :

Hint - Think about which organ is known for initiating vitamin D metabolism.

Know More - The liver hydroxylates cholecalciferol at the 25th position, forming 25-hydroxycholecalciferol. The kidney does the second hydroxylation at the 1st position, not the first. The intestine and heart are not involved in this specific hydroxylation step.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Vitamins. (4th ed., p.124) Elsevier.

Question Number : 153 Question Id : 4410091731763

Which of the following best explains why individuals with a deficiency of the enzyme glucose-6-phosphate dehydrogenase are more susceptible to oxidative stress?

Options :

4410096829404. ✔ They produce less NADPH needed for antioxidant defense

4410096829405. ✖ They have impaired glycolytic breakdown of glucose

4410096829406. ✖ Their hemoglobin transports less oxygen

4410096829407. ✖ They produce more hydrogen peroxide in cells

Hints :

Hint - Consider the role of NADPH in protecting cells from oxidative damage.

Know More - Glucose-6-phosphate dehydrogenase produces NADPH in the pentose phosphate pathway, which is essential for regenerating reduced glutathione, a major cellular antioxidant. Less NADPH means impaired antioxidant defense. The enzyme is not directly involved in glycolysis, does not transport oxygen, and does not increase hydrogen peroxide production itself.

<https://www.ncbi.nlm.nih.gov/books/NBK470315/>

Question Number : 153 Question Id : 4410091731763

નીચેનામાંથી કયું વિધાન શ્રેષ્ઠ રીતે સમજાવે છે કે શા માટે ગ્લુકોઝ-6-ફોસ્ફેટ ડીહાઈડ્રોજેનેઝ (glucose-6-phosphate dehydrogenase) ઉત્સેચકની ઉણપ ધરાવતી વ્યક્તિઓ ઓક્સિડેટીવ સ્ટ્રેસ (oxidative stress) પ્રત્યે વધુ સંવેદનશીલ હોય છે?

Options :

4410096829404. ✔

તેમનામાં એન્ટીઓક્સિડેન્ટ સંરક્ષણ (antioxidant defense) માટે જરૂરી એવા NADPH નું ઓછું ઉત્પાદન થાય છે.

4410096829405. ✖

તેમનામાં ગ્લુકોઝનું ગ્લાયકોલિટીક વિઘટન (glycolytic breakdown) નબળું પડે છે.

4410096829406. ✖ તેમનું હિમોગ્લોબિન (hemoglobin) ઓછું ઓક્સિજન વહન કરે છે.

4410096829407. ✖

તેમના કોષોમાં વધુ હાઈડ્રોજન પેરોક્સાઇડ (hydrogen peroxide) ઉત્પન્ન થાય છે.

Hints :

Hint - Consider the role of NADPH in protecting cells from oxidative damage.

Know More - Glucose-6-phosphate dehydrogenase produces NADPH in the pentose phosphate pathway, which is essential for regenerating reduced glutathione, a major cellular antioxidant. Less NADPH means impaired antioxidant defense. The enzyme is not directly involved in glycolysis, does not transport oxygen, and does not increase hydrogen peroxide production itself.

<https://www.ncbi.nlm.nih.gov/books/NBK470315/>

Question Number : 154 Question Id : 4410091731793

Which food processing technique is most commonly used to preserve meat products and prevent bacterial growth?

Options :

4410096829520. ✔ Curing

4410096829521. ✖ Smoking
 4410096829522. ✖ Drying
 4410096829523. ✖ Fermentation

Hints :

Hint - Consider the method that involves adding substances to meat to keep it safe for longer periods.

Know More - Curing preserves meat by adding salt, nitrates, or sugar, inhibiting bacterial growth. Smoking adds flavor and some preservation but is secondary; drying reduces water but is less common for meat; fermentation is mainly used for sausages. Curing is the standard technique for meat preservation and bacterial control.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10916645/>

Question Number : 154 Question Id : 4410091731793

માંસ ઉત્પાદો (meat products)ને સાચવવા (પ્રિઝર્વ કરવા) અને બેક્ટેરિયાના વિકાસને રોકવા માટે કઈ કૂડ પ્રોસેસિંગ તકનીકનો સર્વસામાન્યપણે ઉપયોગ થાય છે?

Options :

4410096829520. ✔ ક્યુરિંગ (Curing)
 4410096829521. ✖ સ્મોકિંગ (Smoking)
 4410096829522. ✖ શુષ્કન (Drying)
 4410096829523. ✖ અથિવણ (Fermentation)

Hints :

Hint - Consider the method that involves adding substances to meat to keep it safe for longer periods.

Know More - Curing preserves meat by adding salt, nitrates, or sugar, inhibiting bacterial growth. Smoking adds flavor and some preservation but is secondary; drying reduces water but is less common for meat; fermentation is mainly used for sausages. Curing is the standard technique for meat preservation and bacterial control.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10916645/>

Question Number : 155 Question Id : 4410091731826

Which approach is most effective for increasing consumer awareness of a newly launched processed food?

Options :

4410096829652. ✖ Distributing flyers in unrelated locations
 4410096829653. ✔ Organizing tasting events at local supermarkets
 4410096829654. ✖ Posting on generic social media pages
 4410096829655. ✖ Offering discounts without sampling

Hints :

Hint - Consider which method encourages consumers to try and learn about the product directly.

Know More - Organizing tasting events at local supermarkets allows direct interaction and firsthand experience with the product, increasing awareness and interest. Distributing flyers in unrelated locations may not capture the right audience. Posting on generic social media pages lacks targeted engagement. Offering discounts without sampling may not generate awareness among new consumers.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9099755/>

Question Number : 155 Question Id : 4410091731826

નવા બોન્ય થયેલા પ્રોસેસ્ડ ફૂડ (processed food) પ્રત્યે ગ્રાહક જાગૃતિ વધારવા માટે કયો અભિગમ સૌથી અસરકારક છે?

Options :

4410096829652. ✖ અસંબંધિત સ્થળોએ ફ્લાયર્સ (flyers)નું વિતરણ કરવું
 4410096829653. ✔ સ્થાનિક સુપરમાર્કેટમાં ટેસ્ટિંગ ઇવેન્ટ્સનું આયોજન કરવું
 4410096829654. ✖ જનરિક સોશિયલ મીડિયા (generic social media) પેજ પર પોસ્ટ મૂકવી
 4410096829655. ✖ સેમ્પલિંગ વિના ડિસ્કાઉન્ટ ઓફર કરવું

Hints :

Hint - Consider which method encourages consumers to try and learn about the product directly.

Know More - Organizing tasting events at local supermarkets allows direct interaction and firsthand experience with the product, increasing awareness and interest. Distributing flyers in unrelated locations may not capture the right audience. Posting on generic social media pages lacks targeted engagement. Offering discounts without sampling may not generate awareness among new consumers.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9099755/>

Question Number : 156 Question Id : 4410091760267

Which marketing skill best helps a new food product gain visibility in a competitive market?

Options :

4410096941197. ✖ Conducting sensory evaluations
4410096941198. ✖ Optimizing production schedules
4410096941199. ✖ Investing in packaging materials
4410096941200. ✔ Utilizing social media platforms strategically

Hints :

Hint - Think about modern ways brands reach large audiences quickly and effectively.

Know More - Utilizing social media platforms strategically increases visibility through targeted outreach. Conducting sensory evaluations, optimizing production schedules, and investing in packaging materials are not directly related to increasing market visibility through promotion.

Reference- Waheed, S., & Kumar, S. (2024). The Role of Social Media Marketing in the Food Industry. doi:10.4018/979-8-3693-7683-6.ch011

Question Number : 156 Question Id : 4410091760267

સ્પર્ધાત્મક બજારમાં ખાદ્ય પદાર્થની નવી પ્રોડક્ટને લોકપ્રિયતા (visibility) અપાવવા માટે કયું માર્કેટિંગ કૌશલ્ય સૌથી વધુ મદદરૂપ થાય છે?

Options :

4410096941197. ✖ સંવેદનાત્મક મૂલ્યાંકનો (sensory evaluations) હાથ ધરવા.
4410096941198. ✖ ઉત્પાદન સમયપત્રક (production schedules)ને શ્રેષ્ઠ બનાવવું.
4410096941199. ✖ પેકેજિંગ સામગ્રી (packaging materials)માં રોકાણ કરવું.
4410096941200. ✔ સોશિયલ મીડિયા પ્લેટફોર્મનો વ્યૂહાત્મક રીતે (strategically) ઉપયોગ કરવો.

Hints :

Hint - Think about modern ways brands reach large audiences quickly and effectively.

Know More - Utilizing social media platforms strategically increases visibility through targeted outreach. Conducting sensory evaluations, optimizing production schedules, and investing in packaging materials are not directly related to increasing market visibility through promotion.

Reference- Waheed, S., & Kumar, S. (2024). The Role of Social Media Marketing in the Food Industry. doi:10.4018/979-8-3693-7683-6.ch011

Question Number : 157 Question Id : 4410091741059

What is the primary benefit of conducting market research before launching a new food product?

Options :

4410096865696. ✔ Reveals consumer preferences and demand
4410096865697. ✖ Guarantees immediate high sales
4410096865698. ✖ Eliminates product testing
4410096865699. ✖ Ensures instant brand loyalty

Hints :

Hint - Consider what helps a company make informed decisions before investing in a launch.

Know More - Market research uncovers what consumers want and need, helping tailor the product for success. It does not guarantee immediate high sales, eliminate the need for product testing, or ensure instant brand loyalty, which are influenced by other factors.

Reference: **Food Science and Technology by Geoffrey Campbell-Platt**
Chapter: 18 .18.3 ,page no 435

Question Number : 157 Question Id : 4410091741059

નવું ખાદ્ય ઉત્પાદ (food product) લોન્ચ કરતા પહેલાં માર્કેટ રિસર્ચ કરવાનો પ્રાથમિક લાભ શું છે?

Options :

4410096865696. ✔ ગ્રાહકોની પસંદગીઓ અને માંગ અંગે જાણકારી ઉજાગર કરે છે.
4410096865697. ✖ તાત્કાલિક ઉચ્ચ વેચાણની બાંધપાત્રી (Guarantee) આપે છે.
4410096865698. ✖ ઉત્પાદ પરીક્ષણ (product testing)ને નાબૂદ કરે છે.
4410096865699. ✖ ઇન્સ્ટન્ટ બ્રાન્ડ લોયલ્ટી સુનિશ્ચિત કરે છે.

Hints :

Hint - Consider what helps a company make informed decisions before investing in a launch.

Know More - Market research uncovers what consumers want and need, helping tailor the product for success. It does not guarantee immediate high sales, eliminate the need for product testing, or ensure instant brand loyalty, which are influenced by other factors.

Reference: **Food Science and Technology by Geoffrey Campbell-Platt**
Chapter: 18 .18.3 ,page no 435

Question Number : 158 Question Id : 4410091760052

According to the International Dairy Federation, which heat treatment can be considered a universal reference for milk pasteurization?

Options :

4410096940317. ✔ 15 seconds at 71.7°C
4410096940318. ✖ 10 seconds at 75°C

4410096940319. ✖ 20 minutes at 60°C

4410096940320. ✖ 5 minutes at 80°C

Hints :

Hint - Focus on the specific time and temperature values that are recognized as standards for pasteurization.

Know More - The universal reference treatments specified by the IDF are 15 seconds at 71.7°C and 30 minutes at 62.8°C. The other options either do not match the recommended time and temperature combinations.

Reference- IGNOU. Unit 5. Pasteurization. Pg. 25. <https://egyankosh.ac.in/bitstream/123456789/9393/3/Unit-5.pdf>

Question Number : 158 Question Id : 4410091760052

ઈન્ટરનેશનલ ડેરી ફેડરેશન મુજબ, દૂધના પાશ્વરાઇઝેશન માટે કઈ હીટ ટ્રીટમેન્ટ (heat treatment)ને સાર્વત્રિક સંદર્ભ ગણવામાં આવી શકે છે?

Options :

4410096940317. ✔ 71.7°C પર 15 સેકન્ડ્સ

4410096940318. ✖ 75°C પર 10 સેકન્ડ્સ

4410096940319. ✖ 60°C પર 20 મિનિટ્સ

4410096940320. ✖ 80°C પર 5 મિનિટ્સ

Hints :

Hint - Focus on the specific time and temperature values that are recognized as standards for pasteurization.

Know More - The universal reference treatments specified by the IDF are 15 seconds at 71.7°C and 30 minutes at 62.8°C. The other options either do not match the recommended time and temperature combinations.

Reference- IGNOU. Unit 5. Pasteurization. Pg. 25. <https://egyankosh.ac.in/bitstream/123456789/9393/3/Unit-5.pdf>

Question Number : 159 Question Id : 4410091750764

A patient with chronic kidney disease is most likely to show an increase in which biochemical parameter?

Options :

4410096904406. ✖ Blood glucose

4410096904407. ✔ Serum creatinine

4410096904408. ✖ Thyroxine

4410096904409. ✖ ALT (Alanine transaminase)

Hints :

Mahan, L. K., & Raymond, J. L. (2020). *Krause's food & the nutrition care process* (15th ed.). Elsevier.

National Kidney Foundation. (2012). *KDOQI clinical practice guideline for nutrition in chronic kidney disease. American Journal of Kidney Diseases*, 60(5), 850–886.

Question Number : 159 Question Id : 4410091750764

કોનિક કિડની રોગ ધરાવતા દર્દીમાં કયા જૈવરાસાયણિક પેરામીટર (Biochemical parameter)માં વૃદ્ધિ થવાની સંભાવના સૌથી વધુ છે?

Options :

4410096904406. ✖ બ્લડ ગ્લુકોઝ (Blood glucose)

4410096904407. ✔ સીરમ ક્રિએટિનિન (Serum creatinine)

4410096904408. ✖ થાઇરોક્સિન (Thyroxine)

4410096904409. ✖ ALT (એલનાઇન ટ્રાન્સમિનેઝ)

Hints :

Mahan, L. K., & Raymond, J. L. (2020). *Krause's food & the nutrition care process* (15th ed.). Elsevier.

National Kidney Foundation. (2012). *KDOQI clinical practice guideline for nutrition in chronic kidney disease. American Journal of Kidney Diseases*, 60(5), 850–886.

Question Number : 160 Question Id : 4410091750660

Which organ is primarily affected in the pathophysiology of diabetes mellitus?

Options :

4410096903990. ✔ Pancreas

4410096903991. ✖ Liver

4410096903992. ✖ Kidneys

4410096903993. ✖ Lungs

Hints :

Hint - Think about the organ responsible for insulin production.

Know More - The pancreas is primarily affected in diabetes mellitus because it produces insulin, which regulates blood glucose levels. The liver, kidneys, and lungs

are not primarily affected in diabetes mellitus, although complications can occur in these organs due to prolonged high blood sugar.

Reference : Fundamentals of Biochemistry by J L Jain Chapter : 31 Page no 857

Question Number : 160 Question Id : 4410091750660

ડાયાબીટીસ મેલીટસ (Diabetes Mellitus)ની પેથોફિઝિયોલોજી (Pathophysiology)માં કયા અંગને મુખ્યત્વે અસર થાય છે?

