

Chhattisgarh Public Service Commission**Notations :**

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

Question Paper Name: Biotechnology 21ST MAY 2016 ACTUAL
Subject Name: Biotechnology
Duration: 180

Elective Subject

Group Maximum Duration : 120
Group Minimum Duration : 120
Revisit allowed for view? : No
Revisit allowed for edit? : No

Biotechnology

Mandatory or Optional: Mandatory
Display Number Panel: Yes
Group All Questions: No

Question Number : 1 Question Id : 9593764001 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

An example of competitive inhibition of an enzyme is the inhibition of:

Options :

- ✓ Succinic dehydrogenase by malonic acid
- ✗ Cytochrome oxidase by cyanide
- ✗ Hexokinase by glucose-6-phosphate
- ✗ Carbonic anhydrase by carbon dioxide
- ✗ DD-transpeptidase by penicillin

Question Number : 1 Question Id : 9593764001 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

- ✓ Succinic dehydrogenase by malonic acid

2. ✖ Cytochrome oxidase by cyanide
3. ✖ Hexokinase by glucose-6-phosphate
4. ✖ Carbonic anhydrase by carbon dioxide
5. ✖ DD-transpeptidase by penicillin

Question Number : 2 Question Id : 9593764002 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

One common example of feedback inhibition is:

Options :

1. ✔ Allosteric inhibition of hexokinase by glucose-6-phosphate
2. ✖ Reaction between succinic dehydrogenase and succinic acid
3. ✖ Cyanide and cytochrome reaction
4. ✖ Sulfa drugs and folic acid synthesis in bacteria
5. ✖ AZT (zidovudine) and HIV-1 reverse transcriptase

Question Number : 2 Question Id : 9593764002 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

1. ✔ Allosteric inhibition of hexokinase by glucose-6-phosphate
2. ✖ Reaction between succinic dehydrogenase and succinic acid
3. ✖ Cyanide and cytochrome reaction
4. ✖ Sulfa drugs and folic acid synthesis in bacteria
5. ✖ AZT (zidovudine) and HIV-1 reverse transcriptase

Question Number : 3 Question Id : 9593764003 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Turn over number of an enzyme is dependent upon:

Options :

1. ✖ Size of enzyme
2. ✖ Molecular weight of enzyme
3. ✔ Active sites
4. ✖ Buffer
5. ✖ Concentration of substrate

Question Number : 3 Question Id : 9593764003 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Turn over number of an enzyme is dependent upon:

Options :

1. ✗ Size of enzyme
2. ✗ Molecular weight of enzyme
3. ✓ Active sites
4. ✗ Buffer
5. ✗ Concentration of substrate

Question Number : 4 Question Id : 9593764004 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The degree of inhibition for non-competitive inhibition of an enzyme catalyzed reaction:

Options :

1. ✗ Increases with increase in substrate concentration
2. ✓ Reaches a maxima with increase in substrate concentration and then decreases
3. ✗ Reaches a maxima with increase in substrate concentration
4. ✗ Decreases with increase in substrate concentration
5. ✗ Remains constant

Question Number : 4 Question Id : 9593764004 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The degree of inhibition for non-competitive inhibition of an enzyme catalyzed reaction:

Options :

1. ✗ Increases with increase in substrate concentration
2. ✓ Reaches a maxima with increase in substrate concentration and then decreases
3. ✗ Reaches a maxima with increase in substrate concentration
4. ✗ Decreases with increase in substrate concentration
5. ✗ Remains constant

Question Number : 5 Question Id : 9593764005 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following techniques is not ideal for immobilized cell free enzymes?

Options :

1. ✗ Physical entrapment by encapsulation
2. ✗ Covalent chemical bonding by cross linking the precipitate
3. ✗ Covalent surface bonding to surface carriers
4. ✗ Affinity-tag binding to a porous material

5. ✓ Physical bonding by flocculation

Question Number : 5 Question Id : 9593764005 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following techniques is not ideal for immobilized cell free enzymes?

Options :

1. ✗ Physical entrapment by encapsulation
2. ✗ Covalent chemical bonding by cross linking the precipitate
3. ✗ Covalent surface bonding to surface carriers
4. ✗ Affinity-tag binding to a porous material
5. ✓ Physical bonding by flocculation

Question Number : 6 Question Id : 9593764006 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

K_i indicates:

Options :

1. ✗ Reaction velocity
2. ✗ Denaturation of enzyme
3. ✓ Competitive inhibition
4. ✗ Affinity for substrate
5. ✗ Stability of the enzyme

Question Number : 6 Question Id : 9593764006 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

K_i indicates:

Options :

1. ✗ Reaction velocity
2. ✗ Denaturation of enzyme
3. ✓ Competitive inhibition
4. ✗ Affinity for substrate
5. ✗ Stability of the enzyme

Question Number : 7 Question Id : 9593764007 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A tripeptide has:

Options :

1. ✖ No peptide bond
2. ✖ One peptide bond
3. ✔ Two peptide bonds
4. ✖ Three peptide bonds
5. ✖ Four peptide bonds

Question Number : 7 Question Id : 9593764007 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A tripeptide has:

Options :

1. ✖ No peptide bond
2. ✖ One peptide bond
3. ✔ Two peptide bonds
4. ✖ Three peptide bonds
5. ✖ Four peptide bonds

Question Number : 8 Question Id : 9593764008 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The secondary structure of a protein is primarily maintained by:

Options :

1. ✖ Van der Waals forces
2. ✔ Hydrogen bonds
3. ✖ Ionic bonds
4. ✖ Hydrophobic bonds
5. ✖ Electrostatic interactions

Question Number : 8 Question Id : 9593764008 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The secondary structure of a protein is primarily maintained by:

Options :

1. ✖ Van der Waals forces
2. ✔ Hydrogen bonds
3. ✖ Ionic bonds
4. ✖ Hydrophobic bonds
5. ✖ Electrostatic interactions

Question Number : 9 Question Id : 9593764009 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In alpha helix, the bonding is between the:

Options :

1. ✗ Adjacent amino acids
2. ✗ Carbonyl oxygen of one peptide bond to the NH group of the 2nd amino acid
3. ✗ Carbonyl oxygen of one peptide bond to the NH group of the 3rd amino acid
4. ✓ Carbonyl oxygen of second peptide bond to the NH group of the 4th amino acid
5. ✗ Carbonyl oxygen of second peptide bond to the NH group of the 5th amino acid

Question Number : 9 Question Id : 9593764009 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In alpha helix, the bonding is between the:

Options :

1. ✗ Adjacent amino acids
2. ✗ Carbonyl oxygen of one peptide bond to the NH group of the 2nd amino acid
3. ✗ Carbonyl oxygen of one peptide bond to the NH group of the 3rd amino acid
4. ✓ Carbonyl oxygen of second peptide bond to the NH group of the 4th amino acid
5. ✗ Carbonyl oxygen of second peptide bond to the NH group of the 5th amino acid

Question Number : 10 Question Id : 9593764010 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

All the following are reducing sugars EXCEPT:

Options :

1. ✓ Sucrose
2. ✗ Glucose
3. ✗ Maltose
4. ✗ Lactose
5. ✗ Cellobiose

Question Number : 10 Question Id : 9593764010 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

All the following are reducing sugars EXCEPT:

Options :

1. ✓ Sucrose
2. ✗ Glucose

3. ✖ Maltose
4. ✖ Lactose
5. ✖ Cellobiose

Question Number : 11 Question Id : 9593764011 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The six most common atoms in organic molecules are:

Options :

1. ✖ C, H, O, He, Ca and S
2. ✔ C, H, O, N, P and S
3. ✖ C, H, O, Mg, Mn and S
4. ✖ C, H, O, N, P and K
5. ✖ C, H, O, Zn, Mn and Au

Question Number : 11 Question Id : 9593764011 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The six most common atoms in organic molecules are:

Options :

1. ✖ C, H, O, He, Ca and S
2. ✔ C, H, O, N, P and S
3. ✖ C, H, O, Mg, Mn and S
4. ✖ C, H, O, N, P and K
5. ✖ C, H, O, Zn, Mn and Au

Question Number : 12 Question Id : 9593764012 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Succinate is the substrate for succinate dehydrogenase that converts succinate to fumarate. In the presence of reversible competitive inhibitor like malonate in place of succinate, the enzyme:

Options :

1. ✔ K_m increases and V_{max} remains the same
2. ✖ Both K_m and V_{max} increase
3. ✖ Both K_m and V_{max} decreases
4. ✖ K_m decreases and V_{max} remains the same
5. ✖ Both K_m and V_{max} remains same

Question Number : 12 Question Id : 9593764012 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

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2. ☐ Both K_m and V_{max} increase
3. ☐ Both K_m and V_{max} decreases
4. ☐ K_m decreases and V_{max} remains the same
5. ☐ Both K_m and V_{max} remains same

Question Number : 13 Question Id : 9593764013 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Irreversible inhibitors often form covalent bonds with:

Options :

1. ☐ Any amino acid residues at or near the active site
2. ☐ Tryptophan and phenylalanine residues at or near the active site
3. ☐ Positively charged residues at or near the active site
4. ☒ Key amino acid residues required for activity at or near the active site
5. ☐ Negatively charged residues at or near the active site

Question Number : 13 Question Id : 9593764013 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

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2. ☐ Tryptophan and phenylalanine residues at or near the active site
3. ☐ Positively charged residues at or near the active site
4. ☒ Key amino acid residues required for activity at or near the active site
5. ☐ Negatively charged residues at or near the active site

Question Number : 14 Question Id : 9593764014 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following is an NOT example for irreversible inhibitor?

Options :

1. ☐ Di-isopropylfluorophosphate (DPF) with the enzyme acetylcholine esterase involved in nerve impulse transmission

- Penicillin with glycopeptides transpeptidase enzyme involved in bacterial cell wall synthesis
2. ✖ Iodoacetamide, a Cys residue modifier at the active site
3. ✖ Di-fluoromethylornithine with the enzyme ornithine decarboxylase
4. ✖ Malonic acid with the enzyme succinic dehydrogenase
5. ✔

Question Number : 14 Question Id : 9593764014 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Which of the following is an NOT example for irreversible inhibitor?

Options :

- Di-isopropylfluorophosphate (DPF) with the enzyme acetylcholine esterase involved in nerve impulse transmission
1. ✖
- Penicillin with glycopeptides transpeptidase enzyme involved in bacterial cell wall synthesis
2. ✖
- Iodoacetamide, a Cys residue modifier at the active site
3. ✖
- Di-fluoromethylornithine with the enzyme ornithine decarboxylase
4. ✖
- Malonic acid with the enzyme succinic dehydrogenase
5. ✔

Question Number : 15 Question Id : 9593764015 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

When oxygen binds to a heme-containing protein, the two open coordination bonds of Fe^{2+} are occupied by:

Options :

- One O-atom and one amino acid atom
1. ✖
- One O_2 molecule and one amino acid atom
2. ✔
- One O_2 molecule and one heme atom
3. ✖
- Two O-atoms
4. ✖
- One O-atom and one heme atom
5. ✖

Question Number : 15 Question Id : 9593764015 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

When oxygen binds to a heme-containing protein, the two open coordination bonds of Fe^{2+} are occupied by:

Options :

- One O-atom and one amino acid atom
1. ✖
- One O_2 molecule and one amino acid atom
2. ✔
- One O_2 molecule and one heme atom
3. ✖
- Two O-atoms
4. ✖

5. ✖ One O-atom and one heme atom

Question Number : 16 Question Id : 9593764016 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following statements about protein-ligand binding is correct?