Options :

4410096903990. ✓ સ્વાદુપિંડ

4410096903991. ✗ યકૃત

4410096903992. ✗ મૂત્રપિંડ

4410096903993. ✗ ફેફસાં

Hints :

Hint - Think about the organ responsible for insulin production.

Know More - The pancreas is primarily affected in diabetes mellitus because it produces insulin, which regulates blood glucose levels. The liver, kidneys, and lungs are not primarily affected in diabetes mellitus, although complications can occur in these organs due to prolonged high blood sugar.

Reference : Fundamentals of Biochemistry by J L Jain Chapter : 31 Page no 857

Question Number : 161 Question Id : 4410091750967

A patient with jaundice typically shows an increase in which compound in their blood tests?

Options :

4410096905216. ✓ Bilirubin

4410096905217. ✗ Creatinine

4410096905218. ✗ Glucose

4410096905219. ✗ Uric acid

Hints :

Hint - Think about the pigment responsible for the yellow color in jaundice.

Know More - Bilirubin increases in jaundice due to impaired liver function or hemolysis. Elevated creatinine is linked to kidney issues, glucose to diabetes, and uric acid to gout or kidney stones, not jaundice.

Reference: <https://notesmed.com/wp-content/uploads/2021/06/Satyanarayana-biochemistry-pdf-free.pdf>

Chapter 20 .page no 840

Question Number : 161 Question Id : 4410091750967

કમળો (Jaundice) ધરાવતા દર્દીના રક્ત પરીક્ષણ (Blood Test)માં કયા સંયોજનનું પ્રમાણ વધેલું જોવા મળે છે?

Options :

4410096905216. ✓ બિલીરુબિન (Bilirubin)

4410096905217. ✗ ક્રિએટિનિન (Creatinine)

4410096905218. ✗ ગ્લુકોઝ (Glucose)

4410096905219. ✗ યુરિક એસિડ (Uric acid)

Hints :

Hint - Think about the pigment responsible for the yellow color in jaundice.

Know More - Bilirubin increases in jaundice due to impaired liver function or hemolysis. Elevated creatinine is linked to kidney issues, glucose to diabetes, and uric acid to gout or kidney stones, not jaundice.

Reference: <https://notesmed.com/wp-content/uploads/2021/06/Satyanarayana-biochemistry-pdf-free.pdf>

Chapter 20 .page no 840

Question Number : 162 Question Id : 4410091760285

What is the primary substance that accumulates in lysosomes in Pompe's disease?

Options :

4410096941269. ✓ Glycogen
 4410096941270. ✗ Lipid
 4410096941271. ✗ Protein
 4410096941272. ✗ Calcium

Hints :

Hint - Consider the main storage molecule affected in metabolic storage diseases.

Know More - Glycogen is the substance that accumulates in lysosomes in Pompe's disease. Lipid, protein, and calcium do not accumulate in lysosomes for this disease.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In metabolism of carbohydrates. (4th ed., p.269) Elsevier.

Question Number : 162 Question Id : 4410091760285

પોમ્પેના રોગ (Pompe's disease)માં લાયસોઝોમ્સ (Lysosomes)માં કયો પ્રાથમિક પદાર્થ સંચિત (Accumulate) થાય છે?

Options :

4410096941269. ✓ ગ્લાયકોજેન (Glycogen)
 4410096941270. ✗ લિપિડ (Lipid)
 4410096941271. ✗ પ્રોટીન
 4410096941272. ✗ કેલ્શિયમ

Hints :

Hint - Consider the main storage molecule affected in metabolic storage diseases.

Know More - Glycogen is the substance that accumulates in lysosomes in Pompe's disease. Lipid, protein, and calcium do not accumulate in lysosomes for this disease.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In metabolism of carbohydrates. (4th ed., p.269) Elsevier.

Question Number : 163 Question Id : 4410091760428

What is the primary mechanism of action for antioxidants as nutraceuticals?

Options :

4410096941825. ✓ Neutralizing free radicals
 4410096941826. ✗ Lowering cholesterol
 4410096941827. ✗ Increasing blood sugar
 4410096941828. ✗ Blocking digestive enzymes

Hints :

Hint - Think about how antioxidants protect cells from damage.

Know More - Antioxidants act by neutralizing free radicals, preventing oxidative damage. They do not primarily work by lowering cholesterol, increasing blood sugar, or blocking digestive enzymes, which are mechanisms linked to other nutraceuticals.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Free Radicals and Antioxidants. (4th ed., p.658) Elsevier.

Question Number : 163 Question Id : 4410091760428

ન્યુટ્રાસ્યુટિકલ્સ (nutraceuticals) તરીકે એન્ટીઓક્સિડેન્ટોની કાર્ય કરવાની પ્રાથમિક પદ્ધતિ (primary mechanism of action) શું છે?

Options :

4410096941825. ✓ મુક્ત મૂલકો (Free Radicals)ને તટસ્થ કરવા
 4410096941826. ✗ કોલેસ્ટ્રોલ ઘટાડવું
 4410096941827. ✗ રક્ત શર્કરા વધારવી
 4410096941828. ✗ પાચક ઉત્સેયકોને અવરોધવા (Blocking)

Hints :

Hint - Think about how antioxidants protect cells from damage.

Know More - Antioxidants act by neutralizing free radicals, preventing oxidative damage. They do not primarily work by lowering cholesterol, increasing blood sugar, or blocking digestive enzymes, which are mechanisms linked to other nutraceuticals.

Reference- Satyanarayana U, Chakrapani U (2013). Biochemistry (with clinical concepts and case studies). In Free Radicals and Antioxidants. (4th ed., p.658) Elsevier.

Question Number : 164 Question Id : 4410091738495

What is the primary mechanism by which probiotics in functional foods exert their health benefits?

Options :

4410096855613. ✖ Enhancement of iron absorption
 4410096855614. ✖ Provision of essential amino acids
 4410096855615. ✖ Stimulation of insulin release
 4410096855616. ✔ Modulation of gut microbiota

Hints :

Hint - Probiotics are live microorganisms; focus on their influence inside the gut.

Know More - Probiotics primarily modulate gut microbiota, improving digestive health. They do not directly stimulate insulin release, enhance iron absorption, or provide essential amino acids. Those options refer to other nutrients or mechanisms unrelated to probiotics.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10470842/>

Question Number : 164 Question Id : 4410091738495

કઇ પ્રાથમિક કાર્યપદ્ધતિ છે જેના દ્વારા ફંક્શનલ ફૂડ્ઝમાં પ્રોબાયોટિક્સ તેમના સ્વાસ્થ્ય વાભો પ્રદાન કરે છે?

Options :

4410096855613. ✖ લોહિતત્વનું શીષણ વધારીને
 4410096855614. ✖ આવશ્યક એમિનો એસિડની જોગવાઈ કરીને
 4410096855615. ✖ ઇન્સ્યુલિન મુક્ત કરવાની ઉત્તેજના આપીને
 4410096855616. ✔ આંતરડાના સુક્ષ્મજીવાણુઓ (gut microbiota)નું અનુકૂળ સંતુલન જાળવીને

Hints :

Hint - Probiotics are live microorganisms; focus on their influence inside the gut.

Know More - Probiotics primarily modulate gut microbiota, improving digestive health. They do not directly stimulate insulin release, enhance iron absorption, or provide essential amino acids. Those options refer to other nutrients or mechanisms unrelated to probiotics.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10470842/>

Question Number : 165 Question Id : 4410091747810

Which of the following accurately reflects the difference between functional foods and nutraceuticals?

Options :

4410096892706. ✔ Functional foods taken as normal diet, nutraceuticals taken as supplement
 4410096892707. ✖ Both are consumed only as supplements
 4410096892708. ✖ Functional foods contain only vitamins, while nutraceuticals contain minerals
 4410096892709. ✖ Nutraceuticals are always natural, functional foods are always synthetic

Hints :

Hint - Focus on how these products are typically consumed rather than their content.

Know More - The correct answer is 'Functional foods are consumed as part of a normal diet, while nutraceuticals are usually taken in supplement form' because functional foods are everyday foods with added benefits, whereas nutraceuticals are concentrated bioactive compounds often sold as supplements. 'Both are consumed only as supplements' is incorrect as functional foods are not supplements. 'Functional foods contain only vitamins, while nutraceuticals contain minerals' is wrong as both can contain various bioactives. 'Nutraceuticals are always natural, functional foods are always synthetic' is incorrect; both can be natural or synthetic.

Reference:

Functional Foods and Nutraceuticals: Bioactive Compounds Editor Assoc. Prof. Dr. Haci Ahmet DEVECI
 Chapter 1

Question Number : 165 Question Id : 4410091747810

નીચેનામાંથી કયું વિધાન 'કાર્યાત્મક ખોરાક' (Functional foods) અને 'ન્યુટ્રાસ્યુટિકલ્સ' (Nutraceuticals) વચ્ચેના તફાવતને સચોટ રીતે દર્શાવે છે?

Options :

4410096892706. ✔ કાર્યાત્મક ખોરાક એ સામાન્ય આહાર (Normal diet) તરીકે લેવામાં આવે છે, જ્યારે ન્યુટ્રાસ્યુટિકલ્સ એ પૂરક આહાર (Supplements) તરીકે લેવામાં આવે છે.
 4410096892707. ✖ બંને માત્ર પૂરક આહાર (Supplements) તરીકે જ લેવામાં આવે છે.
 4410096892708. ✖ કાર્યાત્મક ખોરાકમાં માત્ર વિટામિન્સ હોય છે, જ્યારે ન્યુટ્રાસ્યુટિકલ્સમાં ખનિજો (Minerals) હોય છે.
 4410096892709. ✖ ન્યુટ્રાસ્યુટિકલ્સ હંમેશા કુદરતી હોય છે, જ્યારે કાર્યાત્મક ખોરાક હંમેશા સિન્થેટિક (Synthetic) હોય છે.

Hints :

Hint - Focus on how these products are typically consumed rather than their content.

Know More - The correct answer is 'Functional foods are consumed as part of a normal diet, while nutraceuticals are usually taken in supplement form' because functional foods are everyday foods with added benefits, whereas nutraceuticals are concentrated bioactive compounds often sold as supplements. 'Both are consumed only as supplements' is incorrect as functional foods are not supplements. 'Functional foods contain only vitamins, while nutraceuticals contain minerals' is wrong as both can contain various bioactives. 'Nutraceuticals are always natural, functional foods are always synthetic' is incorrect; both can be natural or synthetic.

Reference:

Functional Foods and Nutraceuticals: Bioactive Compounds Editor Assoc. Prof. Dr. Haci Ahmet DEVECI
 Chapter 1

Question Number : 166 Question Id : 4410091748046

A yogurt product contains both live bacteria and dietary fibers. What is this combination called in functional foods?

Options :

4410096893634. ✓ Synbiotic
 4410096893635. ✗ Probiotic
 4410096893636. ✗ Prebiotic
 4410096893637. ✗ Postbiotic

Hints :

Hint - Consider the term for a product combining two types of biotics for enhanced benefits.

Know More - Synbiotics contain both probiotics (live bacteria) and prebiotics (dietary fibers) to enhance gut health. Probiotic refers only to live bacteria, prebiotic to fibers, and postbiotic to bacterial byproducts. Only synbiotic includes both components together.

Reference : Functional Foods: Sources and Health Benefits by Deepak Mudgil
 Chapter 7, page no 180

Question Number : 166 Question Id : 4410091748046

એક દહીંના ઉત્પાદમાં જીવંત બેક્ટેરિયા અને ડાયટરી ફાઇબર્સ (Dietary fibers) બંને હોય છે. તો કાર્યાત્મક ખોરાક (Functional foods)માં આ કોમ્બિનેશનને શું કહેવામાં આવે છે?

Options :

4410096893634. ✓ સિનબાયોટિક (Synbiotic)
 4410096893635. ✗ પ્રોબાયોટિક (Probiotic)
 4410096893636. ✗ પ્રીબાયોટિક (Prebiotic)
 4410096893637. ✗ પોસ્ટબાયોટિક (Postbiotic)

Hints :

Hint - Consider the term for a product combining two types of biotics for enhanced benefits.

Know More - Synbiotics contain both probiotics (live bacteria) and prebiotics (dietary fibers) to enhance gut health. Probiotic refers only to live bacteria, prebiotic to fibers, and postbiotic to bacterial byproducts. Only synbiotic includes both components together.

Reference : Functional Foods: Sources and Health Benefits by Deepak Mudgil
 Chapter 7, page no 180

Question Number : 167 Question Id : 4410091748135

Which functional food is most effective for lowering cholesterol due to its high beta-glucan content?

Options :

4410096893983. ✓ Oats
 4410096893984. ✗ Soybeans
 4410096893985. ✗ Flaxseed
 4410096893986. ✗ Blueberries

Hints :

Hint - Think about grains often recommended for heart health and cholesterol management.

Know More - Oats are well recognized for their high beta-glucan content, which is effective in lowering cholesterol. Soybeans provide isoflavones, flaxseed is rich in lignans and omega-3, and blueberries offer anthocyanins. Beta-glucan is specifically abundant in oats, not in the other options.

Reference : Functional Foods: Sources and Health Benefits by Deepak Mudgil
 Chapter10 ,page 291

Question Number : 167 Question Id : 4410091748135

કયો કાર્યાત્મક ખોરાક (ફંક્શનલ ફૂડ) તેના ઉચ્ચ બીટા-ગ્લુકેન (Beta-glucan) ઘટકને કારણે કોલેસ્ટ્રોલ ઘટાડવા માટે સૌથી વધુ અસરકારક છે?

Options :

4410096893983. ✓ ઓટ્સ (Oats)
 4410096893984. ✗ સોયાબીન
 4410096893985. ✗ અળસી (Flaxseed)
 4410096893986. ✗ બ્લુબેરીઝ

Hints :

Hint - Think about grains often recommended for heart health and cholesterol management.

Know More - Oats are well recognized for their high beta-glucan content, which is effective in lowering cholesterol. Soybeans provide isoflavones, flaxseed is rich in lignans and omega-3, and blueberries offer anthocyanins. Beta-glucan is specifically abundant in oats, not in the other options.

Reference : Functional Foods: Sources and Health Benefits by Deepak Mudgil
 Chapter10 ,page 291

Question Number : 168 Question Id : 4410091738535

In the preparation of a **Low-Fat Diet**, which cooking method should be prioritized to keep the lipid content within the therapeutic range?

Options :

- 4410096855769. ❌ Deep-frying the protein source in high-quality vegetable oils at high heat
- 4410096855770. ❌ Pan-frying the vegetables in a mixture of butter and heavy cooking cream
- 4410096855771. ✅ Steaming or boiling the food items without adding any extra oils or fats
- 4410096855772. ❌ Sautéing the ingredients in a generous amount of flavored margarine or lard

Hints :

Steaming and boiling add no fat, whereas frying or sautéing adds significant lipids.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC7918191/>

Question Number : 168 Question Id : 4410091738535

નિમ્ન ચરબીયુક્ત આહાર (**Low-Fat Diet**) તૈયાર કરવામાં, લિપિડ (Lipid)ની પ્રમાણને ઉપચારાત્મક શ્રેણી (Therapeutic range)ની અંદર રાખવા માટે કઈ રસોઈ પદ્ધતિને પ્રાથમિકતા આપવી જોઈએ?