Options :

1. ✖ The K_a is equal to the concentration of ligand when all the binding sites are occupied
2. ✖ The K_a is independent of such conditions as salt concentration and pH
3. ✖ The larger the K_a (association constant), the weaker the affinity
4. ✔ The larger the K_a , the faster is the binding
5. ✖ K_a is independent of temperature

Question Number : 16 Question Id : 9593764016 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following statements about protein-ligand binding is correct?

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2. ✖ The K_a is independent of such conditions as salt concentration and pH
3. ✖ The larger the K_a (association constant), the weaker the affinity
4. ✔ The larger the K_a , the faster is the binding
5. ✖ K_a is independent of temperature

Question Number : 17 Question Id : 9593764017 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following is least likely to result in protein denaturation?

Options :

1. ✖ Altering net charge by changing pH
2. ✔ Changing the salt concentration
3. ✖ Disruption of weak interactions by boiling
4. ✖ Exposure to detergents
5. ✖ Mixing with organic solvents such as acetone

Question Number : 17 Question Id : 9593764017 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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1. ✖ Altering net charge by changing pH

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5. ✗ Mixing with organic solvents such as acetone

Question Number : 18 Question Id : 9593764018 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following statements concerning the process of spontaneous folding of protein is false?

Options :

1. ✓ It may be an essentially random process
2. ✗ It may be defective in some human diseases
3. ✗ It may involve a gradually decreasing range of conformational species
4. ✗ It may involve initial formation of a highly compact state
5. ✗ It may involve initial formation of local secondary structure

Question Number : 18 Question Id : 9593764018 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

1. ✓ It may be an essentially random process
2. ✗ It may be defective in some human diseases
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5. ✗ It may involve initial formation of local secondary structure

Question Number : 19 Question Id : 9593764019 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Protein S will fold into its native conformation only when protein Q is also present in the solution. However, protein Q can fold into its native conformation without protein S. Protein Q, therefore may function as a _____ for protein S.

Options :

1. ✗ Ligand
2. ✓ Molecular chaperone
3. ✗ Protein precursor

- 4. ✖ Structural motif
- 5. ✖ Super-secondary structural unit

Question Number : 19 Question Id : 9593764019 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Protein S will fold into its native conformation only when protein Q is also present in the solution. However, protein Q can fold into its native conformation without protein S. Protein Q, therefore may function as a _____ for protein S.

Options :

- 1. ✖ Ligand
- 2. ✔ Molecular chaperone
- 3. ✖ Protein precursor
- 4. ✖ Structural motif
- 5. ✖ Super-secondary structural unit

Question Number : 20 Question Id : 9593764020 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Experiments on denaturation and renaturation after the reduction and reoxidation of the -S-S- bonds in the enzyme ribonuclease (RNase) have shown that:

Options :

- 1. ✖ Folding of denatured RNase into the native, active conformation, requires the input of energy in the form of heat
- 2. ✖ Native RNase does not have a unique secondary and tertiary structure
- 3. ✖ The completely unfolded enzyme, with all -S-S- bonds broken, is still enzymatically active
- 4. ✖ The enzyme, dissolved in water, is thermodynamically stable relative to the mixture of amino acids whose residues are contained in RNase
- 5. ✔ The primary structure of RNase is sufficient to determine its specific secondary and tertiary structure

Question Number : 20 Question Id : 9593764020 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

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Options :

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3. ✖ The completely unfolded enzyme, with all -S-S- bonds broken, is still enzymatically active
4. ✖ The enzyme, dissolved in water, is thermodynamically stable relative to the mixture of amino acids whose residues are contained in RNase
5. ✔ The primary structure of RNase is sufficient to determine its specific secondary and tertiary structure

Question Number : 21 Question Id : 9593764021 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

In a mixture of the five proteins listed below, which should elute second in size-exclusion (gel filtration) chromatography?

Options :

1. ✖ Cytochrome *c*, $M_r = 13,000$
2. ✔ Immunoglobulin G, $M_r = 145,000$
3. ✖ Ribonuclease A, $M_r = 13,700$
4. ✖ RNA polymerase, $M_r = 450,000$
5. ✖ Serum albumin, $M_r = 68,500$

Question Number : 21 Question Id : 9593764021 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

In a mixture of the five proteins listed below, which should elute second in size-exclusion (gel filtration) chromatography?

Options :

1. ✖ Cytochrome *c*, $M_r = 13,000$
2. ✔ Immunoglobulin G, $M_r = 145,000$
3. ✖ Ribonuclease A, $M_r = 13,700$
4. ✖ RNA polymerase, $M_r = 450,000$
5. ✖ Serum albumin, $M_r = 68,500$

Question Number : 22 Question Id : 9593764022 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

By adding SDS (sodium dodecyl sulphate) during electrophoresis of protein, it is possible to:

Options :

1. ✖ Determine a protein's isoelectric point
2. ✖ Determine an enzyme's specific activity
3. ✖ Determine the amino acid composition of the protein

4. ✖ Preserve a protein's native structure and biological activity
5. ✔ Separate proteins exclusively on the basis of molecular weight

Question Number : 22 Question Id : 9593764022 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

By adding SDS (sodium dodecyl sulphate) during electrophoresis of protein, it is possible to:

Options :

1. ✖ Determine a protein's isoelectric point
2. ✖ Determine an enzyme's specific activity
3. ✖ Determine the amino acid composition of the protein
4. ✖ Preserve a protein's native structure and biological activity
5. ✔ Separate proteins exclusively on the basis of molecular weight

Question Number : 23 Question Id : 9593764023 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The term *specific activity* differs from the term *activity* in that specific activity:

Options :

1. ✔ Is the activity (enzyme units) in a milligram of protein
2. ✖ Is measured only under optimal conditions
3. ✖ Is the activity (enzyme units) of a specific protein
4. ✖ Refers only to a purified protein
5. ✖ Refers to proteins other than enzyme

Question Number : 23 Question Id : 9593764023 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

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3. ✖ Is the activity (enzyme units) of a specific protein
4. ✖ Refers only to a purified protein
5. ✖ Refers to proteins other than enzyme

Question Number : 24 Question Id : 9593764024 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following statement is incorrect?

Options :

1. ✗ In affinity chromatography, lectins are used to purify a glycoprotein
2. ✓ The separation in gel filtration chromatography is based on size, shape and net charge of the protein
3. ✗ In ion exchange chromatography, the bound proteins are eluted using NaCl solution
4. ✗ In affinity chromatography, the binding of a protein to a ligand is by specific non-covalent interactions
5. ✗ Reversed phase chromatography is used separate non-polar compounds from polar ones

Question Number : 24 Question Id : 9593764024 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following statement is incorrect?

Options :

1. ✗ In affinity chromatography, lectins are used to purify a glycoprotein
2. ✓ The separation in gel filtration chromatography is based on size, shape and net charge of the protein
3. ✗ In ion exchange chromatography, the bound proteins are eluted using NaCl solution
4. ✗ In affinity chromatography, the binding of a protein to a ligand is by specific non-covalent interactions
5. ✗ Reversed phase chromatography is used separate non-polar compounds from polar ones

Question Number : 25 Question Id : 9593764025 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

To determine the isoelectric point of a protein, first establish that a gel:

Options :

1. ✗ Contains a denaturing detergent that can distribute uniform negative charges over the protein's surface
2. ✗ Is washed with an antibody specific to the protein of interest
3. ✓ Exhibits a stable pH gradient when ampholytes become distributed in an electric field
4. ✗ Neutralizes all ionic groups on a protein by titrating them with strong bases
5. ✗ Relates the unknown protein to a series of protein markers with known molecular weights, M_r

Question Number : 25 Question Id : 9593764025 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

To determine the isoelectric point of a protein, first establish that a gel:

Options :

1. ✖ Contains a denaturing detergent that can distribute uniform negative charges over the protein's surface
2. ✖ Is washed with an antibody specific to the protein of interest
3. ✔ Exhibits a stable pH gradient when ampholytes become distributed in an electric field
4. ✖ Neutralizes all ionic groups on a protein by titrating them with strong bases
- Relates the unknown protein to a series of protein markers with known molecular weights,
5. ✖ M_r

Question Number : 26 Question Id : 9593764026 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following amino acids has a higher propensity of *cis* peptide bond formation?

Options :

1. ✖ Histidine
2. ✖ Cysteine
3. ✖ Glycine
4. ✔ Proline
5. ✖ Alanine

Question Number : 26 Question Id : 9593764026 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following amino acids has a higher propensity of *cis* peptide bond formation?

Options :

1. ✖ Histidine
2. ✖ Cysteine
3. ✖ Glycine
4. ✔ Proline
5. ✖ Alanine

Question Number : 27 Question Id : 9593764027 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The length of an α -helix composed of 36 amino acid residues is:

Options :

1. ✖ 10 Å
2. ✔ 54 Å
3. ✖ 27 Å
4. ✖ 360 Å
5. ✖ 270 Å

Question Number : 27 Question Id : 9593764027 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The length of an α -helix composed of 36 amino acid residues is:

Options :

1. ✗ 10 Å
2. ✓ 54 Å
3. ✗ 27 Å
4. ✗ 360 Å
5. ✗ 270 Å

Question Number : 28 Question Id : 9593764028 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The order (n) for a given substrate concentration in an enzyme catalyzed reaction following Michaelis-Menten kinetics, is:

Options :

1. ✗ $n = 1$
2. ✗ $n = 0$
3. ✗ $n = 2$
4. ✗ n is not defined
5. ✓ $0 \leq n \leq 1$

Question Number : 28 Question Id : 9593764028 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The order (n) for a given substrate concentration in an enzyme catalyzed reaction following Michaelis-Menten kinetics, is:

Options :

1. ✗ $n = 1$
2. ✗ $n = 0$
3. ✗ $n = 2$
4. ✗ n is not defined
5. ✓ $0 \leq n \leq 1$

Question Number : 29 Question Id : 9593764029 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

An enzyme of 40 kDa is added to a substrate solution in a molar ratio of 1:3. The concentration of the enzyme in the mixture is 12 mg/ml. What would be the corresponding substrate concentration?

Options :

1. ✗ 0.40 mM

- 2. ✖ 0.12 mM
- 3. ✔ 0.90 mM
- 4. ✖ 0.30 mM
- 5. ✖ 0.60 mM

Question Number : 29 Question Id : 9593764029 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

An enzyme of 40 kDa is added to a substrate solution in a molar ratio of 1:3. The concentration of the enzyme in the mixture is 12 mg/ml. What would be the corresponding substrate concentration?

Options :

- 1. ✖ 0.40 mM
- 2. ✖ 0.12 mM
- 3. ✔ 0.90 mM
- 4. ✖ 0.30 mM
- 5. ✖ 0.60 mM

Question Number : 30 Question Id : 9593764030 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The “lock and key” and “induced fit” theories of enzyme action were respectively proposed by:

Options :

- 1. ✔ Fischer and Koshland
- 2. ✖ Koshland and Fischer
- 3. ✖ Kuhne and Fischer
- 4. ✖ Arrhenius and Koshland
- 5. ✖ Michaelis and Menten

Question Number : 30 Question Id : 9593764030 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The “lock and key” and “induced fit” theories of enzyme action were respectively proposed by:

Options :

- 1. ✔ Fischer and Koshland
- 2. ✖ Koshland and Fischer
- 3. ✖ Kuhne and Fischer
- 4. ✖ Arrhenius and Koshland
- 5. ✖ Michaelis and Menten

Question Number : 31 Question Id : 9593764031 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

UV-Vis spectroscopy of organic compounds is usually concerned with which electronic transition(s)?

Options :

1. ✗ $\sigma \rightarrow \sigma^*$
2. ✗ $\pi \rightarrow \pi^*$
3. ✓ $n \rightarrow \pi^*$ and $\pi \rightarrow \pi^*$
4. ✗ $n \rightarrow \sigma^*$
5. ✗ $n \rightarrow \sigma^*$ and $\sigma \rightarrow \sigma^*$

Question Number : 31 Question Id : 9593764031 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

UV-Vis spectroscopy of organic compounds is usually concerned with which electronic transition(s)?

Options :

1. ✗ $\sigma \rightarrow \sigma^*$
2. ✗ $\pi \rightarrow \pi^*$
3. ✓ $n \rightarrow \pi^*$ and $\pi \rightarrow \pi^*$
4. ✗ $n \rightarrow \sigma^*$
5. ✗ $n \rightarrow \sigma^*$ and $\sigma \rightarrow \sigma^*$

Question Number : 32 Question Id : 9593764032 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Animals cannot convert fatty acids into glucose because:

Options :

1. ✓ acetyl CoA cannot be converted to pyruvate
2. ✗ absence of malate synthase
3. ✗ absence of dehydrogenase
4. ✗ absence of α -ketoglutarate dehydrogenase
5. ✗ animals have no fat at all

Question Number : 32 Question Id : 9593764032 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Animals cannot convert fatty acids into glucose because:

Options :

1. ✓ acetyl CoA cannot be converted to pyruvate

2. ✖ absence of malate synthase
3. ✖ absence of dehydrogenase
4. ✖ absence of α -ketoglutarate dehydrogenase
5. ✖ animals have no fat at all

Question Number : 33 Question Id : 9593764033 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Polyprotic acids such as H_3PO_4 , can act as acid-base buffers:

Options :

1. ✖ only in combination with polyprotic bases
2. ✖ if their concentration is kept low
3. ✖ at pH values around neutrality
4. ✔ at pH values around any of their pK_a 's
5. ✖ at basic pH values

Question Number : 33 Question Id : 9593764033 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Polyprotic acids such as H_3PO_4 , can act as acid-base buffers:

Options :

1. ✖ only in combination with polyprotic bases
2. ✖ if their concentration is kept low
3. ✖ at pH values around neutrality
4. ✔ at pH values around any of their pK_a 's
5. ✖ at basic pH values

Question Number : 34 Question Id : 9593764034 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The peptide, Val-Lys-Glu-Met-Ser-Trp-Arg-Ala, was digested with cyanogen bromide (CNBr) to produce:

Options :

1. ✖ Val-Lys + Glu-Met-Ser + Trp-Arg-Ala
2. ✖ Val-Lys-Glu-Met-Ser-Trp + Arg-Ala
3. ✔ Val-Lys-Glu-Met + Ser-Trp-Arg-Ala
4. ✖ Val-Lys-Glu + Met-Ser-Trp-Arg-Ala
5. ✖ Val-Lys + Glu-Met-Ser-Trp-Arg-Ala

Question Number : 34 Question Id : 9593764034 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The peptide, Val-Lys-Glu-Met-Ser-Trp-Arg-Ala, was digested with cyanogen bromide (CNBr) to produce:

Options :

1. ✗ Val-Lys + Glu-Met-Ser + Trp-Arg-Ala
2. ✗ Val-Lys-Glu-Met-Ser-Trp + Arg-Ala
3. ✓ Val-Lys-Glu-Met + Ser-Trp-Arg-Ala
4. ✗ Val-Lys-Glu + Met-Ser-Trp-Arg-Ala
5. ✗ Val-Lys + Glu-Met-Ser-Trp-Arg-Ala

Question Number : 35 Question Id : 9593764035 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which hemoglobin chain replaces the beta chain in embryonic hemoglobin?

Options :

1. ✗ Delta
2. ✓ Epsilon
3. ✗ Gamma
4. ✗ Alfa
5. ✗ Beta

Question Number : 35 Question Id : 9593764035 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which hemoglobin chain replaces the beta chain in embryonic hemoglobin?

Options :

1. ✗ Delta
2. ✓ Epsilon
3. ✗ Gamma
4. ✗ Alfa
5. ✗ Beta

Question Number : 36 Question Id : 9593764036 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following forces is the most unfavorable for protein folding?

Options :

1. ✓ Conformational entropy
2. ✗ Hydrophobic interactions
3. ✗ Van der Waals interactions

4. ✖ Electrostatic interactions

5. ✖ Hydrogen bonding

Question Number : 36 Question Id : 9593764036 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Which of the following forces is the most unfavorable for protein folding?

Options :

1. ✔ Conformational entropy

2. ✖ Hydrophobic interactions

3. ✖ Van der Waals interactions

4. ✖ Electrostatic interactions

5. ✖ Hydrogen bonding

Question Number : 37 Question Id : 9593764037 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Since $\Delta G^\circ = -RT \ln K$

Options :

1. ✖ a 10-fold increase in K decreases ΔG° by about 10-fold

2. ✖ a 10-fold decrease in K decreases ΔG° by about $2.3 \cdot RT$

3. ✔ a 10-fold increase in K decreases ΔG° by about $2.3 \cdot RT$

4. ✖ a 10-fold decrease in K increases ΔG° by about 10-fold

5. ✖ a 10-fold increase in K increases ΔG° by about 10-fold

Question Number : 37 Question Id : 9593764037 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Since $\Delta G^\circ = -RT \ln K$

Options :

1. ✖ a 10-fold increase in K decreases ΔG° by about 10-fold

2. ✖ a 10-fold decrease in K decreases ΔG° by about $2.3 \cdot RT$

3. ✔ a 10-fold increase in K decreases ΔG° by about $2.3 \cdot RT$

4. ✖ a 10-fold decrease in K increases ΔG° by about 10-fold

5. ✖ a 10-fold increase in K increases ΔG° by about 10-fold

Question Number : 38 Question Id : 9593764038 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

If the egg white protein, ovalbumin, is denatured in a hard-boiled egg, then which of the following is least affected?

Options :

1. ✓ The primary structure of ovalbumin
2. ✗ The secondary structure of ovalbumin
3. ✗ The tertiary structure of ovalbumin
4. ✗ The quaternary structure of ovalbumin
5. ✗ The stability of the protein

Question Number : 38 Question Id : 9593764038 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

If the egg white protein, ovalbumin, is denatured in a hard-boiled egg, then which of the following is least affected?

Options :

1. ✓ The primary structure of ovalbumin
2. ✗ The secondary structure of ovalbumin
3. ✗ The tertiary structure of ovalbumin
4. ✗ The quaternary structure of ovalbumin
5. ✗ The stability of the protein

Question Number : 39 Question Id : 9593764039 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following amino acids can interact with the DNA or RNA nucleotide bases via hydrogen bonding?

Options :

1. ✓ Asn and Gln
2. ✗ Cys and Met
3. ✗ Lys and Leu
4. ✗ Ile and Val
5. ✗ Asp and Glu

Question Number : 39 Question Id : 9593764039 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following amino acids can interact with the DNA or RNA nucleotide bases via hydrogen bonding?

Options :

1. ✓ Asn and Gln
2. ✗ Cys and Met
3. ✗ Lys and Leu

4. ✖ Ile and Val

5. ✖ Asp and Glu

Question Number : 40 Question Id : 9593764040 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The direction of amino acid transfer to the growing polypeptide chain is:

Options :

1. ✖ from the A (aminoacyl tRNA site) site to the P (peptidyl tRNA site) site on the ribosome
2. ✔ from the P site to the A site on the ribosome
3. ✖ from the A site to the E (exit tRNA site) site on the ribosome
4. ✖ from the P site to the E site on the ribosome
5. ✖ from the E site to the A site on the ribosome

Question Number : 40 Question Id : 9593764040 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The direction of amino acid transfer to the growing polypeptide chain is:

Options :

1. ✖ from the A (aminoacyl tRNA site) site to the P (peptidyl tRNA site) site on the ribosome
2. ✔ from the P site to the A site on the ribosome
3. ✖ from the A site to the E (exit tRNA site) site on the ribosome
4. ✖ from the P site to the E site on the ribosome
5. ✖ from the E site to the A site on the ribosome

Question Number : 41 Question Id : 9593764041 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Oxysomes are ATP synthases present on:

Options :

1. ✖ Outer nuclear membrane facing cytoplasm
2. ✖ Outer mitochondrial membrane facing cytoplasm
3. ✔ Inner mitochondrial membrane facing matrix
4. ✖ Inner mitochondrial membrane facing cytoplasm
5. ✖ Inner nuclear membrane facing nucleolus

Question Number : 41 Question Id : 9593764041 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Oxysomes are ATP synthases present on:

Options :

1. ✖ Outer nuclear membrane facing cytoplasm
2. ✖ Outer mitochondrial membrane facing cytoplasm
3. ✔ Inner mitochondrial membrane facing matrix
4. ✖ Inner mitochondrial membrane facing cytoplasm
5. ✖ Inner nuclear membrane facing nucleolus

Question Number : 42 Question Id : 9593764042 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Tetracycline blocks protein synthesis by:

Options :

1. ✔ Inhibiting binding of aminoacyl tRNA to ribosome
2. ✖ Inhibiting initiation of translation
3. ✖ Inhibiting peptidyl transferase
4. ✖ Inhibiting translocase enzyme
5. ✖ Inhibiting drug efflux pump

Question Number : 42 Question Id : 9593764042 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Tetracycline blocks protein synthesis by:

Options :

1. ✔ Inhibiting binding of aminoacyl tRNA to ribosome
2. ✖ Inhibiting initiation of translation
3. ✖ Inhibiting peptidyl transferase
4. ✖ Inhibiting translocase enzyme
5. ✖ Inhibiting drug efflux pump

Question Number : 43 Question Id : 9593764043 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The mechanism of ATP formation both in chloroplast and mitochondria is explained by:

Options :