Options :

- 4410096855769. ❌ ઉચ્ચ ગુણવત્તાવાળા વનસ્પતિ તેલમાં પ્રોટીન સ્ત્રોતને વધુ તાપમાન (High heat) પર ડીપ-ફ્રાય કરવું
- 4410096855770. ❌ માખણ અને હેવી કુકિંગ ક્રીમ (Heavy cooking cream)ની મિશ્રણમાં શાકભાજીને પેન-ફ્રાય (Pan-frying) કરવા
- 4410096855771. ✅ વધારાના તેલ કે ચરબી ઉમેર્યા વગર ખાદ્ય પદાર્થોને બાફવા (Steaming) અથવા ઉકાળવા
- 4410096855772. ❌ સ્વાદયુક્ત માર્જરિન (Flavored margarine) અથવા લાર્ડ (Lard)ની વિપુલ પ્રમાણ (Generous amount)માં સામગ્રીને સાંતળવી

Hints :

Steaming and boiling add no fat, whereas frying or sautéing adds significant lipids.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC7918191/>

Question Number : 169 Question Id : 4410091749173

Which factor is essential to consider when designing a therapeutic diet for hospitalized patients with advanced clinical disorders?

Options :

- 4410096898111. ✅ Medical diagnosis and current clinical status
- 4410096898112. ❌ Personal food preferences
- 4410096898113. ❌ Availability of hospital food supplies
- 4410096898114. ❌ Seasonal fruits

Hints :

Hint - Think about what directly impacts the patient's health and nutritional requirements.

Know More - 'Medical diagnosis and current clinical status' is correct because diet planning must be based on the patient's specific medical condition and how it affects their nutritional needs. 'Personal food preferences' may be considered but are not essential in advanced clinical cases. 'Availability of hospital food supplies' is important for logistics but not for clinical appropriateness. 'Seasonal fruits' are not always relevant to medical needs.

Reference: KRAUSE'S
FOOD & THE NUTRITION
CARE PROCESS 14 EDITION

Chapter : part 5 ,page no 478

Question Number : 169 Question Id : 4410091749173

અધતન ક્લિનિકલ ડિસઓર્ડર્સ ધરાવતા હોસ્પિટલમાં દાખલ થયેલા દર્દીઓ માટે ઉપચારાત્મક આહાર (Therapeutic diet) ડિઝાઇન કરતી વખતે કયા પરિબલને ધ્યાનમાં લેવું જરૂરી છે?

Options :

- 4410096898111. ✅ તબીબી નિદાન અને વર્તમાન ક્લિનિકલ સ્થિતિ
- 4410096898112. ❌ વ્યક્તિગત ખોરાકની પસંદગીઓ
- 4410096898113. ❌ હોસ્પિટલના ખાદ્ય પુરવઠાની ઉપલબ્ધતા
- 4410096898114. ❌ મોસમી ફળો

Hints :

Hint - Think about what directly impacts the patient's health and nutritional requirements.

Know More - 'Medical diagnosis and current clinical status' is correct because diet planning must be based on the patient's specific medical condition and how it affects their nutritional needs. 'Personal food preferences' may be considered but are not essential in advanced clinical cases. 'Availability of hospital food supplies' is important for logistics but not for clinical appropriateness. 'Seasonal fruits' are not always relevant to medical needs.

Reference: KRAUSE'S
FOOD & THE NUTRITION
CARE PROCESS 14 EDITION

Chapter : part 5 ,page no 478

Question Number : 170 Question Id : 4410091761054

Which principle is most important when integrating medical nutrition therapy for patients with diabetes?

Options :

4410096944255. ✓ Carbohydrate counting
 4410096944256. ✗ High protein diet
 4410096944257. ✗ Sodium restriction
 4410096944258. ✗ Fluid balance

Hints :

Hint - Think about which nutrient directly affects blood sugar control.

Know More - Carbohydrate counting is essential for managing blood glucose levels in diabetic patients, making it the correct answer. High protein diets, sodium restriction, and fluid balance are less central to diabetes management; protein is more relevant for kidney disease, sodium restriction for hypertension, and fluid balance for heart failure.

Reference- Mudambi, SR; Rajagopal, MV (2007). Fundamentals of Foods, Nutrition and Diet Therapy. In Nutrition in Diabetes Mellitus. (5th ed., p. 298). New Age International Publishers.

Question Number : 170 Question Id : 4410091761054

ડાયાબિટીસના દર્દીઓ માટે મેડિકલ ન્યુટ્રિશન થેરાપી (તબીબી પોષણ ઉપચાર) સંકલિત કરતી વખતે કયો સિદ્ધાંત સૌથી મહત્વપૂર્ણ છે?

Options :

4410096944255. ✓ કાર્બોહાઇડ્રેટની ગણતરી
 4410096944256. ✗ ઉચ્ચ પ્રોટીન આહાર
 4410096944257. ✗ સોડિયમ પ્રતિબંધ (Sodium restriction)
 4410096944258. ✗ તરલ સંતુલન (Fluid balance)

Hints :

Hint - Think about which nutrient directly affects blood sugar control.

Know More - Carbohydrate counting is essential for managing blood glucose levels in diabetic patients, making it the correct answer. High protein diets, sodium restriction, and fluid balance are less central to diabetes management; protein is more relevant for kidney disease, sodium restriction for hypertension, and fluid balance for heart failure.

Reference- Mudambi, SR; Rajagopal, MV (2007). Fundamentals of Foods, Nutrition and Diet Therapy. In Nutrition in Diabetes Mellitus. (5th ed., p. 298). New Age International Publishers.

Question Number : 171 Question Id : 4410091772149

Which step would best improve the evaluation of a renal diet's effectiveness in patients with kidney disease?

Options :

4410096988168. ✗ Adjusting meal frequency
 4410096988169. ✓ Monitoring serum potassium
 4410096988170. ✗ Changing cooking methods
 4410096988171. ✗ Increasing protein intake

Hints :

Hint - Focus on the nutrient that can become dangerous for kidney patients if not carefully controlled.

Know More - Monitoring serum potassium is vital in renal diets because patients are at risk of hyperkalemia. Adjusting meal frequency, cooking methods, or increasing protein do not directly measure renal diet effectiveness regarding electrolyte balance. Increased protein may even be harmful for renal patients.

Reference- Picard, K., Silva, M. I. B., Mager, D., & Richard, C. (2020). Dietary Potassium Intake and Risk of Chronic Kidney Disease Progression in Predialysis Patients with Chronic Kidney Disease: A Systematic Review. *Advances in Nutrition*, 11(4), 1002–1015. doi:10.1093/advances/nmaa027

Question Number : 171 Question Id : 4410091772149

કિડનીના રોગવાળા દર્દીઓમાં રેનલ ડાયેટ (renal diet)ની અસરકારકતાના મૂલ્યાંકનમાં સુધારો કરવા માટે કયું પગલું સૌથી શ્રેષ્ઠ રહેશે?

Options :

4410096988168. ✗ ભોજનની આવૃત્તિ (meal frequency)માં ફેરફાર કરવો
 4410096988169. ✓ સીરમ પોટેશિયમનું નિરીક્ષણ કરવું
 4410096988170. ✗ રાંધવાની પદ્ધતિઓ બદલવી
 4410096988171. ✗ પ્રોટીનનું સેવન (protein intake) વધારવું

Hints :

Hint - Focus on the nutrient that can become dangerous for kidney patients if not carefully controlled.

Know More - Monitoring serum potassium is vital in renal diets because patients are at risk of hyperkalemia. Adjusting meal frequency, cooking methods, or increasing protein do not directly measure renal diet effectiveness regarding electrolyte balance. Increased protein may even be harmful for renal patients.

Reference- Picard, K., Silva, M. I. B., Mager, D., & Richard, C. (2020). Dietary Potassium Intake and Risk of Chronic Kidney Disease Progression in Predialysis Patients with Chronic Kidney Disease: A Systematic Review. *Advances in Nutrition*, 11(4), 1002–1015. doi:10.1093/advances/nmaa027

Question Number : 172 Question Id : 4410091738564

When evaluating the effectiveness of a therapeutic diet for peptic ulcer disease, which indicator best reflects positive outcomes?

Options :

4410096855881. ✓ Less gastric discomfort and better appetite
 4410096855882. ✗ Weight gain within two weeks
 4410096855883. ✗ Increase in gastric acid secretion
 4410096855884. ✗ Elevated serum albumin levels

Hints :

Hint - Focus on symptom management rather than lab values or weight changes.

Know More - Reduction in gastric discomfort and improved appetite is correct as it directly reflects symptom relief. Weight gain may occur but isn't specific to ulcer healing. Increase in gastric acid secretion is undesirable. Elevated serum albumin may indicate nutritional status but not ulcer recovery.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4743227/>

Question Number : 172 Question Id : 4410091738564

પેપ્ટિક અલ્સર રોગ માટે ઉપચારાત્મક આહાર (Therapeutic diet)ની અસરકારકતાનું મૂલ્યાંકન કરતી વખતે, કયું સૂચક સકારાત્મક પરિણામોને શ્રેષ્ઠ રીતે દર્શાવે છે?

Options :

4410096855881. ✓ ઓછી જઠરીય અસ્વસ્થતા (Gastric discomfort) અને વધુ સારી ભૂખ (Better appetite)
 4410096855882. ✗ બે અઠવાડિયાની અંદર વજનમાં વધારો
 4410096855883. ✗ જઠરીય એસિડના સ્રાવમાં વધારો
 4410096855884. ✗ સીરમ આલ્બ્યુમિન (Serum albumin)ની સ્તરોમાં વધારો

Hints :

Hint - Focus on symptom management rather than lab values or weight changes.

Know More - Reduction in gastric discomfort and improved appetite is correct as it directly reflects symptom relief. Weight gain may occur but isn't specific to ulcer healing. Increase in gastric acid secretion is undesirable. Elevated serum albumin may indicate nutritional status but not ulcer recovery.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4743227/>

Question Number : 173 Question Id : 4410091738649

What is considered a critical control point in food safety management systems?

Options :

4410096856213. ✗ Washing hands before handling food
 4410096856214. ✓ Cooking food to safe internal temperatures
 4410096856215. ✗ Storing utensils properly
 4410096856216. ✗ Keeping floors clean

Hints :

Hint - Identify the step that directly prevents hazards in the food production process, not general hygiene practices.

Know More - 'Cooking food to safe internal temperatures' is correct because it is a specific step where hazards can be prevented, eliminated, or reduced to safe levels. Washing hands is important but is not a critical control point; it is a prerequisite. Storing utensils properly helps with hygiene but is not a critical control point. Keeping floors clean is necessary for sanitation but does not directly control food safety hazards.

<https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines>

Question Number : 173 Question Id : 4410091738649

ખાદ્ય સુરક્ષા વ્યવસ્થાપન પ્રણાલીઓ (Management systems)માં નીચેનામાંથી કયાને મહત્વપૂર્ણ નિયંત્રણ બિંદુ (Critical control point) તરીકે માનવામાં આવે છે?

Options :

4410096856213. ✗ ખોરાક હેન્ડલ (Food handling) કરતાં પહેલા હાથ ધોવા
 4410096856214. ✓ ખોરાકને સુરક્ષિત આંતરિક તાપમાન (Internal temperature) સુધી રાંધવો
 4410096856215. ✗ વાસણોને યોગ્ય રીતે સ્ટોર કરવા
 4410096856216. ✗ ફ્લોરને સ્વચ્છ રાખવા

Hints :

Hint - Identify the step that directly prevents hazards in the food production process, not general hygiene practices.

Know More - 'Cooking food to safe internal temperatures' is correct because it is a specific step where hazards can be prevented, eliminated, or reduced to safe levels. Washing hands is important but is not a critical control point; it is a prerequisite. Storing utensils properly helps with hygiene but is not a critical control point. Keeping floors clean is necessary for sanitation but does not directly control food safety hazards.

<https://www.fda.gov/food/hazard-analysis-critical-control-point-haccp/haccp-principles-application-guidelines>

Question Number : 174 Question Id : 4410091742514

Why is regular cleaning of kitchen surfaces important in food safety?

Options :

4410096871729. ✓ It prevents the growth of harmful bacteria

4410096871730. ✗ It makes the kitchen look tidy

4410096871731. ✗ It increases food flavor

4410096871732. ✗ It preserves food freshness

Hints :

Hint - Think about the main health risk when surfaces are left dirty in a kitchen.

Know More - Regular cleaning of kitchen surfaces prevents the growth of harmful bacteria, which is crucial for maintaining food safety. Although cleaning can make the kitchen look tidy, this is not the main reason in food safety. Cleaning does not increase food flavor or directly preserve food freshness, but it does reduce microbial contamination, thereby protecting health.

Reference: Essentials of Food Science by Vickie A, chapter 19 Page no 419

Question Number : 174 Question Id : 4410091742514

ખાદ્ય સુરક્ષા (food safety)માં રસોડાની સપાટી (kitchen surfaces)ની નિયમિત સફાઈ કરવી શા માટે મહત્વપૂર્ણ છે?

Options :

4410096871729. ✓ તે હાનિકારક બેક્ટેરિયાના વિકાસને અટકાવે છે.

4410096871730. ✗ તે રસોડાને સુધડ બનાવે છે.

4410096871731. ✗ તે ખોરાકનો સ્વાદ વધારે છે.

4410096871732. ✗ તે ખોરાકની તાજગી જાળવી રાખે છે.

Hints :

Hint - Think about the main health risk when surfaces are left dirty in a kitchen.

Know More - Regular cleaning of kitchen surfaces prevents the growth of harmful bacteria, which is crucial for maintaining food safety. Although cleaning can make the kitchen look tidy, this is not the main reason in food safety. Cleaning does not increase food flavor or directly preserve food freshness, but it does reduce microbial contamination, thereby protecting health.

Reference: Essentials of Food Science by Vickie A, chapter 19 Page no 419

Question Number : 175 Question Id : 4410091763553

What is the first step in managing a food safety incident in a community setting?

Options :

4410096954151. ✓ Identify the source of contamination

4410096954152. ✗ Conduct mass vaccination

4410096954153. ✗ Close all food outlets

4410096954154. ✗ Issue nutritional supplements

Hints :

Hint - Think about what must be known before any intervention can be planned.

Know More - Identifying the source of contamination is necessary to manage a food safety incident effectively. Conducting mass vaccinations, closing all food outlets, or issuing nutritional supplements are not appropriate initial steps and may not address the root cause.

Reference- Rather, I. A., Koh, W. Y., Paek, W. K., & Lim, J. (2017). The Sources of Chemical Contaminants in Food and Their Health Implications. Frontiers in pharmacology, 8, 830. <https://doi.org/10.3389/fphar.2017.00830>

Question Number : 175 Question Id : 4410091763553

સામુદાયિક સેટિંગ (Community Setting)માં ખાદ્ય સલામતીની ઘટના (Food Safety Incident)ને મેનેજ કરતી વખતે, પ્રથમ પગલું કયું છે?