1. ✔ Chemiosmotic theory
2. ✖ Munch's hypothesis (mass flow model)
3. ✖ Relay pump theory of Godlewski
4. ✖ Cholodny Wont's model
5. ✖ Relativity theory of Einstein

Question Number : 43 Question Id : 9593764043 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The mechanism of ATP formation both in chloroplast and mitochondria is explained by:

Options :

1. ✓ Chemiosmotic theory
2. ✗ Munch's hypothesis (mass flow model)
3. ✗ Relay pump theory of Godlewski
4. ✗ Cholodny Wont's model
5. ✗ Relativity theory of Einstein

Question Number : 44 Question Id : 9593764044 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Ozone day is observed on:

Options :

1. ✗ 03 January
2. ✗ 26 March
3. ✗ 6 June
4. ✗ 10 November
5. ✓ 16 September

Question Number : 44 Question Id : 9593764044 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Ozone day is observed on:

Options :

1. ✗ 03 January
2. ✗ 26 March
3. ✗ 6 June
4. ✗ 10 November
5. ✓ 16 September

Question Number : 45 Question Id : 9593764045 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The three primary soil macronutrients are:

Options :

1. ✗ carbon, oxygen and water
2. ✗ copper, cadmium and carbon

- 3. ✓ potassium, phosphorus and nitrogen
- 4. ✗ boron, zinc and manganese
- 5. ✗ carbon, hydrogen, oxygen, nitrogen

Question Number : 45 Question Id : 9593764045 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The three primary soil macronutrients are:

Options :

- 1. ✗ carbon, oxygen and water
- 2. ✗ copper, cadmium and carbon
- 3. ✓ potassium, phosphorus and nitrogen
- 4. ✗ boron, zinc and manganese
- 5. ✗ carbon, hydrogen, oxygen, nitrogen

Question Number : 46 Question Id : 9593764046 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A given substrate may be acted upon a number of different enzymes. Each of which uses the same substrate(s) and produces the same product(s). The individual members of a set of enzymes sharing such characteristics are known as:

Options :

- 1. ✗ Group specific enzymes
- 2. ✗ Substrate specific enzymes
- 3. ✓ Isozymes
- 4. ✗ Ribozymes
- 5. ✗ Allosteric enzymes

Question Number : 46 Question Id : 9593764046 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A given substrate may be acted upon a number of different enzymes. Each of which uses the same substrate(s) and produces the same product(s). The individual members of a set of enzymes sharing such characteristics are known as:

Options :

- 1. ✗ Group specific enzymes
- 2. ✗ Substrate specific enzymes
- 3. ✓ Isozymes
- 4. ✗ Ribozymes

5. ✖ Allosteric enzymes

Question Number : 47 Question Id : 9593764047 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The activities of many enzymes, membrane transporters and other proteins can be quickly activated or inactivated by phosphorylation of specific amino acid residues. This regulation is called:

Options :

1. ✖ Allosteric modification
2. ✔ Covalent modification
3. ✖ Induction
4. ✖ Repression
5. ✖ Competitive inhibition

Question Number : 47 Question Id : 9593764047 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The activities of many enzymes, membrane transporters and other proteins can be quickly activated or inactivated by phosphorylation of specific amino acid residues. This regulation is called:

Options :

1. ✖ Allosteric modification
2. ✔ Covalent modification
3. ✖ Induction
4. ✖ Repression
5. ✖ Competitive inhibition

Question Number : 48 Question Id : 9593764048 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Which of the following statements about acids and bases is correct?

Options :

1. ✖ At pH values below its pK_a , more than 50% of a weak acid will be present in the dissociated state (as the conjugate base)
2. ✔ At pH values above its pK_a , more than 50% of a weak acid will be present in the dissociated state (as the conjugate base)
3. ✖ The pH value of a 0.001 M solution of hydrochloric acid (HCl) is 4
4. ✖ Acetic (ethanoic) acid (pK_a 4.76) is a good physiological buffer in blood
5. ✖ The pH value of a 0.001 M solution of hydrochloric acid (HCl) is 5.

Correct : 2 Wrong : 1

Which of the following statements about acids and bases is correct?

Options :

1. ✗ At pH values below its pK_a , more than 50% of a weak acid will be present in the dissociated state (as the conjugate base)
2. ✓ At pH values above its pK_a , more than 50% of a weak acid will be present in the dissociated state (as the conjugate base)
3. ✗ The pH value of a 0.001 M solution of hydrochloric acid (HCl) is 4
4. ✗ Acetic (ethanoic) acid (pK_a 4.76) is a good physiological buffer in blood
5. ✗ The pH value of a 0.001 M solution of hydrochloric acid (HCl) is 5.

Question Number : 49 Question Id : 9593764049 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Carbonic acid and sodium bicarbonate (sodium hydrogen carbonate) act as buffers in the blood. When a small amount of acid is added to this buffer, the H^+ ions are used up as they combine with the bicarbonate ions. What happens as a result?

Options :

1. ✗ The pH of the blood increases
2. ✗ The pH of the blood decreases
3. ✗ The reaction is irreversible
4. ✗ The carbonic acid and sodium bicarbonate buffer system will cease to operate
5. ✓ The pH of the blood does not change

Question Number : 49 Question Id : 9593764049 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Carbonic acid and sodium bicarbonate (sodium hydrogen carbonate) act as buffers in the blood. When a small amount of acid is added to this buffer, the H^+ ions are used up as they combine with the bicarbonate ions. What happens as a result?

Options :

1. ✗ The pH of the blood increases
2. ✗ The pH of the blood decreases
3. ✗ The reaction is irreversible
4. ✗ The carbonic acid and sodium bicarbonate buffer system will cease to operate
5. ✓ The pH of the blood does not change

Question Number : 50 Question Id : 9593764050 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following amino acids in myoglobin is highly likely to be localized within the interior of the molecule?

Options :

1. ✓ Valine
2. ✗ Arginine
3. ✗ Aspartic acid
4. ✗ Lysine
5. ✗ Glutamic acid

Question Number : 50 Question Id : 9593764050 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following amino acids in myoglobin is highly likely to be localized within the interior of the molecule?

Options :

1. ✓ Valine
2. ✗ Arginine
3. ✗ Aspartic acid
4. ✗ Lysine
5. ✗ Glutamic acid

Question Number : 51 Question Id : 9593764051 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In *E coli*, the inability of the *lac* repressor to bind an inducer would results in:

Options :

1. ✓ No substantial synthesis of β -galactosidase
2. ✗ Consecutive synthesis of β -galactosidase
3. ✗ Inducible synthesis of β -galactosidase
4. ✗ Synthesis of inactive β -galactosidase
5. ✗ Synthesis of β -galactosidase only in the absence of the lactose

Question Number : 51 Question Id : 9593764051 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In *E coli*, the inability of the *lac* repressor to bind an inducer would results in:

Options :

1. ✓ No substantial synthesis of β -galactosidase
2. ✗ Consecutive synthesis of β -galactosidase
3. ✗ Inducible synthesis of β -galactosidase

- 4. ✖ Synthesis of inactive β -galactosidase
- 5. ✖ Synthesis of β -galactosidase only in the absence of the lactose

Question Number : 52 Question Id : 9593764052 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Which of the following about retrotransposons is correct?

Options :

- 1. ✔ They transpose via an RNA intermediate
- 2. ✖ They contains genes for ribosomal proteins
- 3. ✖ They possesses a gene for RNA dependent RNA polymerase
- 4. ✖ They possesses a gene that encodes a proteins that integrates RNA into chromosomes
- 5. ✖ They are found only in bacteria

Question Number : 52 Question Id : 9593764052 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Which of the following about retrotransposons is correct?

Options :

- 1. ✔ They transpose via an RNA intermediate
- 2. ✖ They contains genes for ribosomal proteins
- 3. ✖ They possesses a gene for RNA dependent RNA polymerase
- 4. ✖ They possesses a gene that encodes a proteins that integrates RNA into chromosomes
- 5. ✖ They are found only in bacteria

Question Number : 53 Question Id : 9593764053 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Micro-array is a large collection of specific DNA oligonucleotides spotted in a defined pattern of on a microscope slide. What is the most useful experiment that can be done with such a tool?

Options :

- 1. ✖ Predict the presence of specific metabolites in the cell
- 2. ✖ Comparing the newly synthesized nuclear RNA with cytoplasmic RNA to locate intron
- 3. ✔ Comparing RNA produced under two different physiological conditions to understand pattern of gene expression
- 4. ✖ Comparing proteins produced under two different physiological conditions to understand their function
- 5. ✖ Evaluates the linkage relationships of genes

Correct : 2 Wrong : 1

Micro-array is a large collection of specific DNA oligonucleotides spotted in a defined pattern of on a microscope slide. What is the most useful experiment that can be done with such a tool?

Options :

1. ✖ Predict the presence of specific metabolites in the cell
2. ✖ Comparing the newly synthesized nuclear RNA with cytoplasmic RNA to locate intron
3. ✔ Comparing RNA produced under two different physiological conditions to understand pattern of gene expression
4. ✖ Comparing proteins produced under two different physiological conditions to understand their function
5. ✖ Evaluates the linkage relationships of genes

Question Number : 54 Question Id : 9593764054 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In vertebrate genes, transcription regulatory regions that contain CpG islands are inactivated by which CpG modification?

Options :

1. ✔ Methylation
2. ✖ Meristylation
3. ✖ Phosphorylation
4. ✖ Acetylation
5. ✖ Ubiquitination

Question Number : 54 Question Id : 9593764054 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In vertebrate genes, transcription regulatory regions that contain CpG islands are inactivated by which CpG modification?

Options :

1. ✔ Methylation
2. ✖ Meristylation
3. ✖ Phosphorylation
4. ✖ Acetylation
5. ✖ Ubiquitination

Question Number : 55 Question Id : 9593764055 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

All of the following are the parts of core nucleosome proteins EXCEPT:

Options :

1. ☒ H1
2. ☐ H2A
3. ☐ H2B
4. ☐ H3
5. ☐ H4

Question Number : 55 Question Id : 9593764055 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

All of the following are the parts of core nucleosome proteins EXCEPT:

Options :

1. ☒ H1
2. ☐ H2A
3. ☐ H2B
4. ☐ H3
5. ☐ H4

Question Number : 56 Question Id : 9593764056 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Synthesis of mRNAs that encodes the proteins of eukaryotic ribosomes occurs in:

Options :

1. ☐ Cytoplasm
2. ☐ Nuclear envelope
3. ☐ Nucleolus
4. ☒ Euchromatin
5. ☐ Heterochromatin

Question Number : 56 Question Id : 9593764056 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Synthesis of mRNAs that encodes the proteins of eukaryotic ribosomes occurs in:

Options :

1. ☐ Cytoplasm
2. ☐ Nuclear envelope
3. ☐ Nucleolus
4. ☒ Euchromatin
5. ☐ Heterochromatin

Correct : 2 Wrong : 1

Which of the following NOT the consequence of increased cellular level of cAMP?

Options :

1. ✗ Activation of a kinase cascade
2. ✓ Activation of transducin G-protein
3. ✗ Increased phosphorylation of glycogen phosphorylase
4. ✗ Inhibition of glycogen synthesis
5. ✗ Dissociation of the cAMP- dependent protein kinase tetramer

Question Number : 57 Question Id : 9593764057 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following NOT the consequence of increased cellular level of cAMP?

Options :

1. ✗ Activation of a kinase cascade
2. ✓ Activation of transducin G-protein
3. ✗ Increased phosphorylation of glycogen phosphorylase
4. ✗ Inhibition of glycogen synthesis
5. ✗ Dissociation of the cAMP- dependent protein kinase tetramer

Question Number : 58 Question Id : 9593764058 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following best describes the hyperchromicity of DNA?

Options :

1. ✗ The shift in UV absorption in longer wavelengths upon denaturation
2. ✗ The shift in UV absorption to shorter wavelengths upon hydrolysis
3. ✗ The shift in UV absorption to longer wavelengths upon annealing (forming double strands)
4. ✗ The increased in absorption at 260 nm upon annealing
5. ✓ The increased in absorption at 260 nm upon denaturation

Question Number : 58 Question Id : 9593764058 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following best describes the hyperchromicity of DNA?

Options :

1. ✗ The shift in UV absorption in longer wavelengths upon denaturation
2. ✗ The shift in UV absorption to shorter wavelengths upon hydrolysis

3. ✖ The shift in UV absorption to longer wavelengths upon annealing (forming double strands)
4. ✖ The increased in absorption at 260 nm upon annealing
5. ✔ The increased in absorption at 260 nm upon denaturation

Question Number : 59 Question Id : 9593764059 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The GAL4 protein activates the transcription from the GAL1 promoter in yeast. To bind to DNA, the protein utilizes a:

Options :

1. ✖ Heme group
2. ✖ Transcriptional activating domain
3. ✔ Zinc-finger domain
4. ✖ Transmembrane domain
5. ✖ Signal peptide

Question Number : 59 Question Id : 9593764059 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The GAL4 protein activates the transcription from the GAL1 promoter in yeast. To bind to DNA, the protein utilizes a:

Options :

1. ✖ Heme group
2. ✖ Transcriptional activating domain
3. ✔ Zinc-finger domain
4. ✖ Transmembrane domain
5. ✖ Signal peptide

Question Number : 60 Question Id : 9593764060 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Active transposable feature have which of the following features?

- I. Repeated sequence at the end of the transposable element
- II. Different members and chromosomal positions indifferent species of a single genus
- III. The ability to alter the phenotype of an organism

Options :

1. ✖ Only I
2. ✖ Only II
3. ✖ Only I and II

4. ✖ Only I and III

5. ✔ I, II and III

Question Number : 60 Question Id : 9593764060 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Active transposable feature have which of the following features?

- I. Repeated sequence at the end of the transposable element
- II. Different members and chromosomal positions indifferent species of a single genus
- III. The ability to alter the phenotype of an organism

Options :

1. ✖ Only I

2. ✖ Only II

3. ✖ Only I and II

4. ✖ Only I and III

5. ✔ I, II and III

Question Number : 61 Question Id : 9593764061 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Consider the average in vivo turnover rates for proteins, DNA and RNA. Which of the following orders best describes the turnover rates from fastest (shortest average life time) to slowest (longest average life time)?

Options :

1. ✖ mRNA > DNA > Protein

2. ✔ mRNA > Protein > DNA

3. ✖ Protein > mRNA > DNA

4. ✖ Protein > DNA > mRNA

5. ✖ DNA > mRNA > Protein

Question Number : 61 Question Id : 9593764061 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Consider the average in vivo turnover rates for proteins, DNA and RNA. Which of the following orders best describes the turnover rates from fastest (shortest average life time) to slowest (longest average life time)?

Options :

1. ✖ mRNA > DNA > Protein

2. ✔ mRNA > Protein > DNA

3. ✖ Protein > mRNA > DNA

4. ✖ Protein > DNA > mRNA

5. ✖ DNA > mRNA > Protein

Question Number : 62 Question Id : 9593764062 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Silent mutation in a gene results in:

Options :

1. ✖ No change in nucleotide sequence of the mRNA encoded by the gene
2. ✔ No change in the amino acid sequence of the protein encoded by the genes
3. ✖ No expression of the protein encoded by gene
4. ✖ An amino acid substitution that have significant effect on the functional activity of the protein encoded by the gene
5. ✖ A shift of the translational reading frame

Question Number : 62 Question Id : 9593764062 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Silent mutation in a gene results in:

Options :

1. ✖ No change in nucleotide sequence of the mRNA encoded by the gene
2. ✔ No change in the amino acid sequence of the protein encoded by the genes
3. ✖ No expression of the protein encoded by gene
4. ✖ An amino acid substitution that have significant effect on the functional activity of the protein encoded by the gene
5. ✖ A shift of the translational reading frame

Question Number : 63 Question Id : 9593764063 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The nuclear synthesized ploy-A sequences at the 3' end of eukaryotic mRNA is:

Options :

1. ✖ Attached at random sequences within the 3' non-translational region of a pre-mRNA
2. ✖ Found as common feature in rRNA and tRNA
3. ✖ Transcribed from poly-T sequences in template DNA
4. ✖ Transcribes by RNA polymerase II
5. ✔ Added after 3' end cleavage of the pre-mRNA transcript

Question Number : 63 Question Id : 9593764063 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

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3. ✖ Transcribed from poly-T sequences in template DNA
4. ✖ Transcribes by RNA polymerase II
5. ✔ Added after 3' end cleavage of the pre-mRNA transcript

Question Number : 64 Question Id : 9593764064 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following support the endosymbiotic theory of biological evolution of mitochondria?

Options :

1. ✖ Mitochondria, chloroplast, and prokaryotes contains electron carrier
2. ✖ Genes for mitochondrial pyruvate dehydrogenase subunits are found in the nuclear DNA
3. ✔ Mitochondria and bacterial ribosome functions are inhibited by the same antibiotics
4. ✖ The outer mitochondrial membrane contains the porin protein
5. ✖ Many mitochondrial are imported across both inner and outer membrane after translation on cytoplasmic ribosomes is completed

Question Number : 64 Question Id : 9593764064 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following support the endosymbiotic theory of biological evolution of mitochondria?

Options :

1. ✖ Mitochondria, chloroplast, and prokaryotes contains electron carrier
2. ✖ Genes for mitochondrial pyruvate dehydrogenase subunits are found in the nuclear DNA
3. ✔ Mitochondria and bacterial ribosome functions are inhibited by the same antibiotics
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5. ✖ Many mitochondrial are imported across both inner and outer membrane after translation on cytoplasmic ribosomes is completed

Question Number : 65 Question Id : 9593764065 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Gene rearrangement plays the role in which of the following?

Options :

1. ✖ Adapted to carbon sources by bacteria
2. ✔ Surface antigen changes in trypanosomes

- 3. ✖ Sex determination in nematodes
- 4. ✖ Host range modification in bacteriophage T4
- 5. ✖ Segmentation during arthropod development

Question Number : 65 Question Id : 9593764065 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

- 1. ✖ Adapted to carbon sources by bacteria
- 2. ✔ Surface antigen changes in trypanosomes
- 3. ✖ Sex determination in nematodes
- 4. ✖ Host range modification in bacteriophage T4
- 5. ✖ Segmentation during arthropod development

Question Number : 66 Question Id : 9593764066 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The enzyme reverse transcriptase is useful in the generation of cDNA libraries for which of the following reasons?

Options :

- 1. ✖ It is sensitive to higher temperature and so can be readily "killed" by heat treatment when reaction is completed
- 2. ✖ It does not require a primer to initiate polymerization as do many DNA polymerases
- 3. ✖ It is sensitive to higher temperature so can survive the many cycles of heating required to perform polymerase chain reaction
- 4. ✔ It is a RNA dependent DNA polymerase
- 5. ✖ It lacks the proof reading function of most DNA polymerases and so is able to utilize mRNA from mutated genes as a template

Question Number : 66 Question Id : 9593764066 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The enzyme reverse transcriptase is useful in the generation of cDNA libraries for which of the following reasons?

Options :

- 1. ✖ It is sensitive to higher temperature and so can be readily "killed" by heat treatment when reaction is completed
- 2. ✖ It does not require a primer to initiate polymerization as do many DNA polymerases
- 3. ✖ It is sensitive to higher temperature so can survive the many cycles of heating required to perform polymerase chain reaction

4. ✓ It is a RNA dependent DNA polymerase

It lack the proof reading function of most DNA polymerase and so is able to utilize mRNA from mutated genes as a template

Question Number : 67 Question Id : 9593764067 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A mutant of E. coli with a heat sensitive DNA ligase (25°C permissive and 37°C non-permissive) has been used to show DNA synthesis is discontinuous. Examination of DNA replication in the presences of [³H₁]-thymidine in the mutant would demonstrate which of the following?

Options :

1. ✗ The accumulation of short segments of unlabeled DNA at 25 ° C and at 37 ° C
2. ✗ The accumulation of short segments of unlabeled DNA at 25 ° C but not at 37 ° C
3. ✓ The accumulation of short segments of radioactive DNA at 37 ° C but not at 25 ° C
4. ✗ The accumulation of short segments of radioactive DNA at 25 ° C but not at 37 ° C
5. ✗ The incorporation of short segments of radioactive DNA into longer ones at 25 ° C but not at 37 ° C

Question Number : 67 Question Id : 9593764067 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A mutant of E. coli with a heat sensitive DNA ligase (25°C permissive and 37°C non-permissive) has been used to show DNA synthesis is discontinuous. Examination of DNA replication in the presences of [³H₁]-thymidine in the mutant would demonstrate which of the following?

Options :

1. ✗ The accumulation of short segments of unlabeled DNA at 25 ° C and at 37 ° C
2. ✗ The accumulation of short segments of unlabeled DNA at 25 ° C but not at 37 ° C
3. ✓ The accumulation of short segments of radioactive DNA at 37 ° C but not at 25 ° C
4. ✗ The accumulation of short segments of radioactive DNA at 25 ° C but not at 37 ° C
5. ✗ The incorporation of short segments of radioactive DNA into longer ones at 25 ° C but not at 37 ° C

Question Number : 68 Question Id : 9593764068 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

All of the following statements are true about damage by ultraviolet light to DNA in the living cells EXCEPT:

Options :

1. ✗ The damages blocks normal DNA replication

2. ✗ The most damaging wavelength is about 260 nm
3. ✗ Covalent bonds are formed that join neighbouring pyrimidines
4. ✓ Neighbouring phosphodiester are cleaved
5. ✗ Most cells can synthesized proteins capable of repairing UV damage

Question Number : 68 Question Id : 9593764068 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

1. ✗ The damages blocks normal DNA replication
2. ✗ The most damaging wavelength is about 260 nm
3. ✗ Covalent bonds are formed that join neighbouring pyrimidines
4. ✓ Neighbouring phosphodiester are cleaved
5. ✗ Most cells can synthesized proteins capable of repairing UV damage

Question Number : 69 Question Id : 9593764069 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following best predict the chemical reaction?