Options :

4410096954151. ✓ દૂષણ (contamination)નો સ્ત્રોત શોધવો.

4410096954152. ✗ સામૂહિક રસીકરણ (mass vaccination)નું આયોજન કરવું.

4410096954153. ✗ તમામ ખાદ્ય આઉટલેટ્સ બંધ કરવા.

4410096954154. ✗ પોષક સપ્લિમેન્ટ્સ આપવા.

Hints :

Hint - Think about what must be known before any intervention can be planned.

Know More - Identifying the source of contamination is necessary to manage a food safety incident effectively. Conducting mass vaccinations, closing all food outlets, or issuing nutritional supplements are not appropriate initial steps and may not address the root cause.

Reference- Rather, I. A., Koh, W. Y., Paek, W. K., & Lim, J. (2017). The Sources of Chemical Contaminants in Food and Their Health Implications. Frontiers in pharmacology, 8, 830. <https://doi.org/10.3389/fphar.2017.00830>

Question Number : 176 Question Id : 4410091762737

Which of the following is a primary goal of food safety standards in public health?

Options :

4410096950943. ✖ To increase food production efficiency

4410096950944. ✖ To reduce food prices for consumers

4410096950945. ✔ To prevent foodborne illnesses

4410096950946. ✖ To promote international trade

Hints :

Hint - Consider what food safety standards are fundamentally meant to achieve in society.

Know More - The correct answer is 'To prevent foodborne illnesses' because food safety standards are designed to minimize health risks from contaminated food. 'To increase food production efficiency' is not a direct goal of food safety standards, though it may be a benefit. 'To reduce food prices for consumers' is unrelated to the health focus of food safety standards. 'To promote international trade' is a secondary outcome but not the primary public health goal.

Reference- <https://www.who.int/news-room/fact-sheets/detail/food-safety>

Question Number : 176 Question Id : 4410091762737

જાહેર આરોગ્યમાં ખાદ્ય સુરક્ષાના ધોરણો (food safety standards)નો મુખ્ય ધ્યેય નીચેનામાંથી કયો છે?

Options :

4410096950943. ✖ ખાદ્ય ઉત્પાદન કાર્યક્ષમતા (food production efficiency) વધારવી

4410096950944. ✖ ગ્રાહકો માટે ખાદ્ય પદાર્થોના ભાવ ઘટાડવા

4410096950945. ✔ ખોરાકજન્ય બીમારીઓ (foodborne illnesses) અટકાવવી

ખોરાકજન્ય બીમારીઓ (foodborne illnesses) અટકાવવી

4410096950946. ✖ આંતરરાષ્ટ્રીય વ્યાપારને પ્રોત્સાહન આપવું

Hints :

Hint - Consider what food safety standards are fundamentally meant to achieve in society.

Know More - The correct answer is 'To prevent foodborne illnesses' because food safety standards are designed to minimize health risks from contaminated food. 'To increase food production efficiency' is not a direct goal of food safety standards, though it may be a benefit. 'To reduce food prices for consumers' is unrelated to the health focus of food safety standards. 'To promote international trade' is a secondary outcome but not the primary public health goal.

Reference- <https://www.who.int/news-room/fact-sheets/detail/food-safety>

Question Number : 177 Question Id : 4410091763566

Which collective catering setting requires the strictest adherence to food safety standards due to vulnerable clientele?

Options :

4410096954203. ✖ Corporate offices

4410096954204. ✖ School cafeterias

4410096954205. ✔ Hospital catering

4410096954206. ✖ Event catering

Hints :

Hint - Think about places where the health status of people makes them more susceptible to food risks.

Know More - 'Hospital catering' is correct because patients are often immunocompromised, making them more susceptible to foodborne illnesses. 'Corporate offices' and 'school cafeterias' also require standards, but the clientele is generally less vulnerable. 'Event catering' may serve healthy adults and is temporary.

Reference- https://isid.org/wp-content/uploads/2018/04/ISID_InfectionGuide_Chapter18.pdf

Question Number : 177 Question Id : 4410091763566

કયા સામૂહિક કેટરિંગ સેટિંગ (Collective catering setting)માં, સંવેદનશીલ ગ્રાહકવર્ગ (Vulnerable Clientele)ને કારણે, ખાદ્ય સુરક્ષા ધોરણોનું સૌથી સખત પાલન જરૂરી છે?

Options :

4410096954203. ✖ કોર્પોરેટ કચેરીઓ

4410096954204. ✖ શાળા કેફેટેરિયા

4410096954205. ✔ હોસ્પિટલ કેટરિંગ (Hospital Catering)

4410096954206. ✖ ઇવેન્ટ કેટરિંગ (Event Catering)

Hints :

Hint - Think about places where the health status of people makes them more susceptible to food risks.

Know More - 'Hospital catering' is correct because patients are often immunocompromised, making them more susceptible to foodborne illnesses. 'Corporate offices' and 'school cafeterias' also require standards, but the clientele is generally less vulnerable. 'Event catering' may serve healthy adults and is temporary.

Reference- https://isid.org/wp-content/uploads/2018/04/ISID_InfectionGuide_Chapter18.pdf

Question Number : 178 Question Id : 4410091763582

Which research method is most suitable for collecting data through structured questionnaires from a large group of people?

Options :

4410096954267. ✔ Survey

4410096954268. ✖ Experiment

4410096954269. ✖ Case study
 4410096954270. ✖ Observation

Hints :

Hint - Think about methods commonly used for large-scale data collection rather than in-depth or controlled studies.

Know More - Survey is the correct answer because it involves structured questionnaires and is ideal for gathering data from large groups. Experiment is incorrect because it focuses on testing hypotheses under controlled conditions. Case study is not suitable for large groups as it involves in-depth analysis of a single or few cases. Observation is used to record behaviors without direct questioning and does not employ structured questionnaires.

Reference- Ponto J. (2015). Understanding and Evaluating Survey Research. Journal of the advanced practitioner in oncology, 6(2), 168–171.

Question Number : 178 Question Id : 4410091763582

લોકોના મોટા સમૂહ પાસેથી સ્ટ્રક્ચર્ડ પ્રશ્નાવલી (Structured questionnaires) દ્વારા માહિતી એકત્રિત કરવા માટે કઈ સંશોધન પદ્ધતિ સૌથી વધુ યોગ્ય છે?

Options :

4410096954267. ✔ સર્વેક્ષણ
 4410096954268. ✖ પ્રયોગ
 4410096954269. ✖ કેસ સ્ટડી
 4410096954270. ✖ અવલોકન

Hints :

Hint - Think about methods commonly used for large-scale data collection rather than in-depth or controlled studies.

Know More - Survey is the correct answer because it involves structured questionnaires and is ideal for gathering data from large groups. Experiment is incorrect because it focuses on testing hypotheses under controlled conditions. Case study is not suitable for large groups as it involves in-depth analysis of a single or few cases. Observation is used to record behaviors without direct questioning and does not employ structured questionnaires.

Reference- Ponto J. (2015). Understanding and Evaluating Survey Research. Journal of the advanced practitioner in oncology, 6(2), 168–171.

Question Number : 179 Question Id : 4410091738777

Which statistical test should be used to compare the frequency of vitamin deficiency between males and females in a population?

Options :

4410096856713. ✔ Chi-square test
 4410096856714. ✖ ANOVA
 4410096856715. ✖ Independent t-test
 4410096856716. ✖ Regression analysis

Hints :

Hint - Choose the test that analyzes differences in counts or proportions, not averages.

Know More - Chi-square test is correct as it compares frequencies between groups for categorical variables. ANOVA and t-tests are used for comparing means, and regression is for prediction or association between continuous variables.

https://www.researchgate.net/post/What_is_the_best_statistical_test_to_compare_difference_between_data_samples_for_male_and_female_at_different_age_grou

Question Number : 179 Question Id : 4410091738777

કોઈ એક વસ્તીમાં પુરુષો અને સ્ત્રીઓ વચ્ચે વિટામિનની ઊણપની આવૃત્તિની સરખામણી કરવા માટે કઈ આંકડાકીય કસોટીનો ઉપયોગ કરવો જોઈએ?

Options :

4410096856713. ✔ કાઇ-વર્ગ કસોટી (Chi-square test)
 4410096856714. ✖ ANOVA
 4410096856715. ✖ સ્વતંત્ર t-કસોટી (Independent t-test)
 4410096856716. ✖ નિયતસંબંધ વિશ્લેષણ (Regression analysis)

Hints :

Hint - Choose the test that analyzes differences in counts or proportions, not averages.

Know More - Chi-square test is correct as it compares frequencies between groups for categorical variables. ANOVA and t-tests are used for comparing means, and regression is for prediction or association between continuous variables.

https://www.researchgate.net/post/What_is_the_best_statistical_test_to_compare_difference_between_data_samples_for_male_and_female_at_different_age_grou

Question Number : 180 Question Id : 4410091756777

When preparing a bibliography in APA style, which element is placed first in each reference?

Options :

4410096927733. ✔ Author's name
 4410096927734. ✖ Title of the work
 4410096927735. ✖ Publisher's name
 4410096927736. ✖ Digital Object Identifier (DOI)

Hints :

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association.

Question Number : 180 Question Id : 4410091756777

APA શૈલીમાં ગ્રંથસૂચિ (Bibliography) તૈયાર કરતી વખતે, પ્રત્યેક સંદર્ભ (Reference)માં કયા તત્વ (Element)ને સૌથી પ્રથમ મૂકવામાં આવે છે?

Options :

4410096927733. ✓ લેખકનું નામ

4410096927734. ✗ કાર્યનું શીર્ષક

4410096927735. ✗ પ્રકાશકનું નામ

4410096927736. ✗ ડિજિટલ ઓબ્જેક્ટ આઇડેન્ટિફાયર (DOI)

Hints :

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). American Psychological Association.

Question Number : 181 Question Id : 4410091756673

A researcher wants to determine if there is an association between smoking status (smoker/non-smoker) and incidence of lung disease (present/absent) in adults. Which statistical test should they use?

Options :

4410096927317. ✓ Chi-square test

4410096927318. ✗ Regression analysis

4410096927319. ✗ Paired t-test

4410096927320. ✗ ANOVA

Hints :

Hint - Focus on tests used for association between categorical variables.

Know More - The chi-square test is used for examining associations between two categorical variables. Regression analysis predicts a dependent variable from one or more independent variables, not association. Paired t-test compares means from the same group at different times, not between categories. ANOVA compares means across groups with continuous outcomes.

Reference :Research Method and Biostatistics by IGNOUChapter 13 ,13.4.1 ,page no 227

Question Number : 181 Question Id : 4410091756673

એક સંશોધક પુખ્ત વયના લોકોમાં ધૂમ્રપાનની સ્થિતિ (ધૂમ્રપાન કરનાર/ધૂમ્રપાન ન કરનાર) અને ફેફસાંના રોગની ઘટના (હાજર/ગેરહાજર) વચ્ચે કોઈ સંબંધ (Association) છે કે નહીં, તે નક્કી કરવા ઇચ્છે છે. આ માટે તેમણે કયા આંકડાકીય ટેસ્ટ (Statistical Test)નો ઉપયોગ કરવો જોઈએ?

Options :

4410096927317. ✓ કાય-સ્ક્વેર ટેસ્ટ (Chi-square test)

4410096927318. ✗ રિગ્રેશન એનાલિસિસ (Regression analysis)

4410096927319. ✗ પેર્ડ t-ટેસ્ટ (Paired t-test)

4410096927320. ✗ એનોવા (ANOVA)

Hints :

Hint - Focus on tests used for association between categorical variables.

Know More - The chi-square test is used for examining associations between two categorical variables. Regression analysis predicts a dependent variable from one or more independent variables, not association. Paired t-test compares means from the same group at different times, not between categories. ANOVA compares means across groups with continuous outcomes.

Reference :Research Method and Biostatistics by IGNOUChapter 13 ,13.4.1 ,page no 227

Question Number : 182 Question Id : 4410091723547

Which nutrient is primarily responsible for providing energy to athletes during exercise?

Options :

4410096797353. ✓ Carbohydrates

4410096797354. ✗ Proteins

4410096797355. ✗ Fats

4410096797356. ✗ Vitamins

Hints :

Hint - Think about which nutrient is most quickly used by the body during intense activity.

Know More - Carbohydrates are the main source of energy for athletes during exercise because they are quickly broken down into glucose for immediate use. Proteins are mainly used for muscle repair and growth, not rapid energy. Fats can provide energy, but they are metabolized more slowly and are not the primary source during intense activity. Vitamins do not provide energy but support various body functions. Thus, carbohydrates are correct, and the others are incorrect for primary energy during exercise.

Reference :Sports Nutrition for Health Professionals by Natalie Digate Muth ,Chapter 1 page no 14

Question Number : 182 Question Id : 4410091723547

કસરત દરમિયાન રમતવીરો (athletes)ને મુખ્યત્વે ઊર્જા પૂરી પાડવા માટે કયું પોષક તત્વ જવાબદાર છે?

Options :

4410096797353. ✓ કાર્બોહાઇડ્રેટ્સ
 4410096797354. ✗ પ્રોટીન્સ
 4410096797355. ✗ ચરબી
 4410096797356. ✗ વિટામિન્સ

Hints :

Hint - Think about which nutrient is most quickly used by the body during intense activity.

Know More - Carbohydrates are the main source of energy for athletes during exercise because they are quickly broken down into glucose for immediate use. Proteins are mainly used for muscle repair and growth, not rapid energy. Fats can provide energy, but they are metabolized more slowly and are not the primary source during intense activity. Vitamins do not provide energy but support various body functions. Thus, carbohydrates are correct, and the others are incorrect for primary energy during exercise.

Reference :Sports Nutrition for Health Professionals by Natalie Digate Muth ,Chapter 1 page no 14

Question Number : 183 Question Id : 4410091738917

In the context of sports nutrition, the 'Periodization' of a diet refers to which of the following practices?

Options :

4410096857283. ✗ Avoiding all seasonings
 4410096857284. ✓ Adjusting calorie goals
 4410096857285. ✗ Eating one meal a day
 4410096857286. ✗ Buying organic produce

Hints :

In the context of sports nutrition, the practice of 'Periodization' (or periodized nutrition) refers to the strategic manipulation of nutritional intake to align with the specific goals and demands of different training phases.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5371625/>

Question Number : 183 Question Id : 4410091738917

રમતગમતના પોષણ (Sports nutrition)ના સંદર્ભમાં, આહારનું 'પિરિયડાઇઝેશન' (Periodization) એ નીચેની કઈ પ્રેક્ટિસનો ઉલ્લેખ કરે છે?