Options :

1. ✗ ΔS (entropy change)
2. ✗ ΔH (enthalpy change)
3. ✗ ΔE (internal energy change)
4. ✓ ΔG (Gibbs free energy change)
5. ✗ E_{act} (energy of activation)

Question Number : 69 Question Id : 9593764069 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following best predict the chemical reaction?

Options :

1. ✗ ΔS (entropy change)
2. ✗ ΔH (enthalpy change)
3. ✗ ΔE (internal energy change)
4. ✓ ΔG (Gibbs free energy change)
5. ✗ E_{act} (energy of activation)

Question Number : 70 Question Id : 9593764070 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A coenzyme required by some enzymes that transfer the one carbon groups is:

Options :

1. ✗ Pyridoxal phosphate
2. ✓ Tetrahydrofolate
3. ✗ Thiamine pyrophosphate
4. ✗ Flavin adenine dinucleotide
5. ✗ Nicotinamide adenine dinucleotide

Question Number : 70 Question Id : 9593764070 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

1. ✗ Pyridoxal phosphate
2. ✓ Tetrahydrofolate
3. ✗ Thiamine pyrophosphate
4. ✗ Flavin adenine dinucleotide
5. ✗ Nicotinamide adenine dinucleotide

Question Number : 71 Question Id : 9593764071 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following statements about repetitive DNA is NOT true?

Options :

1. ✗ Repetitive DNA is associated with the centromeres and telomers in higher eukaryotes
2. ✓ Repetitive DNA is restricted to nontranscribed regions of the genomes
3. ✗ Repetitive DNA sequences are often found in tandem clusters throughout of genome
4. ✗ Repetitive DNA was first detected because of its rapid reassociation kinetics
5. ✗ Transposable elements can be contribute to the repetitive DNA fraction

Question Number : 71 Question Id : 9593764071 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

1. ✗ Repetitive DNA is associated with the centromeres and telomers in higher eukaryotes
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3. ✖ Repetitive DNA sequences are often found in tandem clusters throughout of genome
4. ✖ Repetitive DNA was first detected because of its rapid reassociation kinetics
5. ✖ Transposable elements can be contribute to the repetitive DNA fraction

Question Number : 72 Question Id : 9593764072 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following is NOT characteristic of the eukaryotic enhancer element?

Options :

1. ✖ Its activity is dependent of its orientation (i.e., the sequence can be inverted without effect)
2. ✔ Its activity is dependent on its distance from start site of transcription
3. ✖ It may be found as far as 1 to 2 kb from the promoter
4. ✖ It may be positioned at the 5' end or 3' end of the gene
5. ✖ It increases the level of transcription of genes under its control

Question Number : 72 Question Id : 9593764072 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following is NOT characteristic of the eukaryotic enhancer element?

Options :

1. ✖ Its activity is dependent of its orientation (i.e., the sequence can be inverted without effect)
2. ✔ Its activity is dependent on its distance from start site of transcription
3. ✖ It may be found as far as 1 to 2 kb from the promoter
4. ✖ It may be positioned at the 5' end or 3' end of the gene
5. ✖ It increases the level of transcription of genes under its control

Question Number : 73 Question Id : 9593764073 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following is found in mammalian during male gamete formation?

Options :

1. ✖ To successive centrosome duplications during meiosis
2. ✖ Accumulation of yolk during gamete formation
3. ✖ Generation of polar body during meiosis I
4. ✔ Formation of four functional gametes from a primary germ cell
5. ✖ Temporary arrest of meiosis at the metaphase I stage

Correct : 2 Wrong : 1

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Options :

1. ✗ To successive centrosome duplications during meiosis
2. ✗ Accumulation of yolk during gamete formation
3. ✗ Generation of polar body during meiosis I
4. ✓ Formation of four functional gametes from a primary germ cell
5. ✗ Temporary arrest of meiosis at the metaphase I stage

Question Number : 74 Question Id : 9593764074 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The unit of molar extinction coefficient are:

Options :

1. ✓ $\text{L mole}^{-1} \text{ cm}^{-1}$
2. ✗ L mole cm^{-1}
3. ✗ $\text{Mole}^{-1} \text{ cm}^{-1}$
4. ✗ $\text{cm L}^{-1} \text{ cm}^{-1}$
5. ✗ $\text{ml mg}^{-1} \text{ cm}^{-1}$

Question Number : 74 Question Id : 9593764074 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The unit of molar extinction coefficient are:

Options :

1. ✓ $\text{L mole}^{-1} \text{ cm}^{-1}$
2. ✗ L mole cm^{-1}
3. ✗ $\text{Mole}^{-1} \text{ cm}^{-1}$
4. ✗ $\text{cm L}^{-1} \text{ cm}^{-1}$
5. ✗ $\text{ml mg}^{-1} \text{ cm}^{-1}$

Question Number : 75 Question Id : 9593764075 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following events occurs first as a result of EFG binding to its receptor?

Options :

1. ✗ Activation of serine/threonine kinase
2. ✗ Activation of tyrosine phosphates

- 3. ☒ Activation of tyrosine kinase
- 4. ☐ Activation of phospholipase
- 5. ☐ Activation of GTPase

Question Number : 75 Question Id : 9593764075 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following events occurs first as a result of EFG binding to its receptor?

Options :

- 1. ☐ Activation of serine/threonine kinase
- 2. ☐ Activation of tyrosine phosphates
- 3. ☒ Activation of tyrosine kinase
- 4. ☐ Activation of phospholipase
- 5. ☐ Activation of GTPase

Question Number : 76 Question Id : 9593764076 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

One important mechanism for maintaining sequence identity among the many copies of a gene within tandem array is:

Options :

- 1. ☐ Unequal crossing over
- 2. ☒ Gene conversion
- 3. ☐ Retrotransposition
- 4. ☐ Deletion
- 5. ☐ Inversion

Question Number : 76 Question Id : 9593764076 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

One important mechanism for maintaining sequence identity among the many copies of a gene within tandem array is:

Options :

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- 2. ☒ Gene conversion
- 3. ☐ Retrotransposition
- 4. ☐ Deletion
- 5. ☐ Inversion

Question Number : 77 Question Id : 9593764077 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following mRNA would form the most stable stem loop structure?

Options :

1. ✗ 5'GGCUU.....UUCGG.....3'
2. ✓ 5'GGCUU.....AAGCC.....3'
3. ✗ 5'GGCUU.....GGUCC.....3'
4. ✗ 5'GGCUU.....CCGAA.....3'
5. ✗ None of the other options

Question Number : 77 Question Id : 9593764077 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following mRNA would form the most stable stem loop structure?

Options :

1. ✗ 5'GGCUU.....UUCGG.....3'
2. ✓ 5'GGCUU.....AAGCC.....3'
3. ✗ 5'GGCUU.....GGUCC.....3'
4. ✗ 5'GGCUU.....CCGAA.....3'
5. ✗ None of the other options

Question Number : 78 Question Id : 9593764078 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following conditions is likely to interfere with transfer of genetic material by conjugation in Bacteria?

Options :

1. ✗ Pre-treatment of recipient cells with DNase
2. ✗ Pre-treatment of recipient cells by application of strong shearing forces
3. ✗ Treatment of recipient cells with cycloheximide
4. ✓ Treatment of mating cells pairs by strong shearing forces
5. ✗ Treatment of the mating cells pairs with RNase

Question Number : 78 Question Id : 9593764078 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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3. ✗ Treatment of recipient cells with cycloheximide

4. ✓ Treatment of mating cells pairs by strong shearing forces
5. ✗ Treatment of the mating cells pairs with RNase

Question Number : 79 Question Id : 9593764079 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

How many grams of MgCl_2 required preparing one litre of a 10 millimolar MgCl_2 solution? (Atomic weight of Mg =24.3 g; atomic of Cl =35.5 g)?

Options :

1. ✗ 0.59 g
2. ✓ 0.95 g
3. ✗ 59 g
4. ✗ 95 g
5. ✗ 950 g

Question Number : 79 Question Id : 9593764079 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

How many grams of MgCl_2 required preparing one litre of a 10 millimolar MgCl_2 solution? (Atomic weight of Mg =24.3 g; atomic of Cl =35.5 g)?

Options :

1. ✗ 0.59 g
2. ✓ 0.95 g
3. ✗ 59 g
4. ✗ 95 g
5. ✗ 950 g

Question Number : 80 Question Id : 9593764080 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

All of the following statements about the Fluid Mosaic Model of biological membrane are EXCEPT:

Options :

1. ✗ Lipid molecules in the membrane readily undergo lateral diffusion
2. ✓ Lipid molecules in the cell membrane readily undergo flip-flop diffusion
3. ✗ Integral membrane proteins can undergo lateral diffusion

4. ✗ The saturated hydrocarbon chains of lipid molecules in the membrane undergo carbon-carbon rotation

5. ✗ The transition temperature of a membrane is sensitive to the composition of the lipid molecules in the membrane

Correct : 2 Wrong : 1

All of the following statements about the Fluid Mosaic Model of biological membrane are EXCEPT:

Options :

1. ✗ Lipid molecules in the membrane readily undergo lateral diffusion
2. ✓ Lipid molecules in the cell membrane readily undergo flip-flop diffusion
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4. ✗ The saturated hydrocarbon chains of lipid molecules in the membrane undergo carbon-carbon rotation
5. ✗ The transition temperature of a membrane is sensitive to the composition of the lipid molecules in the membrane

Question Number : 81 Question Id : 9593764081 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In operon regulated only by attenuation, a mutation causing over-synthesis of the gene products is most likely to be in the part of the DNA corresponding to the:

Options :

1. ✗ Operator
2. ✗ 3' terminal sequence of the RNA
3. ✓ 5' terminal sequence of the RNA
4. ✗ Intron of the RNA
5. ✗ Coding sequence of the *trans* activator

Question Number : 81 Question Id : 9593764081 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In operon regulated only by attenuation, a mutation causing over-synthesis of the gene products is most likely to be in the part of the DNA corresponding to the:

Options :

1. ✗ Operator
2. ✗ 3' terminal sequence of the RNA
3. ✓ 5' terminal sequence of the RNA
4. ✗ Intron of the RNA
5. ✗ Coding sequence of the *trans* activator

Question Number : 82 Question Id : 9593764082 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Two protein sequences are compared by BLAST and produce an e value of e^{-100} . This value most signifies which of the following about the genes coding these two proteins?

Options :

1. ✗ They function in the same tissue
2. ✗ They have unrelated functions
3. ✓ They have descended from a common ancestor
4. ✗ They are derived from the related species
5. ✗ They encode proteins that form a dimer complex

Question Number : 82 Question Id : 9593764082 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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5. ✗ They encode proteins that form a dimer complex

Question Number : 83 Question Id : 9593764083 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The processes that lead to the synthesis of the functional light chain of an antibody molecule include:

Options :

1. ✗ DNA rearrangement but no RNA splicing
2. ✓ DNA rearrangement but no gene duplication
3. ✗ DNA rearrangement but no protein processing
4. ✗ RNA splicing but no DNA rearrangement
5. ✗ Gene duplication but no protein processing

Question Number : 83 Question Id : 9593764083 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The processes that lead to the synthesis of the functional light chain of an antibody molecule include:

Options :

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2. ☒ DNA rearrangement but no gene duplication
3. ☐ DNA rearrangement but no protein processing
4. ☐ RNA splicing but no DNA rearrangement
5. ☐ Gene duplication but no protein processing

Question Number : 84 Question Id : 9593764084 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A second mutation in the same gene restored the wild type phenotype. The phenomenon referred as a:

Options :

1. ☐ Intergenic complementation
2. ☐ Gene conversion
3. ☐ Synthetic enhancement
4. ☒ Intragenic suppression
5. ☐ Epistasis

Question Number : 84 Question Id : 9593764084 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A second mutation in the same gene restored the wild type phenotype. The phenomenon referred as a:

Options :

1. ☐ Intergenic complementation
2. ☐ Gene conversion
3. ☐ Synthetic enhancement
4. ☒ Intragenic suppression
5. ☐ Epistasis

Question Number : 85 Question Id : 9593764085 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Water is generally a good solvent for polar molecules and polar solvent for non-polar molecules. These solvent properties best explained by:

Options :

1. ☐ The higher density of liquid water relative to polar solvents
2. ☒ The ability to form intermolecular hydrogen bond
3. ☐ The density of solid water being less than density of liquid water
4. ☐ High surface tension

5. ✖ High heat of vaporization

Question Number : 85 Question Id : 9593764085 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Water is generally a good solvent for polar molecules and polar solvent for non-polar molecules. These solvent properties best explained by:

Options :

1. ✖ The higher density of liquid water relative to polar solvents
2. ✔ The ability to form intermolecular hydrogen bond
3. ✖ The density of solid water being less than density of liquid water
4. ✖ High surface tension
5. ✖ High heat of vaporization

Question Number : 86 Question Id : 9593764086 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The DNA from bacteriophage ϕ X 174 has base composition of 25% A, 33%T, 24%G and 18%C. Which of the following best explained this observation?

Options :

1. ✖ In viral genomes, the base pairing follows the standard Watson-Crick rules, and allows G-A and C-A base pairs
2. ✖ In the viral genomes, the base pairing does not follow the standard Watson-Crick rules and allows the G-A and C-A base pairs
3. ✖ Viral genomes are linear and tolerated base pair mismatches
4. ✖ Nucleic acid from viruses are tightly complexed with nucleic acid binding proteins and so cannot be base pair with one other
5. ✔ The genome of bacteriophage ϕ X 174 is single stranded

Question Number : 86 Question Id : 9593764086 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The DNA from bacteriophage ϕ X 174 has base composition of 25% A, 33%T, 24%G and 18%C. Which of the following best explained this observation?

Options :

1. ✖ In viral genomes, the base pairing follows the standard Watson-Crick rules, and allows G-A and C-A base pairs
2. ✖ In the viral genomes, the base pairing does not follow the standard Watson-Crick rules and allows the G-A and C-A base pairs
3. ✖ Viral genomes are linear and tolerated base pair mismatches

Nucleic acid from viruses are tightly complexed with nucleic acid binding proteins and so cannot be base pair with one other

4. ✖
5. ✔ The genome of bacteriophage ϕ X 174 is single stranded

Question Number : 87 Question Id : 9593764087 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In adult mammals, the primary site for the final stage of differentiation of T lymphocytes is the:

Options :

1. ✖ Spleen
2. ✔ Bone marrow
3. ✖ Bursa of Fabricius
4. ✖ Thymus
5. ✖ Liver

Question Number : 87 Question Id : 9593764087 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In adult mammals, the primary site for the final stage of differentiation of T lymphocytes is the:

Options :

1. ✖ Spleen
2. ✔ Bone marrow
3. ✖ Bursa of Fabricius
4. ✖ Thymus
5. ✖ Liver

Question Number : 88 Question Id : 9593764088 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Isopentenyl pyrophosphate is precursor of which of the following?

- I. Cholesterol
- II. Farnesyl group on protein
- III. Steroid protein

Options :

1. ✖ Only I
2. ✖ Only I and II
3. ✖ Only I and III
4. ✖ Only II and III
5. ✔ I, II and III

Question Number : 88 Question Id : 9593764088 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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- I. Cholesterol
- II. Farnesyl group on protein
- III. Steroid protein

Options :

- 1. ✗ Only I
- 2. ✗ Only I and II
- 3. ✗ Only I and III
- 4. ✗ Only II and III
- 5. ✓ I, II and III

Question Number : 89 Question Id : 9593764089 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The KDEL sequence, found in the luminal protein of the ER, is responsible for:

Options :

- 1. ✗ Translocation of protein into the ER lumen
- 2. ✗ Insertion of proteins into the membrane of ER
- 3. ✗ Quality control in ER
- 4. ✗ Recognition by signal peptidase of the signal sequences
- 5. ✓ Retrieval of ER luminal proteins from the Golgi

Question Number : 89 Question Id : 9593764089 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

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- 2. ✗ Insertion of proteins into the membrane of ER
- 3. ✗ Quality control in ER
- 4. ✗ Recognition by signal peptidase of the signal sequences
- 5. ✓ Retrieval of ER luminal proteins from the Golgi

Question Number : 90 Question Id : 9593764090 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Cyclins are protein, are responsible for:

Options :

- 1. ✓ Cell-cycle protein kinase

2. ✖ Circadian rhythms
3. ✖ Synthesis of cAMP
4. ✖ Membrane circulation via exocytosis and endocytosis
5. ✖ The cycling of tubulin subunits through microtubules

Question Number : 90 Question Id : 9593764090 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Cyclins are protein, are responsible for:

Options :

1. ✔ Cell-cycle protein kinase
2. ✖ Circadian rhythms
3. ✖ Synthesis of cAMP
4. ✖ Membrane circulation via exocytosis and endocytosis
5. ✖ The cycling of tubulin subunits through microtubules

Question Number : 91 Question Id : 9593764091 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Rhodopsin, β -adrenergic receptors, and muscarinic acetylcholine receptors share which of the following features?

Options :

1. ✖ Each causes an inhibitory intracellular response
2. ✖ Each inactivates a tyrosine kinase cascade
3. ✖ Each is composed of a $\alpha\beta$ -dimer
4. ✔ Each function through a heterotrimeric G-protein
5. ✖ Each gates a cationic channel

Question Number : 91 Question Id : 9593764091 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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5. ✖ Each gates a cationic channel

Question Number : 92 Question Id : 9593764092 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Retroviral oncogenes are probably aberrant form of normal cellular genes that regulates the cell proliferation. Which of the following gene products are LEAST likely to encode by oncogenes?

Options :

1. ✗ GTP binding proteins
2. ✗ DNA binding proteins
3. ✗ Transmembrane proteins
4. ✓ Caspid proteins
5. ✗ Tyrosine kinase

Question Number : 92 Question Id : 9593764092 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Retroviral oncogenes are probably aberrant form of normal cellular genes that regulates the cell proliferation. Which of the following gene products are LEAST likely to encode by oncogenes?

Options :

1. ✗ GTP binding proteins
2. ✗ DNA binding proteins
3. ✗ Transmembrane proteins
4. ✓ Caspid proteins
5. ✗ Tyrosine kinase

Question Number : 93 Question Id : 9593764093 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following most accurately explains the cause of abnormal chromosomes during human reproduction that results in Down syndrome, Turner's syndrome and Klinefelter's syndrome?

Options :

1. ✓ The occurrence of nondisjunction of homologous during meiosis
2. ✗ The duplicative production of extra chromosome during DNA duplication
3. ✗ The abnormal pairing of nonhomologous chromosome during prophase of meiosis I
4. ✗ The selective loss of particular chromosomes from the sex cells after formation of mature gametes
5. ✗ The fusion of two sperms with one egg to provide an extra set of paternal chromosome

Correct : 2 Wrong : 1

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Options :

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3. ☐ The abnormal pairing of nonhomologous chromosome during prophase of meiosis I
4. ☐ The selective loss of particular chromosomes from the sex cells after formation of mature gametes
5. ☐ The fusion of two sperms with one egg to provide an extra set of paternal chromosome

Question Number : 94 Question Id : 9593764094 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In *Drosophila*, region of polytene chromosomes show puffs different times in development. Studies with labelled compounds have indicated the localization to the puffs of treated

Options :

1. ☐ Thymidine indicates the DNA being synthesized
2. ☐ Thymidine indicates that RNA being synthesized
3. ☐ Leucine indicates that new proteins are being synthesized
4. ☒ Uridine indicates that RNA is being synthesized
5. ☐ Uridine indicates that DNA is being synthesized

Question Number : 94 Question Id : 9593764094 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In *Drosophila*, region of polytene chromosomes show puffs different times in development. Studies with labelled compounds have indicated the localization to the puffs of treated

Options :

1. ☐ Thymidine indicates the DNA being synthesized
2. ☐ Thymidine indicates that RNA being synthesized
3. ☐ Leucine indicates that new proteins are being synthesized
4. ☒ Uridine indicates that RNA is being synthesized
5. ☐ Uridine indicates that DNA is being synthesized

Question Number : 95 Question Id : 9593764095 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Thyroxine labelled with the ^{131}I is administered to a patient for the purpose of imaging the thyroid gland. The radioactive half-life of ^{131}I is 8 days. The biological half-life (the time required to half elimination of the isotopes in animal body) is 2 days. The time at which $\frac{3}{4}$ of the original radioactivity will no longer be detected in animal body, closed to:

Options :

1. ✗ 2.0 days
2. ✓ 3.2 days
3. ✗ 4.0 days
4. ✗ 4.8 days
5. ✗ 16.0 days

Question Number : 95 Question Id : 9593764095 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

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Options :

1. ✗ 2.0 days
2. ✓ 3.2 days
3. ✗ 4.0 days
4. ✗ 4.8 days
5. ✗ 16.0 days

Question Number : 96 Question Id : 9593764096 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Allosteric inhibition of enzyme involves which of the following?

Options :

1. ✓ Binding of an inhibitor to a site other than the substrate binding site
2. ✗ Binding of an inhibitor competitively to the substrate binding site
3. ✗ Binding of an inhibitor non-competitively the substrate binding site
4. ✗ Cooperative binding of substrate to an enzyme with four or more sub-units
5. ✗ Cooperative binding of substrate to an enzyme that does not deviate from normal Michaelis Menten kinetics

Question Number : 96 Question Id : 9593764096 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Allosteric inhibition of enzyme involves which of the following?