Options :

4410096857283. ✗ તમામ મસાલાઓ ટાળવા (Avoiding all seasonings)
 4410096857284. ✓ કેલરીના લક્ષ્યાંકોમાં સમાયોજન કરવું
 4410096857285. ✗ દિવસમાં એક વખત ભોજન લેવું
 4410096857286. ✗ ઓર્ગેનિક ઉત્પાદનો ખરીદવા (Buying organic produce)

Hints :

In the context of sports nutrition, the practice of 'Periodization' (or periodized nutrition) refers to the strategic manipulation of nutritional intake to align with the specific goals and demands of different training phases.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5371625/>

Question Number : 184 Question Id : 4410091765514

What is the main purpose of adjusting the carbohydrate intake for athletes based on their activity type and volume?

Options :

4410096961972. ✗ To increase water retention
 4410096961973. ✓ To ensure optimal recovery
 4410096961974. ✗ To reduce fat stores
 4410096961975. ✗ To enhance protein absorption

Hints :

Hint - Focus on what athletes need for both performing well and recovering quickly.

Know More - Adjusting carbohydrate intake ensures adequate fuel during activity and optimal recovery afterwards. 'To increase water retention' is not a primary purpose; 'To reduce fat stores' is not directly linked to carbohydrate adjustment; 'To enhance protein absorption' is unrelated to carbohydrates.

Reference- Jatana, A., DK D., Shyam, H., Rohatgi, P., Yeptho, K.P. (2022). Sports Nutrition. In Apollo Clinical Nutrition Handbook (1st ed., p. 273). Jaypee Brothers Medical Publishers

Question Number : 184 Question Id : 4410091765514

રમતવીરો માટે તેમની પ્રવૃત્તિના પ્રકાર (Activity type) અને વોલ્યુમના આધારે કાર્બોહાઇડ્રેટના સેવનને સમાયોજિત કરવાનો મુખ્ય હેતુ શું છે?

Options :

4410096961972. ✗ પાણીની જાળવણી (Water retention)ને વધારવું.
 4410096961973. ✓ ઇષ્ટમ રિકવરી (Optimal recovery) સુનિશ્ચિત કરવી.
 4410096961974. ✗ ચરબીના સંગ્રહને ઘટાડવું.

4410096961975. ❌ પ્રોટીનનું અવશોષણ વધારવું.

Hints :

Hint - Focus on what athletes need for both performing well and recovering quickly.

Know More - Adjusting carbohydrate intake ensures adequate fuel during activity and optimal recovery afterwards. 'To increase water retention' is not a primary purpose; 'To reduce fat stores' is not directly linked to carbohydrate adjustment; 'To enhance protein absorption' is unrelated to carbohydrates.

Reference- Jatana, A., DK D., Shyam, H., Rohatgi, P., Yephtho, K.P. (2022). Sports Nutrition. In Apollo Clinical Nutrition Handbook (1st ed., p. 273). Jaypee Brothers Medical Publishers

Question Number : 185 Question Id : 4410091765530

When planning a meal for an athlete prior to an event, which food should be limited to follow a low fiber diet recommendation?

Options :

4410096962068. ✔ Whole grain bread

4410096962069. ❌ White rice

4410096962070. ❌ Chicken breast

4410096962071. ❌ Yogurt

Hints :

Hint - Think about which foods contain the most dietary fiber.

Know More - Whole grain bread should be limited due to its high fiber content. White rice and chicken breast are low in fiber and suitable for pre-event meals. Traditional, plain yogurt contains no fibre.

Reference- Jatana, A., DK D., Shyam, H., Rohatgi, P., Yephtho, K.P. (2022). Sports Nutrition. In Apollo Clinical Nutrition Handbook (1st ed., p. 278). Jaypee Brothers Medical Publishers

Question Number : 185 Question Id : 4410091765530

કોઈ ઇવેન્ટ (સ્પર્ધા) પહેલાં રમતવીર માટે ભોજનનું આયોજન (planning) કરતી વખતે, લો-ફાઇબર ડાયેટ ભલામણને અનુસરવા માટે નીચેનામાંથી કયા ખાદ્ય પદાર્થનો ઉપયોગ મર્યાદિત રાખવો જોઈએ?

Options :

4410096962068. ✔ હોલ ગ્રેઈન બ્રેડ (Whole grain bread)

4410096962069. ❌ સફેદ ચોખ્ખા (White rice)

4410096962070. ❌ ચિકન બ્રેસ્ટ (Chicken breast)

4410096962071. ❌ યોગર્ટ (Yogurt)

Hints :

Hint - Think about which foods contain the most dietary fiber.

Know More - Whole grain bread should be limited due to its high fiber content. White rice and chicken breast are low in fiber and suitable for pre-event meals. Traditional, plain yogurt contains no fibre.

Reference- Jatana, A., DK D., Shyam, H., Rohatgi, P., Yephtho, K.P. (2022). Sports Nutrition. In Apollo Clinical Nutrition Handbook (1st ed., p. 278). Jaypee Brothers Medical Publishers

Question Number : 186 Question Id : 4410091738892

Why is the principle of nutrient periodization important in sports nutrition for athletes?

Options :

4410096857183. ✔ Aligning diet with training phases for peak adaptation

4410096857184. ❌ Maintaining the same diet throughout the year

4410096857185. ❌ Avoiding dietary changes during training

4410096857186. ❌ Focusing solely on supplementation instead of diet

Hints :

Hint - Think about how dietary needs might change as an athlete moves through off-season, competition, and recovery.

Know More - Nutrient periodization is important because it matches dietary changes to different stages of training, supporting optimal adaptation and performance. The other options—maintaining the same diet year-round, avoiding dietary changes, or focusing solely on supplementation—ignore the dynamic nature of training and do not maximize benefits.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5371625/>

Question Number : 186 Question Id : 4410091738892

રમતવીરો માટે રમતગમતના પોષણમાં પોષકતત્વોના પીરિયડાઇઝેશન (Nutrient periodization)નો સિદ્ધાંત શા માટે મહત્વપૂર્ણ છે?

Options :

4410096857183. ✔ મહત્તમ અનુકૂળન (Peak adaptation) સાધવા માટે તાલીમના તબક્કાઓ સાથે આહારને સંરેખિત કરવા માટે

4410096857184. ❌ સંપૂર્ણ વર્ષભર માટે એકસરખો આહાર જાળવી રાખવા માટે

4410096857185. ❌ તાલીમ દરમિયાન આહારમાં ફેરફાર કરવાનું ટાળવા માટે

4410096857186. ✖ આહારને બદલે માત્ર સપ્લીમેન્ટેશન (Supplementation) પર જ ધ્યાન કેન્દ્રિત કરવા માટે

Hints :

Hint - Think about how dietary needs might change as an athlete moves through off-season, competition, and recovery.

Know More - Nutrient periodization is important because it matches dietary changes to different stages of training, supporting optimal adaptation and performance. The other options—maintaining the same diet year-round, avoiding dietary changes, or focusing solely on supplementation—ignore the dynamic nature of training and do not maximize benefits.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5371625/>

Question Number : 187 Question Id : 4410091738960

Which skill is essential for diet counselors to establish rapport and trust during the initial session?

Options :

4410096857455. ✔ Active listening

4410096857456. ✖ Giving advice

4410096857457. ✖ The rapid-fire assessment

4410096857458. ✖ Non-verbal communication

Hints :

Hint - Think about which skill involves truly understanding the client's perspective before responding.

Know More - Active listening is crucial for rapport, as it shows genuine interest and understanding. Giving advice prematurely can make clients feel unheard. Using open-ended questions helps, but without active listening, it may not build trust. Non-verbal communication supports rapport but is less direct than listening actively.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9543415/>

Question Number : 187 Question Id : 4410091738960

ડાટેટ કાઉન્સેલર્સ માટે શરૂઆતના સત્ર દરમિયાન તાલમેલ (Rapport) અને વિશ્વાસ સ્થાપિત કરવા માટે કયું કૌશલ્ય આવશ્યક છે?

Options :

4410096857455. ✔ સક્રિય શ્રવણ

4410096857456. ✖ સલાહ આપવી

4410096857457. ✖ ઝડપી આકારણી (The rapid-fire assessment)

4410096857458. ✖ અશબ્દિક સંવાદ (Non-verbal communication)

Hints :

Hint - Think about which skill involves truly understanding the client's perspective before responding.

Know More - Active listening is crucial for rapport, as it shows genuine interest and understanding. Giving advice prematurely can make clients feel unheard. Using open-ended questions helps, but without active listening, it may not build trust. Non-verbal communication supports rapport but is less direct than listening actively.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9543415/>

Question Number : 188 Question Id : 4410091738961

When counseling a client with multiple dietary restrictions, which approach best ensures the client's needs are met without overwhelming them?

Options :

4410096857459. ✔ Individualized goal setting

4410096857460. ✖ Generic meal planning

4410096857461. ✖ The elimination extremist

4410096857462. ✖ Strict dietary prescriptions

Hints :

Hint - Which method adapts to the client's unique situation rather than using a universal approach?

Know More - Individualized goal setting tailors advice to the client's situation, preventing overwhelm and meeting needs. Generic meal plans do not consider unique restrictions. Group counseling lacks personalization. Strict dietary prescriptions can overwhelm rather than support the client.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4900876/>

Question Number : 188 Question Id : 4410091738961

જ્યારે બહુવિધ આહાર પ્રતિબંધો (Multiple dietary restrictions) ધરાવતા એક ક્લાયન્ટને પરામર્શ આપવાનું હોય, ત્યારે કયો અભિગમ (Approach) એ સુનિશ્ચિત કરે છે કે ક્લાયન્ટને મૂઝવણ (Overwhelm)માં મૂક્યા વગર તેમની જરૂરિયાતો પૂરી થાય?

Options :

4410096857459. ✔ વ્યક્તિગત લક્ષ્ય નિર્ધારણ (Individualized goal setting)

4410096857460. ✖ સામાન્ય ભોજનનું આયોજન (Generic meal planning)

4410096857461. ✖ એલિમિનેશન એક્સ્ટ્રિમિસ્ટ (The elimination extremist)

4410096857462. ✖ ચુસ્ત આહારના સૂચનો (Strict dietary prescriptions)

Hints :

Hint - Which method adapts to the client's unique situation rather than using a universal approach?

Know More - Individualized goal setting tailors advice to the client's situation, preventing overwhelm and meeting needs. Generic meal plans do not consider unique restrictions. Group counseling lacks personalization. Strict dietary prescriptions can overwhelm rather than support the client.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC4900876/>

Question Number : 189 Question Id : 4410091773394

Which type of diet counselling focuses on helping clients set achievable goals?

Options :

4410096993162. ✓ Goal-oriented counselling

4410096993163. ✗ Motivational counselling

4410096993164. ✗ Directive counselling

4410096993165. ✗ Educational counselling

Hints :

Hint: Consider which approach centers around making plans for improvement.

Explanation: Goal-oriented counselling helps clients set realistic and achievable dietary goals. Motivational counselling focuses on encouraging behavior change. Directive counselling tells clients what to do, while educational counselling provides information.

Cullen, K. W., Baranowski, T., & Smith, S. P. (2001). Using goal setting as a strategy for dietary behavior change. Journal of the American Dietetic Association, 101(5), 562–566. [https://doi.org/10.1016/S0002-8223\(01\)00140-7](https://doi.org/10.1016/S0002-8223(01)00140-7)

Question Number : 189 Question Id : 4410091773394

કયા પ્રકારનું આહાર કાઉન્સેલિંગ (Diet Counselling) ક્લાયન્ટને પ્રાપ્ત કરી શકાય તેવા લક્ષ્યો (achievable goals) નક્કી કરવામાં મદદ કરવા પર ધ્યાન કેન્દ્રિત કરે છે?

Options :

4410096993162. ✓ ધ્યેય-લક્ષી કાઉન્સેલિંગ (Goal-oriented counselling)

4410096993163. ✗ પ્રેરણાત્મક કાઉન્સેલિંગ (Motivational counselling)

4410096993164. ✗ નિર્દેશાત્મક કાઉન્સેલિંગ (Directive counselling)

4410096993165. ✗ શૈક્ષણિક કાઉન્સેલિંગ (Educational counselling)

Hints :

Hint: Consider which approach centers around making plans for improvement.

Explanation: Goal-oriented counselling helps clients set realistic and achievable dietary goals. Motivational counselling focuses on encouraging behavior change. Directive counselling tells clients what to do, while educational counselling provides information.

Cullen, K. W., Baranowski, T., & Smith, S. P. (2001). Using goal setting as a strategy for dietary behavior change. Journal of the American Dietetic Association, 101(5), 562–566. [https://doi.org/10.1016/S0002-8223\(01\)00140-7](https://doi.org/10.1016/S0002-8223(01)00140-7)

Question Number : 190 Question Id : 4410091773467

Which technique is most effective for encouraging client self-reflection during nutritional counselling?

Options :

4410096993454. ✓ Open-ended questioning

4410096993455. ✗ Providing meal plans

4410096993456. ✗ Using food diaries

4410096993457. ✗ Giving direct instructions

Hints :

Hint - Consider which method best prompts clients to express their own thoughts and feelings.

Know more- Open-ended questions encourage clients to think, reflect, and express their own thoughts and feelings rather than giving simple “yes” or “no” answers.

Reference- Semyonov-Tal, K., & Lewin-Epstein, N. (2021). The importance of combining open-ended and closed-ended questions when conducting patient satisfaction surveys in hospitals. Health policy OPEN, 2, 100033. <https://doi.org/10.1016/j.hpopen.2021.100033>

Question Number : 190 Question Id : 4410091773467

પોષણ સંબંધી કાઉન્સેલિંગ (Nutritional Counselling) દરમિયાન ક્લાયન્ટને સ્વ-ચિંતન (Self-reflection) હેતુ પ્રોત્સાહિત કરવા માટે કઈ તકનીક સૌથી અસરકારક છે?

Options :

4410096993454. ✓ ઓપન-એન્ડેડ પ્રશ્નો પૂછવી (Open-ended questioning)
4410096993455. ✗ ભોજનની યોજનાઓ (meal plans) પૂરી પાડવી
4410096993456. ✗ ફૂડ ડાયરીઝ (food diaries)નો ઉપયોગ કરવો
4410096993457. ✗ પ્રત્યક્ષ સૂચનાઓ (direct instructions) આપવી

Hints :

Hint - Consider which method best prompts clients to express their own thoughts and feelings.

Know more- Open-ended questions encourage clients to think, reflect, and express their own thoughts and feelings rather than giving simple “yes” or “no” answers.

Reference- Semyonov-Tal, K., & Lewin-Epstein, N. (2021). The importance of combining open-ended and closed-ended questions when conducting patient satisfaction surveys in hospitals. Health policy OPEN, 2, 100033. <https://doi.org/10.1016/j.hopen.2021.100033>

Question Number : 191 Question Id : 4410091738990

A dietitian wants to help a client to overcome barriers to healthy eating. Which technique is most appropriate for identifying and addressing these barriers during nutrition counseling?

Options :

4410096857571. ✗ Reflective listening
4410096857572. ✗ Behavior modification
4410096857573. ✓ Problem-solving counseling
4410096857574. ✗ Providing meal plans

Hints :

Hint - Choose the technique that actively works to resolve obstacles rather than just listening or offering general advice.

Know More - Problem-solving counseling is most appropriate because it systematically identifies barriers and develops strategies to overcome them. Reflective listening is useful for understanding client feelings but does not directly address barriers. Behavior modification focuses on changing actions but may not address underlying barriers. Providing meal plans offers solutions but does not address the client's specific obstacles.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9543415/>

Question Number : 191 Question Id : 4410091738990

એક આહાર નિષ્ણાત (Dietician) તેમના દર્દીને સ્વાસ્થ્યપ્રદ આહાર લેવામાં આવતા અવરોધોને દૂર કરવામાં મદદ કરવા માંગે છે. તો પોષણ સંબંધી પરામર્શ (Nutrition counseling) દરમિયાન આ અવરોધોને ઓળખવા અને તેનો ઉકેલ લાવવા (Address) માટે નીચેનામાંથી કઈ પદ્ધતિ સૌથી વધુ યોગ્ય છે?

Options :

4410096857571. ✗ રિફ્લેક્ટિવ લિસનિંગ (Reflective listening)
4410096857572. ✗ બિહેવિયર મોડિફિકેશન (Behavior modification)
4410096857573. ✓ સમસ્યા-નિવારણ પરામર્શ (Problem-solving counseling)
4410096857574. ✗ ભોજન માટે આયોજન પૂરું પાડવું (Providing meal plans)

Hints :

Hint - Choose the technique that actively works to resolve obstacles rather than just listening or offering general advice.

Know More - Problem-solving counseling is most appropriate because it systematically identifies barriers and develops strategies to overcome them. Reflective listening is useful for understanding client feelings but does not directly address barriers. Behavior modification focuses on changing actions but may not address underlying barriers. Providing meal plans offers solutions but does not address the client's specific obstacles.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9543415/>

Question Number : 192 Question Id : 4410091773558

Which method would an anthropologist most likely use to study dietary intake?

Options :

4410096993837. ✗ Analyzing blood samples for nutrients
4410096993838. ✗ Calculating macronutrient ratios
4410096993839. ✓ Observing cultural food rituals and practices
4410096993840. ✗ Prescribing dietary supplements

Hints :

Hint - Consider which option involves studying behaviors in a social setting rather than laboratory or clinical approaches.

Know More - Anthropologists use observation of cultural rituals to understand eating patterns, so 'Observing cultural food rituals and practices' is correct. 'Analyzing blood samples for nutrients' is a biomedical method. 'Calculating macronutrient ratios' is nutrition science. 'Prescribing dietary supplements' is clinical nutrition, not anthropological research.

Reference- Ulijaszek S. (2024). Nutritional anthropology in the world. Journal of physiological anthropology, 43(1), 10. <https://doi.org/10.1186/s40101-023-00345-0>

Question Number : 192 Question Id : 4410091773558

એક એન્થ્રોપોલોજિસ્ટ (નૃવંશશાસ્ત્રી) આહારના સેવન (dietary intake)નો અભ્યાસ કરવા માટે મોટે ભાગે કઈ પદ્ધતિનો ઉપયોગ કરશે?

Options :

4410096993837. ❌ પોષકતત્વો માટે રક્ત નમૂનાઓ (blood samples)નું વિશ્લેષણ કરવું.
 4410096993838. ❌ મેક્રોન્યુટ્રિઅન્ટ રેશિયો (Macronutrient ratios)ની ગણતરી કરવી.
 4410096993839. ✅ સાંસ્કૃતિક ખાદ્ય વિધિઓ (cultural food rituals) અને પદ્ધતિઓ (practices)નું નિરીક્ષણ કરવું.
 4410096993840. ❌ આહાર સપ્લીમેન્ટ્સ (Dietary supplements) પ્રિસ્ક્રાઈબ કરવી.

Hints :

Hint - Consider which option involves studying behaviors in a social setting rather than laboratory or clinical approaches.

Know More - Anthropologists use observation of cultural rituals to understand eating patterns, so 'Observing cultural food rituals and practices' is correct. 'Analyzing blood samples for nutrients' is a biomedical method. 'Calculating macronutrient ratios' is nutrition science. 'Prescribing dietary supplements' is clinical nutrition, not anthropological research.

Reference- Ulijaszek S. (2024). Nutritional anthropology in the world. Journal of physiological anthropology, 43(1), 10. <https://doi.org/10.1186/s40101-023-00345-0>

Question Number : 193 Question Id : 4410091741440

Which study design would be most suitable to quickly estimate the current magnitude of protein-energy malnutrition among school-aged children in a region?

Options :

4410096867298. ✅ Cross-sectional study
 4410096867299. ❌ Cohort study
 4410096867300. ❌ Case-control study
 4410096867301. ❌ Randomized controlled trial

Hints :

Hint - Consider which approach gives an immediate estimate of a condition's frequency in a population.

Know More - A cross-sectional study is used to rapidly assess the prevalence of a condition, such as protein-energy malnutrition, at a specific point in time. Cohort and case-control studies focus on causes or risk factors, not prevalence, and randomized controlled trials are not used for prevalence estimation.

https://www.researchgate.net/publication/284204311_A_cross-sectional_study_to_assess_the_protein_energy_malnutrition_in_children_between_one_to_five_years_of_age_in_a_tribal_area_Parol_Thane_district_Maharashtra_I

Question Number : 193 Question Id : 4410091741440

કોઈ એક પ્રદેશમાં શાળાએ જવાની ઉંમરના બાળકોમાં પ્રોટીન-ઊર્જા કુપોષણ (protein-energy malnutrition)ની હાલની મેગ્નિટ્યુડ (magnitude)નો ઝડપથી અંદાજ કાઢવા માટે કઈ અભ્યાસ રચના (study design) સૌથી યોગ્ય રહેશે?

Options :

4410096867298. ✅ ક્રોસ-સેક્શનલ અભ્યાસ (Cross-sectional study)
 4410096867299. ❌ કોહર્ટ અભ્યાસ (Cohort study)
 4410096867300. ❌ કેસ-નિયંત્રણ અભ્યાસ (Case-control study)
 4410096867301. ❌ રેન્ડમાઇઝ્ડ કંટ્રોલ્ડ ટ્રાયલ (Randomized controlled trial)

Hints :

Hint - Consider which approach gives an immediate estimate of a condition's frequency in a population.

Know More - A cross-sectional study is used to rapidly assess the prevalence of a condition, such as protein-energy malnutrition, at a specific point in time. Cohort and case-control studies focus on causes or risk factors, not prevalence, and randomized controlled trials are not used for prevalence estimation.

https://www.researchgate.net/publication/284204311_A_cross-sectional_study_to_assess_the_protein_energy_malnutrition_in_children_between_one_to_five_years_of_age_in_a_tribal_area_Parol_Thane_district_Maharashtra_I

Question Number : 194 Question Id : 4410091741452

Which scenario best illustrates how cultural environment affects nutritional status?

Options :

4410096867346. ❌ A region lacks access to fresh fruits due to supply issues
 4410096867347. ❌ Individuals develop allergies to gluten-containing foods
 4410096867348. ✅ Community's traditional dairy avoidance causes calcium deficiency
 4410096867349. ❌ Government fortifies wheat flour with iron to combat anemia

Hints :

Hint - Focus on choices influenced by tradition rather than external circumstances.

Know More - Avoidance of dairy due to tradition directly impacts calcium intake and demonstrates how culture affects nutrition. The other scenarios involve food availability, medical issues, and food fortification, which are not primarily cultural environmental effects.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC11241560/>

Question Number : 194 Question Id : 4410091741452

નીચેની કઇ પરિસ્થિતિ એવું શ્રેષ્ઠ રીતે દર્શાવે છે કે સાંસ્કૃતિક વાતાવરણ પોષણને લગતી સ્થિતિને કેવી રીતે અસર કરે છે?

Options :

4410096867346. ❌ પુરવઠાની સમસ્યાઓને લીધે એક વિસ્તારમાં તાજા ફળોની ઉપલબ્ધતાનો અભાવ છે.
4410096867347. ❌ વ્યક્તિઓમાં ગુણવત્તાનું ખોરાક પ્રત્યે એલર્જી વિકસે છે.
4410096867348. ✅ સમુદાય દ્વારા ડેરી ઉત્પાદનોના પરંપરાગત ત્યાગના કારણે કેલ્શિયમની ઉણપ સર્જાય છે.
4410096867349. ❌ સરકારે એનિમિયાનો મુકાબલો કરવા માટે ઘઉંના લોટને આયર્નથી ફોર્ટિફાઇડ કર્યો છે.

Hints :

Hint - Focus on choices influenced by tradition rather than external circumstances.

Know More - Avoidance of dairy due to tradition directly impacts calcium intake and demonstrates how culture affects nutrition. The other scenarios involve food availability, medical issues, and food fortification, which are not primarily cultural environmental effects.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC11241560/>

Question Number : 195 Question Id : 4410091765322

A researcher wants to determine the prevalence of vitamin D deficiency in a specific ethnic group at one point in time. Which study design should be used?

Options :

4410096961132. ❌ Case-control study
4410096961133. ❌ Cohort study
4410096961134. ❌ Randomized controlled trial
4410096961135. ✅ Cross-sectional study

Hints :

Hint - Think about which design measures outcomes without following participants over time.

Know More - A cross-sectional study is ideal for measuring prevalence at a single point in time. Case-control studies focus on past exposure and outcomes, not prevalence. Cohort studies follow subjects over time, which is unnecessary for prevalence. Randomized controlled trials are used to test interventions, not prevalence.

Reference: Nursing Research by BT Basavanthappa, Chapter 9, page no 187

Question Number : 195 Question Id : 4410091765322

એક સંશોધક કોઈ ચોક્કસ વંશીય જૂથમાં (Specific ethnic group) એક જ સમયે વિટામિન D ની ઉણપનો વ્યાપ (Prevalence) નક્કી કરવા માંગે છે. આ માટે નીચેનામાંથી કઈ સ્ટડી ડિઝાઇન (Study Design)નો ઉપયોગ કરવો સૌથી યોગ્ય છે?

Options :

4410096961132. ❌ કેસ-કંટ્રોલ સ્ટડી (Case-control study)
4410096961133. ❌ કોહોર્ટ સ્ટડી (Cohort study)
4410096961134. ❌ રેન્ડમાઇઝ્ડ કંટ્રોલ ટ્રાયલ (Randomized controlled trial)
4410096961135. ✅ ક્રોસ-સેક્શનલ સ્ટડી (Cross-sectional study)

Hints :

Hint - Think about which design measures outcomes without following participants over time.

Know More - A cross-sectional study is ideal for measuring prevalence at a single point in time. Case-control studies focus on past exposure and outcomes, not prevalence. Cohort studies follow subjects over time, which is unnecessary for prevalence. Randomized controlled trials are used to test interventions, not prevalence.

Reference: Nursing Research by BT Basavanthappa, Chapter 9, page no 187

Question Number : 196 Question Id : 4410091765520

In the context of nutritional anthropology, which method would best evaluate the relationship between food choices and the cultural environment in a rural population?

Options :

4410096962004. ❌ Dietary recall
4410096962005. ❌ Blood Test
4410096962006. ❌ Food frequency questionnaires
4410096962007. ✅ Ethnographic interviews

Hints :

Hint - Consider methods that reveal underlying beliefs and shared meanings rather than just numerical data.

Know More - Ethnographic interviews allow researchers to understand cultural norms, beliefs, and practices influencing food choices. Dietary recall surveys provide data on food intake but lack cultural depth. Laboratory analysis focuses on nutrient content, not cultural factors. Food frequency questionnaires measure intake frequency but do not capture the cultural reasons behind choices.

Reference:

Public Health Nutrition By M Margaret Barth
Chapter 3 : Nutrition Epidemiology Research Methods
 page 59

Question Number : 196 Question Id : 4410091765520

ન્યુટ્રિશનલ એન્થ્રોપોલોજી (Nutritional anthropology)ના સંદર્ભમાં, કઈ પદ્ધતિ ગ્રામીણ વસ્તીમાં ખોરાકની પસંદગીઓ (food choices) અને સાંસ્કૃતિક વાતાવરણ (cultural environment) વચ્ચેના સંબંધોનું શ્રેષ્ઠ મૂલ્યાંકન કરશે?

Options :

4410096962004. ✖ ડાયેટરી રીકોલ (Dietary recall)
4410096962005. ✖ રક્ત પરીક્ષણ (Blood Test)
4410096962006. ✖ ખોરાકની આવૃત્તિ અંગેની પ્રશ્નાવલી (Food frequency questionnaires)
4410096962007. ✔ એથનોગ્રાફિક ઇન્ટરવ્યુઝ (Ethnographic interviews)

Hints :

Hint - Consider methods that reveal underlying beliefs and shared meanings rather than just numerical data.

Know More - Ethnographic interviews allow researchers to understand cultural norms, beliefs, and practices influencing food choices. Dietary recall surveys provide data on food intake but lack cultural depth. Laboratory analysis focuses on nutrient content, not cultural factors. Food frequency questionnaires measure intake frequency but do not capture the cultural reasons behind choices.

Reference:

Public Health Nutrition By M Margaret Barth
Chapter 3 :Nutrition Epidemiology Research Methods
 page 59

Question Number : 197 Question Id : 4410091774076

Which of the following is a physical property commonly measured in food analysis?

Options :

4410096995905. ✔ Texture
4410096995906. ✖ Moisture content
4410096995907. ✖ pH
4410096995908. ✖ Protein content

Hints :

Hint - Physical properties relate to how a food feels or looks, not its chemical makeup or pH.

Know More - Texture is a physical property assessed in food analysis to determine qualities like firmness or softness. Moisture content, pH, and protein content are chemical properties or measurements. Moisture content involves water determination, pH measures acidity or alkalinity, and protein content relates to nutrient analysis, all of which are chemical or compositional assessments, not physical properties.

Reference- Sarkar, T., Salauddin, M., Kirtonia, K., Pati, S., Rebezov, M., Khayrullin, M., Panasenkov, S., Tretyak, L., Temerbayeva, M., Kapustina, N., Azimova, S., Gruzdeva, L., Makhmudov, F., Nikitin, I., Kassenov, A., Shariati, M. A., & Lorenzo, J. M. (2022). A Review on the Commonly Used Methods for Analysis of Physical Properties of Food Materials. Applied Sciences, 12(4), 2004. <https://doi.org/10.3390/app12042004>

Question Number : 197 Question Id : 4410091774076

ખોરાકના વિશ્લેષણમાં સામાન્ય રીતે માપવામાં આવતો ભૌતિક ગુણધર્મ (Physical property) નીચેનામાંથી કયો છે?

Options :

4410096995905. ✔ ટેક્સ્ચર (Texture)
4410096995906. ✖ ભેજનું પ્રમાણ (Moisture content)
4410096995907. ✖ pH
4410096995908. ✖ પ્રોટીનનું પ્રમાણ

Hints :

Hint - Physical properties relate to how a food feels or looks, not its chemical makeup or pH.

Know More - Texture is a physical property assessed in food analysis to determine qualities like firmness or softness. Moisture content, pH, and protein content are chemical properties or measurements. Moisture content involves water determination, pH measures acidity or alkalinity, and protein content relates to nutrient analysis, all of which are chemical or compositional assessments, not physical properties.

Reference- Sarkar, T., Salauddin, M., Kirtonia, K., Pati, S., Rebezov, M., Khayrullin, M., Panasenkov, S., Tretyak, L., Temerbayeva, M., Kapustina, N., Azimova, S., Gruzdeva, L., Makhmudov, F., Nikitin, I., Kassenov, A., Shariati, M. A., & Lorenzo, J. M. (2022). A Review on the Commonly Used Methods for Analysis of Physical Properties of Food Materials. Applied Sciences, 12(4), 2004. <https://doi.org/10.3390/app12042004>

Question Number : 198 Question Id : 4410091732608

Which physical characteristic can help identify the quality of fruits during food analysis?

Options :

4410096832750. ✔ Color
4410096832751. ✖ Protein content
4410096832752. ✖ Shelf life
4410096832753. ✖ Aroma

Hints :

Hint - Visual inspection is often used to assess this property in fruits.

Know More - Color is a physical characteristic that provides quick visual cues about ripeness and quality in fruits. Protein content is a chemical characteristic, shelf life is a quality parameter that combines several factors, and aroma is a sensory property.

Reference : Food Analysis Theory and Practices 3 edition by Pomeranze , Chap : 39 page 759

Question Number : 198 Question Id : 4410091732608

ખાદ્ય પદાર્થોનાં વિશ્લેષણ (Food analysis) દરમિયાન ફળોની ગુણવત્તાને ઓળખવામાં કઈ ભૌતિક લાક્ષણિકતા મદદ કરી શકે છે?

Options :

4410096832750. ✓ રંગ

4410096832751. ✗

પ્રોટીનનું પ્રમાણ

4410096832752. ✗ શેલ્ફ લાઇફ (Shelf life)

4410096832753. ✗ સુગંધ (Aroma)

Hints :

Hint - Visual inspection is often used to assess this property in fruits.

Know More - Color is a physical characteristic that provides quick visual cues about ripeness and quality in fruits. Protein content is a chemical characteristic, shelf life is a quality parameter that combines several factors, and aroma is a sensory property.

Reference : Food Analysis Theory and Practices 3 edition by Pomeranze , Chap : 39 page 759

Question Number : 199 Question Id : 4410091773840

Which of the following instruments is primarily used for identifying and quantifying volatile compounds in food samples?

Options :

4410096994977. ✗ Atomic absorption spectrophotometry

4410096994978. ✓ Gas chromatography

4410096994979. ✗ Centrifugation

4410096994980. ✗ Titration

Hints :

Hint - Think about which method separates compounds based on their ability to vaporize and travel through a column.

Know More - Gas chromatography is specifically designed for separating and quantifying volatile substances. Atomic absorption spectrophotometry is used for mineral content, not volatiles. Centrifugation is used for separating mixtures by density, and titration measures chemical concentrations, not volatile compounds.

Reference- Mumm, R., & Scheffler, C. (2019). Lack of evidence of nutritional influence on height in four low and middle-income countries. *Anthropologischer Anzeiger; Bericht uber die biologisch-anthropologische Literatur*, 76(5), 421–432. <https://doi.org/10.1127/anthranz/2019/0988>

Question Number : 199 Question Id : 4410091773840

ખોરાકના સેમ્પલ્સમાં રહેલા બાષ્પશીલ સંયોજનો (Volatile compounds)ની ઓળખ કરવા અને તેનું પ્રમાણ નક્કી (Quantify) કરવા માટે મુખ્યત્વે નીચેનામાંથી કયા સાધન (Instrument)નો ઉપયોગ થાય છે?

Options :

4410096994977. ✗ એટોમિક એબ્સોર્પ્શન સ્પેક્ટ્રોફોટોમેટ્રી (Atomic absorption spectrophotometry)

4410096994978. ✓ ગેસ ક્રોમેટોગ્રાફી (Gas chromatography)

4410096994979. ✗ સેન્ટ્રીફ્યુગેશન (Centrifugation)

4410096994980. ✗ ટાઇટ્રેશન (Titration)

Hints :

Hint - Think about which method separates compounds based on their ability to vaporize and travel through a column.

Know More - Gas chromatography is specifically designed for separating and quantifying volatile substances. Atomic absorption spectrophotometry is used for mineral content, not volatiles. Centrifugation is used for separating mixtures by density, and titration measures chemical concentrations, not volatile compounds.

Reference- Mumm, R., & Scheffler, C. (2019). Lack of evidence of nutritional influence on height in four low and middle-income countries. *Anthropologischer Anzeiger; Bericht uber die biologisch-anthropologische Literatur*, 76(5), 421–432. <https://doi.org/10.1127/anthranz/2019/0988>

Question Number : 200 Question Id : 4410091774139

Which technique is most commonly used to enumerate viable bacteria in food samples?

Options :

4410096996157. ✓ Plate count method

4410096996158. ✗ Direct microscopic count

4410096996159. ✗ Most Probable Number (MPN) method

4410096996160. ✗ PCR technique

Hints :

Hint - Consider which method allows for direct observation of living bacterial colonies.

Know More - The plate count method is correct because it directly measures viable bacteria by allowing colonies to form on agar plates. The direct microscopic count does not distinguish between live and dead cells, making it less suitable for viable enumeration. The Most Probable Number (MPN) method estimates bacterial numbers statistically but does not directly count colonies. The PCR technique detects genetic material and cannot differentiate between viable and dead cells without additional steps.

Reference- IGNOU. Experiment 5. Standard Plate Count Method. Pg 30. <https://egyankosh.ac.in/bitstream/123456789/12434/1/Experiment-5.pdf>

Question Number : 200 Question Id : 4410091774139

બાધ પદાર્થોના નમૂનાઓમાં જીવંત બેક્ટેરિયા (viable bacteria)ની ગણતરી કરવા માટે સામાન્ય રીતે કઈ તકનીકનો ઉપયોગ કરવામાં આવે છે?

Options :

4410096996157. ✓ પ્લેટ કાઉન્ટ પદ્ધતિ (Plate count method)
4410096996158. ✗ ડાયરેક્ટ માઈક્રોસ્કોપિક કાઉન્ટ (Direct microscopic count)
4410096996159. ✗ મોસ્ટ પ્રોબેબલ નંબર (MPN) પદ્ધતિ
4410096996160. ✗ PCR તકનીક (PCR technique)

Hints :

Hint - Consider which method allows for direct observation of living bacterial colonies.

Know More - The plate count method is correct because it directly measures viable bacteria by allowing colonies to form on agar plates. The direct microscopic count does not distinguish between live and dead cells, making it less suitable for viable enumeration. The Most Probable Number (MPN) method estimates bacterial numbers statistically but does not directly count colonies. The PCR technique detects genetic material and cannot differentiate between viable and dead cells without additional steps.

Reference- IGNOU. Experiment 5. Standard Plate Count Method. Pg 30. <https://egyankosh.ac.in/bitstream/123456789/12434/1/Experiment-5.pdf>

Question Number : 201 Question Id : 4410091774100

A food scientist needs to analyze the protein content and the lipid oxidation status in a ready-to-eat meat product. Which combination of methods is most appropriate for these analyses?

Options :

4410096996001. ✗ Soxhlet extraction and thiobarbituric acid (TBA) test
4410096996002. ✓ Kjeldahl analysis and thiobarbituric acid (TBA) test
4410096996003. ✗ Sensory panel and Soxhlet extraction
4410096996004. ✗ Kjeldahl analysis and refractometry

Hints :

Hint - Focus on one method for proteins and one for lipid oxidation; consider established chemical tests.

Know More - Kjeldahl analysis is the standard method for determining protein content, while the TBA test specifically measures lipid oxidation. Other combinations either measure only one component (e.g., Soxhlet extraction for fat) or are less accurate for these specific analyses (e.g., sensory panel for subjective quality, or using both TBA and Soxhlet, which would not assess protein content). Therefore, Kjeldahl analysis with TBA test is the only option that directly addresses both protein and lipid oxidation.

Reference- Squires, E. J., Valdes, E. V., Wu, J., & Leeson, S. (1991). Research note: utility of the thiobarbituric acid test in the determination of the quality of fats and oils in feeds. Poultry science, 70(1), 180–183. <https://doi.org/10.3382/ps.0700180>
Wang, H., Pampati, N., McCormick, W. M., & Bhattacharyya, L. (2016). Protein Nitrogen Determination by Kjeldahl Digestion and Ion Chromatography. Journal of pharmaceutical sciences, 105(6), 1851–1857. <https://doi.org/10.1016/j.xphs.2016.03.039>

Question Number : 201 Question Id : 4410091774100

એક ખાદ્ય વૈજ્ઞાનિકે ખાવા માટે તૈયાર (Ready-to-eat) માંસના ઉત્પાદમાં પ્રોટીનનું પ્રમાણ અને લિપિડ ઓક્સિડેશનની સ્થિતિનું વિશ્લેષણ કરવાની જરૂર છે. તો આ વિશ્લેષણ માટે પદ્ધતિઓનું કયું સંયોજન (Combination) સૌથી વધુ યોગ્ય છે?

Options :

4410096996001. ✗ સોક્સલેટ એક્સ્ટ્રેક્શન (Soxhlet extraction) અને થાયોબાર્બિટ્યુરિક એસિડ (TBA) પરીક્ષણ (Thiobarbituric acid (TBA) test)
4410096996002. ✓ કેજલ્હલ વિશ્લેષણ (Kjeldahl analysis) અને થાયોબાર્બિટ્યુરિક એસિડ (TBA) પરીક્ષણ (Thiobarbituric acid (TBA) test)
4410096996003. ✗ સેન્સરી પેનલ અને સોક્સલેટ એક્સ્ટ્રેક્શન (Sensory panel and Soxhlet extraction)
4410096996004. ✗ કેજલ્હલ વિશ્લેષણ અને રીફ્રેક્ટોમેટ્રી (Kjeldahl analysis and refractometry)

Hints :

Hint - Focus on one method for proteins and one for lipid oxidation; consider established chemical tests.

Know More - Kjeldahl analysis is the standard method for determining protein content, while the TBA test specifically measures lipid oxidation. Other combinations either measure only one component (e.g., Soxhlet extraction for fat) or are less accurate for these specific analyses (e.g., sensory panel for subjective quality, or using both TBA and Soxhlet, which would not assess protein content). Therefore, Kjeldahl analysis with TBA test is the only option that directly addresses both protein and lipid oxidation.

Reference- Squires, E. J., Valdes, E. V., Wu, J., & Leeson, S. (1991). Research note: utility of the thiobarbituric acid test in the determination of the quality of fats and oils in feeds. Poultry science, 70(1), 180–183. <https://doi.org/10.3382/ps.0700180>
Wang, H., Pampati, N., McCormick, W. M., & Bhattacharyya, L. (2016). Protein Nitrogen Determination by Kjeldahl Digestion and Ion Chromatography. Journal of pharmaceutical sciences, 105(6), 1851–1857. <https://doi.org/10.1016/j.xphs.2016.03.039>

Question Number : 202 Question Id : 4410091741948

What is the first step in the processing of foods with quality management considerations?

Options :

4410096869434. ✓ Selecting high-quality raw materials
4410096869435. ✗ Packaging the product
4410096869436. ✗ Distributing the product

4410096869437. ❌ Marketing the product

Hints :

Hint - Consider what must be chosen before any processing can begin.

Know More - Selecting high-quality raw materials is the essential first step in food processing with quality management because the quality of the final product depends on the initial ingredients. Packaging, distribution, and marketing occur later and do not start the process.

Reference: **Food Science and Technology by Geoffrey Campbell-Platt**
chapter 15, page no 367

Question Number : 202 Question Id : 4410091741948

ગુણવત્તા વ્યવસ્થાપન (Quality Management)ને ધ્યાનમાં રાખીને ખાદ્ય પદાર્થોના પ્રોસેસિંગ (Processing of Foods)માં પ્રથમ પગલું કયું છે?

Options :

4410096869434. ✅ ઉચ્ચ ગુણવત્તાવાળા કાચા માલ (raw materials)ની પસંદગી કરવી

4410096869435. ❌ ઉત્પાદનની પેકેજિંગ કરવી (Packaging the product)

4410096869436. ❌ ઉત્પાદનું વિતરણ કરવું

4410096869437. ❌ ઉત્પાદનની માર્કેટિંગ કરવી

Hints :

Hint - Consider what must be chosen before any processing can begin.

Know More - Selecting high-quality raw materials is the essential first step in food processing with quality management because the quality of the final product depends on the initial ingredients. Packaging, distribution, and marketing occur later and do not start the process.

Reference: **Food Science and Technology by Geoffrey Campbell-Platt**
chapter 15, page no 367

Question Number : 203 Question Id : 4410091776154

Which evaluation method is commonly used to assess consumer acceptance of new packaged food products?

Options :

4410097003855. ✅ Sensory evaluation

4410097003856. ❌ Nutritional analysis

4410097003857. ❌ Microbiological testing

4410097003858. ❌ Packaging design

Hints :

Hint - This method involves direct human senses to judge food products.

Know More - Sensory evaluation is the correct answer because it involves tasting, smelling, and other sensory tests to gauge consumer acceptance. Nutritional analysis determines nutrient content, not consumer preferences. Microbiological testing checks for harmful microbes but does not evaluate consumer acceptance. Packaging design focuses on appearance and functionality, not acceptance.

Reference- Ruiz-Capillas, C., & Herrero, A. M. (2021). Sensory Analysis and Consumer Research in New Product Development. Foods (Basel, Switzerland), 10(3), 582. <https://doi.org/10.3390/foods10030582>

Question Number : 203 Question Id : 4410091776154

નવા પેકેજ્ડ ખાદ્ય પદાર્થો (Food products)ની ગ્રાહક સ્વીકૃતિ (Consumer acceptance)નું આકલન કરવા માટે સામાન્ય રીતે કઈ મૂલ્યાંકન પદ્ધતિનો ઉપયોગ કરવામાં આવે છે?

Options :

4410097003855. ✅ સંવેદનાત્મક મૂલ્યાંકન (Sensory evaluation)

4410097003856. ❌

પોષણ સંબંધિત વિશ્લેષણ (Nutritional analysis)

4410097003857. ❌ માઇક્રોબાયોલોજીકલ પરીક્ષણ (Microbiological testing)

4410097003858. ❌ પેકેજિંગ ડિઝાઇન (Packaging design)

Hints :

Hint - This method involves direct human senses to judge food products.

Know More - Sensory evaluation is the correct answer because it involves tasting, smelling, and other sensory tests to gauge consumer acceptance. Nutritional analysis determines nutrient content, not consumer preferences. Microbiological testing checks for harmful microbes but does not evaluate consumer acceptance. Packaging design focuses on appearance and functionality, not acceptance.

Reference- Ruiz-Capillas, C., & Herrero, A. M. (2021). Sensory Analysis and Consumer Research in New Product Development. Foods (Basel, Switzerland), 10(3), 582. <https://doi.org/10.3390/foods10030582>

Question Number : 204 Question Id : 4410091744642

Which processing method would best preserve both the nutritional quality and shelf life in a new vegetable-based soup product?

Options :

4410096880185. ✅ Freezing

4410096880186. ❌ Retort processing

4410096880187. ✖ Dehydration

4410096880188. ✖ Pasteurization

Hints :

Retort processing uses steam or superheated water to cook food in its own package, which helps extend the shelf life. Pasteurization and dehydration are also techniques that employs high temperature. Although there is increased shelf life, these practices reduces nutritional quality. Therefore, freezing is the technique which preserves the nutritional quality and shelf life.

Gómez, I., Janardhanan, R., Ibañez, F. C., & Beriain, M. J. (2020). The Effects of Processing and Preservation Technologies on Meat Quality: Sensory and Nutritional Aspects. Foods (Basel, Switzerland), 9(10), 1416. <https://doi.org/10.3390/foods9101416>

Question Number : 204 Question Id : 4410091744642

એક નવા વનસ્પતિ-આધારિત સૂપ ઉત્પાદ (vegetable-based soup product)માં પોષક ગુણવત્તા અને શેલ્ફ લાઈફ (shelf life) બંનેને શ્રેષ્ઠ રીતે જાળવવા (પિઝર્વ કરવા) માટે કઈ પ્રોસેસિંગ પદ્ધતિ શ્રેષ્ઠ રહેશે?

Options :

4410096880185. ✔ થીજવવું (Freezing)

4410096880186. ✖ રિટોર્ટ પ્રોસેસિંગ (Retort processing)

4410096880187. ✖ નિર્જલીકરણ (Dehydration)

4410096880188. ✖ પેશ્ચુરાઇઝેશન (Pasteurization)

Hints :

Retort processing uses steam or superheated water to cook food in its own package, which helps extend the shelf life. Pasteurization and dehydration are also techniques that employs high temperature. Although there is increased shelf life, these practices reduces nutritional quality. Therefore, freezing is the technique which preserves the nutritional quality and shelf life.

Gómez, I., Janardhanan, R., Ibañez, F. C., & Beriain, M. J. (2020). The Effects of Processing and Preservation Technologies on Meat Quality: Sensory and Nutritional Aspects. Foods (Basel, Switzerland), 9(10), 1416. <https://doi.org/10.3390/foods9101416>

Question Number : 205 Question Id : 4410091746676

What is the first step in developing a new food product for the market?

Options :

4410096888255. ✖ Selecting packaging materials

4410096888256. ✔ Identifying consumer needs

4410096888257. ✖ Testing shelf-life

4410096888258. ✖ Designing marketing campaigns

Hints :

Hint - Think about what guides all product development decisions before production starts.

Know More - 'Identifying consumer needs' is correct because development should begin with understanding what consumers want. 'Selecting packaging materials' and 'Designing marketing campaigns' occur later. 'Testing shelf-life' is important but not the initial step

Reference : Food Product Development by Mary earle ,Chapter 3 ,Page no 96 .

Question Number : 205 Question Id : 4410091746676

બજાર માટે નવું ખાદ્ય ઉત્પાદ (food product) વિકસાવવામાં પ્રથમ પગલું શું છે?

Options :

4410096888255. ✖ પેકેજિંગ સામગ્રીની પસંદગી કરવી.

4410096888256. ✔ ગ્રાહકોની જરૂરિયાતો ઓળખવી.

4410096888257. ✖ શેલ્ફ-લાઈફ (shelf-life)નું પરીક્ષણ કરવું.

4410096888258. ✖

માર્કેટિંગ કંપેઇન (marketing campaigns)ની રચના કરવી.

Hints :

Hint - Think about what guides all product development decisions before production starts.

Know More - 'Identifying consumer needs' is correct because development should begin with understanding what consumers want. 'Selecting packaging materials' and 'Designing marketing campaigns' occur later. 'Testing shelf-life' is important but not the initial step

Reference : Food Product Development by Mary earle ,Chapter 3 ,Page no 96 .

Question Number : 206 Question Id : 4410091776150

Which factor is most crucial when designing a new food product to ensure it is both marketable and economically viable?

Options :

4410097003839. ✖ Nutritional labeling

4410097003840. ✔ Consumer demand

4410097003841. ✖ Packaging design

4410097003842. ✖ Shelf life

Hints :

Hint - Consider what drives sales and adoption of new products in the market.

Know More - Consumer demand and preferences are most crucial because they directly affect the likelihood of a product succeeding in the market. If a product meets consumer needs, it is more likely to be purchased and generate profit. Nutritional labeling is important for compliance and marketing, but alone does not guarantee marketability or economic viability. Packaging design can enhance appeal but will not compensate for lack of demand. Shelf life matters for logistics and quality, but without demand, it won't impact viability.

Reference- IGNOU. Unit 10. Market and Market Mechanization. Pg. 13, <https://egyankosh.ac.in/bitstream/123456789/11931/1/Unit-10.pdf>

Question Number : 206 Question Id : 4410091776150

કોઈ નવા ખાદ્ય પદાર્થ (Food product)ને ડિઝાઇન કરતી વખતે, તે બજારમાં વેચાણક્ષમ (Marketable) અને આર્થિક રીતે સક્ષમ (Economically viable) બને, તે સુનિશ્ચિત કરવા માટે કયું પરિબલ સૌથી વધુ મહત્વનું છે?

Options :

4410097003839. ❌ પોષણ સંબંધિત લેબલિંગ (Nutritional labeling)

4410097003840. ✅ ગ્રાહકની માંગ (Consumer demand)

4410097003841. ❌ પેકેજિંગ ડિઝાઇન (Packaging design)

4410097003842. ❌ શેલ્ફ લાઇફ (Shelf life)

Hints :

Hint - Consider what drives sales and adoption of new products in the market.

Know More - Consumer demand and preferences are most crucial because they directly affect the likelihood of a product succeeding in the market. If a product meets consumer needs, it is more likely to be purchased and generate profit. Nutritional labeling is important for compliance and marketing, but alone does not guarantee marketability or economic viability. Packaging design can enhance appeal but will not compensate for lack of demand. Shelf life matters for logistics and quality, but without demand, it won't impact viability.

Reference- IGNOU. Unit 10. Market and Market Mechanization. Pg. 13, <https://egyankosh.ac.in/bitstream/123456789/11931/1/Unit-10.pdf>

Question Number : 207 Question Id : 441009653007

Which software loads first when the computer starts?

Options :

4410092566319. ❌ MS Excel

4410092566320. ❌ Video game

4410092566321. ❌ Antivirus

4410092566322. ✅ Operating system

Hints :

Solution: The operating system is a type of system software that loads immediately after the computer is switched on. It manages hardware resources and sets up the environment for other software. Programs cannot run until the OS is fully loaded. It acts like a manager of the whole system.

Chapter 1, Information and Computer Technology, Class X, CBSE

Question Number : 207 Question Id : 441009653007

કમ્પ્યુટર ચાલુ (start) થતી વખતે સૌથી પહેલા કયું સોફ્ટવેર લોડ (Load) થાય છે?

Options :

4410092566319. ❌ MS એક્સેલ

4410092566320. ❌ વિડિયો ગેમ

4410092566321. ❌ એન્ટિવાયરસ (Antivirus)

4410092566322. ✅ ઓપરેટિંગ સિસ્ટમ (Operating system)

Hints :

Solution: The operating system is a type of system software that loads immediately after the computer is switched on. It manages hardware resources and sets up the environment for other software. Programs cannot run until the OS is fully loaded. It acts like a manager of the whole system.

Chapter 1, Information and Computer Technology, Class X, CBSE

Question Number : 208 Question Id : 4410091558780

Which Windows power-saving mode keeps all open programs running while using very low power?

Options :

4410096157505. ❌ Shut down

4410096157506. ❌ Restart

4410096157507. ✅ Sleep

4410096157508. ❌ Hibernate

Hints :

Answer: Sleep

Explanation:

Sleep mode saves the current session in RAM and puts the PC into a low-power state. The computer wakes quickly and resumes work almost instantly.

Sleep

Sleep uses very little power, your PC starts up faster, and you're instantly back to where you left off. You don't have to worry that you'll lose your work because of your battery draining because Windows automatically saves all your work and turns off the PC if the battery is too low. Use Sleep when you're going to be away from your PC for just a little while—like when you're taking a coffee break.

For a lot of PCs (especially laptops and tablets), your PC goes to sleep when you close your lid or press the power button.

Reference: <https://support.microsoft.com/en-us/windows/shut-down-sleep-or-hibernate-your-pc-2941d165-7d0a-a5e8-c5ad-8c972e8e6eff>

Question Number : 208 Question Id : 4410091558780

વિન્ડોઝનો કયો પાવર-સેવિંગ મોડ ખૂબ જ ઓછા પાવરનો ઉપયોગ કરીને તમામ યાલુ પ્રોગ્રામ્સને કાર્યરત રાખે છે?

Options :

4410096157505. ✖ શટ ડાઉન (Shut down)

4410096157506. ✖ રિસ્ટાર્ટ (Restart)

4410096157507. ✔ સ્લીપ (Sleep)

4410096157508. ✖

હાઈબરનેટ (Hibernate)

Hints :

Answer: Sleep

Explanation:

Sleep mode saves the current session in RAM and puts the PC into a low-power state. The computer wakes quickly and resumes work almost instantly. Sleep

Sleep uses very little power, your PC starts up faster, and you're instantly back to where you left off. You don't have to worry that you'll lose your work because of your battery draining because Windows automatically saves all your work and turns off the PC if the battery is too low. Use Sleep when you're going to be away from your PC for just a little while—like when you're taking a coffee break.

For a lot of PCs (especially laptops and tablets), your PC goes to sleep when you close your lid or press the power button.

Reference: <https://support.microsoft.com/en-us/windows/shut-down-sleep-or-hibernate-your-pc-2941d165-7d0a-a5e8-c5ad-8c972e8e6eff>

Question Number : 209 Question Id : 441009665960

In Task Manager, which tab displays the usage of CPU, memory, disk and network?

Options :

4410092617819. ✖ Services

4410092617820. ✔ Performance

4410092617821. ✖ Processes

4410092617822. ✖ App history

Hints :

Solution: In Windows Task Manager, the **Performance tab** displays the usage of CPU, memory, disk, and network. This tab provides a real-time view of system resource utilization through detailed graphs for each of these components. You can also open the Resource Monitor within Task Manager for a more detailed breakdown of these resources.

Reference: Microsoft, "View performance details in Task Manager," *Microsoft Support*. [Online]. Available: <https://support.microsoft.com/en-us/windows/view-performance-details-in-task-manager>. [Accessed: Jun. 11, 2025].

Question Number : 209 Question Id : 441009665960

ટાસ્ક મેનેજરમાં, કયું ટેબ એ CPU, મેમરી, ડિસ્ક અને નેટવર્કના ઉપયોગને દર્શાવે છે?

Options :

4410092617819. ✖ સર્વિસિસ (Services)

4410092617820. ✔ પર્ફોર્મન્સ (Performance)

4410092617821. ✖ પ્રોસેસિસ (Processes)

4410092617822. ✖ એપ હિસ્ટરી (App history)

Hints :

Solution: In Windows Task Manager, the **Performance tab** displays the usage of CPU, memory, disk, and network. This tab provides a real-time view of system resource utilization through detailed graphs for each of these components. You can also open the Resource Monitor within Task Manager for a more detailed breakdown of these resources.

Reference: Microsoft, "View performance details in Task Manager," *Microsoft Support*. [Online]. Available: <https://support.microsoft.com/en-us/windows/view-performance-details-in-task-manager>. [Accessed: Jun. 11, 2025].

Question Number : 210 Question Id : 441009873294

Match the components of **Task Manager** in **Column A** with their correct functions in **Column B** as used in Windows OS.

Column A – Task Manager Tab

- Processes
- Performance
- Startup
- Users

Options :

4410093446487. ✖ 1–a, 2–b, 3–c, 4–d

4410093446488. ✔ 1–b, 2–a, 3–c, 4–d

Column B – Function

- Displays details about CPU, memory, disk, and network usage in real-time
- Lists all currently running applications and background processes
- Allows enabling or disabling programs that run at system startup
- Shows active user sessions and their resource consumption

4410093446489. ✖ 1-c, 2-d, 3-a, 4-b

4410093446490. ✖ 1-b, 2-c, 3-d, 4-a

Hints :

Explanation:

- **Processes** → **b**: Lists all apps and background processes currently running.
- **Performance** → **a**: Shows real-time statistics on **CPU, RAM, disk, and network usage**.
- **Startup** → **c**: Displays programs configured to **launch during system startup**, with options to enable/disable them.
- **Users** → **d**: Lists **active user accounts** and the resources they are consuming.

Reference:

- **Book Title:** *Windows 10 Step by Step*
- **Author:** Joan Lambert
- **Edition:** 1st Edition
- **Chapter:** "Monitoring System Performance with Task Manager"
- **Page Number:** 168
- **Publisher:** Microsoft Press

Question Number : 210 Question Id : 441009873294

Windows OSમાં ઉપયોગ થાય છે તેમ, કોલમ Aમાં આપેલા 'ટાસ્ક મેનેજર'ના ઘટકોને કોલમ Bમાં તેમના યોગ્ય કાર્યો સાથે જોડો.

કોલમ A - ટાસ્ક મેનેજર ટેબ

કોલમ B - કાર્ય

1. પ્રોસેસીસ
2. પર્ફોર્મન્સ
3. સ્ટાર્ટઅપ
4. યુઝર્સ

- a) CPU, મેમરી, ડિસ્ક અને નેટવર્કના રીઅલ-ટાઇમ ઉપયોગની વિગતો દર્શાવે છે.
- (b) હાલમાં ચાલતી તમામ એપ્લિકેશન્સ અને બેકગ્રાઉન્ડ પ્રોસેસીસની યાદી આપે છે.
- (c) સિસ્ટમ શરૂ થતી વખતે ચાલતા પ્રોગ્રામ્સને એનેબલ (Enable) કે ડિસેબલ (Disable) કરવાની સુવિધા આપે છે.
- (d) સક્રિય યુઝર સેશન્સ અને તેમના સંસાધન વપરાશ (resource consumption)ને બતાવે છે.

Options :

4410093446487. ✖

1-a, 2-b, 3-c, 4-d

4410093446488. ✔

1-b, 2-a, 3-c, 4-d

4410093446489. ✖

1-c, 2-d, 3-a, 4-b

4410093446490. ✖

1-b, 2-c, 3-d, 4-a

Hints :

Explanation:

- **Processes** → **b**: Lists all apps and background processes currently running.
- **Performance** → **a**: Shows real-time statistics on **CPU, RAM, disk, and network usage**.
- **Startup** → **c**: Displays programs configured to **launch during system startup**, with options to enable/disable them.
- **Users** → **d**: Lists **active user accounts** and the resources they are consuming.

Reference:

- **Book Title:** *Windows 10 Step by Step*
- **Author:** Joan Lambert
- **Edition:** 1st Edition
- **Chapter:** "Monitoring System Performance with Task Manager"
- **Page Number:** 168
- **Publisher:** Microsoft Press