Options :

1. ☒ Binding of an inhibitor to a site other than the substrate binding site
2. ☐ Binding of an inhibitor competitively to the substrate binding site
3. ☐ Binding of an inhibitor non-competitively the substrate binding site
4. ☐ Cooperative binding of substrate to an enzyme with four or more sub-units
Cooperative binding of substrate to an enzyme that does not deviate from normal
5. ☐ Michaelis Menten kinetics

Question Number : 97 Question Id : 9593764097 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The ability of cell migrates on surface required the following EXCEPT:

Options :

1. ☐ Formation and breaking of focal adhesion
2. ☐ Assembly of an actin meshwork at the leading edge
3. ☐ WASp protein
4. ☐ Arp2/3 complex protein
5. ☒ Connexin protein

Question Number : 97 Question Id : 9593764097 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The ability of cell migrates on surface required the following EXCEPT:

Options :

1. ☐ Formation and breaking of focal adhesion
2. ☐ Assembly of an actin meshwork at the leading edge
3. ☐ WASp protein
4. ☐ Arp2/3 complex protein
5. ☒ Connexin protein

Question Number : 98 Question Id : 9593764098 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Correct statement concerning the different members of myosin family including which of the following?

- I. Some are actin plus (Barbed) - motors
- II. Some are actin minus (pointed) - motors
- III. Some are actin depolarizing proteins

Options :

1. ✖ Only I
2. ✖ Only II
3. ✖ Only III
4. ✔ Only I and II
5. ✖ I, II and III

Question Number : 98 Question Id : 9593764098 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Correct statement concerning the different members of myosin family including which of the following?

- I. Some are actin plus (Barbed) - motors
- II. Some are actin minus (pointed) - motors
- III. Some are actin depolarizing proteins

Options :

1. ✖ Only I
2. ✖ Only II
3. ✖ Only III
4. ✔ Only I and II
5. ✖ I, II and III

Question Number : 99 Question Id : 9593764099 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following cell junctions is responsible for metabolic coupling?

Options :

1. ✖ Tight junction
2. ✔ Gap junction
3. ✖ Adherens junction
4. ✖ Desmosomes
5. ✖ Hemidesmosome

Question Number : 99 Question Id : 9593764099 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following cell junctions is responsible for metabolic coupling?

Options :

1. ✖ Tight junction
2. ✔ Gap junction
3. ✖ Adherens junction

4. ✖ Desmosomes

5. ✖ Hemidesmosome

Question Number : 100 Question Id : 9593764100 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A dicentric chromosome is unstable due to:

Options :

1. ✖ It can't resynthesized telomerase during replication
2. ✖ It pairs with nonhomologous chromosomes in meiosis
3. ✖ It pairs with nonhomologous chromosomes in mitosis
4. ✔ It is often simultaneously drawn to opposite spindle poles in mitosis
5. ✖ Many of its genes are silenced

Question Number : 100 Question Id : 9593764100 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

A dicentric chromosome is unstable due to:

Options :

1. ✖ It can't resynthesized telomerase during replication
2. ✖ It pairs with nonhomologous chromosomes in meiosis
3. ✖ It pairs with nonhomologous chromosomes in mitosis
4. ✔ It is often simultaneously drawn to opposite spindle poles in mitosis
5. ✖ Many of its genes are silenced

General Knowledge

Group Maximum Duration :	60
Group Minimum Duration :	60
Revisit allowed for view? :	No
Revisit allowed for edit? :	No

GK of Chhattisgarh

Mandatory or Optional:	Mandatory
Display Number Panel:	Yes
Group All Questions:	No

Question Number : 101 Question Id : 9593764101 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

What was the previous name of Moti Bag (garden) of Raipur?

Options :

1. ✗ Sapre garden
2. ✗ Jawahar garden
3. ✗ Adinbara garden
4. ✗ Goerge II garden
5. ✓ Victoria garden

Question Number : 101 Question Id : 9593764101 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

रायपुर के मोती बाग का पुराना नाम क्या था?

Options :

1. ✗ सप्रे बाग
2. ✗ जवाहर बाग
3. ✗ एडिनवरा बाग
4. ✗ जार्ज द्वितीय बाग
5. ✓ विक्टोरिया बाग

Question Number : 102 Question Id : 9593764102 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who is the writer of the book called "Ratanpur Mahatmya"?

Options :

1. ✗ Raj Singh
2. ✓ Gopal Kavi
3. ✗ Shiv Raj
4. ✗ Jai Singh
5. ✗ None of the other options

Question Number : 102 Question Id : 9593764102 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

"रतनपुर महात्म्य" पुस्तक के लेखक कौन है?

Options :

1. ✗ राज सिंह
2. ✓ गोपाल कवि
3. ✗ शिव राज

4. ✖ जय सिंह

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 103 Question Id : 9593764103 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who is the main worker of Swarajya party in Chhattisgarh?

Options :

1. ✖ Pt. Lochan Prasad Pandey

2. ✖ Chhedi Lal

3. ✖ Pt. Ravi Shankar Shukla

4. ✔ E. Raghwendra Rao

5. ✖ None of the other options

Question Number : 103 Question Id : 9593764103 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ में स्वराज्य दल के प्रमुख कार्यकर्ता कौन थे?

Options :

1. ✖ पं. लोचन प्रसाद पांडे

2. ✖ छेदीलाल

3. ✖ पं. रविशंकर शुक्ल

4. ✔ ई. राघवेन्द्र राव

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 104 Question Id : 9593764104 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

National poet Makhan Lal Chaturvedi's famous poem "Pusp ki Abhilasha" was written in which Jail of Chhattisgarh? First line of this poem is "Chah Nahi Main Surbala Ke Gahne Mai Guntha Jaun".

Options :

1. ✖ Nagpur

2. ✖ Raipur

3. ✔ Bilaspur

4. ✖ Raigarh

5. ✖ None of the other options

Question Number : 104 Question Id : 9593764104 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

राष्ट्र कवि माखन लाल चतुर्वेदी जी ने "पुष्प की अभिलाषा" कविता छत्तीसगढ़ की किस जेल में लिखी थी? इस कविता की प्रथम पंक्ति थी "चाह नहीं मैं सुरबाला के गहने में गुथाँ जाऊँ।"

Options :

1. ✗ नागपुर
2. ✗ रायपुर
3. ✓ बिलासपुर
4. ✗ रायगढ़
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 105 Question Id : 9593764105 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In which Tahsil of Chhattisgarh, the prominent freedom fighter Gajadhar Sao was connected?

Options :

1. ✗ Durg
2. ✗ Raipur
3. ✗ Bilaspur
4. ✗ Dhamtari
5. ✓ None of the other options

Question Number : 105 Question Id : 9593764105 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ के प्रसिद्ध स्वतंत्रता संग्राम सेनानी श्री गजाधर साव किस तहसील से संबद्ध थे?

Options :

1. ✗ दुर्ग
2. ✗ रायपुर
3. ✗ बिलासपुर
4. ✗ धमतरी
5. ✓ अन्य विकल्पों में से कोई नहीं

Question Number : 106 Question Id : 9593764106 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Where is Menka dwar or Gate?

Options :

1. ✗ Sakti

2. ✖ Madnpur
3. ✖ Dhanpur
4. ✔ Chaitur Garh
5. ✖ Ram Garh

Question Number : 106 Question Id : 9593764106 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

मेनका द्वार या दरवाजा कहाँ है?

Options :

1. ✖ सकती
2. ✖ मदनपुर
3. ✖ धनपुर
4. ✔ चैतुरगढ़
5. ✖ रामगढ़

Question Number : 107 Question Id : 9593764107 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

In 1987, one of the prominent idol searched by the Archeological Department, which was made up by several part of different animals. In which place was this idol kept by government?

Options :

1. ✖ Malhar
2. ✖ Ratanpur
3. ✔ Talagaon
4. ✖ Sirpur
5. ✖ None of the other options

Question Number : 107 Question Id : 9593764107 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

पुरातत्व विभाग ने 1987 ई. में एक प्रख्यात मूर्ति खोजी जिसमें बहुत से प्राणियों के भाग सम्मिलित थे। इसे शासन ने कौन से स्थान पर रखा है?

Options :

1. ✖ मल्हार
2. ✖ रतनपुर
3. ✔ तलगांव
4. ✖ सिरपुर

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 108 Question Id : 9593764108 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

In which district Satdhara waterfall is?

Options :

1. ✖ Raipur
2. ✖ Kanker
3. ✖ Bilaspur
4. ✔ Dantewada
5. ✖ None of the other options

Question Number : 108 Question Id : 9593764108 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

सतधारा जलप्रपात किस जिले में है?

Options :

1. ✖ रायपुर
2. ✖ कांकेर
3. ✖ बिलासपुर
4. ✔ दंतेवाड़ा
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 109 Question Id : 9593764109 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Which famous temple in Chhattisgarh was constructed by king Veersen?

Options :

1. ✖ Mahamaya temple
2. ✖ Bhoramdeo temple
3. ✖ Rajiv Lochan temple
4. ✔ Ma Bumbleshwari temple
5. ✖ None of the other options

Question Number : 109 Question Id : 9593764109 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

राजा वीरसेन द्वारा छत्तीसगढ़ के किस प्रसिद्ध मंदिर का निर्माण कराया गया है?

Options :

1. ✖ महामाया मंदिर
2. ✖ भोरमदेव मंदिर
3. ✖ राजिव लोचन मंदिर
4. ✔ मां बूम्बलेश्वरी मंदिर
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 110 Question Id : 9593764110 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

How many kilometer lies Mahanadi basin in Chhattisgarh?

Options :

1. ✖ 70858
2. ✖ 65580
3. ✖ 6356
4. ✖ 2380
5. ✔ None of the other options

Question Number : 110 Question Id : 9593764110 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ में महानदी बेसिन का विस्तार कितने किलोमीटर में है?

Options :

1. ✖ 70858
2. ✖ 65580
3. ✖ 6356
4. ✖ 2380
5. ✔ अन्य विकल्पों में से कोई नहीं

Question Number : 111 Question Id : 9593764111 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

From which Hindu tithi, Rajim Kumbha mela commences?

Options :

1. ✔ Megh purnima
2. ✖ Kartik purnima
3. ✖ Poush purnima
4. ✖ Baisakh purnima
5. ✖ None of the other options

Question Number : 111 Question Id : 9593764111 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

राजिम कुंभ मेला किस हिन्दू तिथि से प्रारंभ होता है?

Options :

1. ✓ माघ पूर्णिमा
2. ✗ कार्तिक पूर्णिमा
3. ✗ पौष पूर्णिमा
4. ✗ बैसाख पूर्णिमा
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 112 Question Id : 9593764112 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Where is Hazrat Moose Khan Dargaha situated?

Options :

1. ✗ Kabirdham (Kawardha)
2. ✗ Rajnandgaon
3. ✗ Durg
4. ✓ Ratanpur
5. ✗ None of the other options

Question Number : 112 Question Id : 9593764112 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

हजरत मूसे खां का दरगाह कहाँ स्थित है?

Options :

1. ✗ कबीरधाम (कवर्धा)
2. ✗ राजनांदगांव
3. ✗ दुर्ग
4. ✓ रतनपुर
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 113 Question Id : 9593764113 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Jaydev Baghel was related to which field of work?

Options :

1. ☒ Craft
2. ☐ Music
3. ☐ Literature
4. ☐ Medicine
5. ☐ None of the other options

Question Number : 113 Question Id : 9593764113 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

जयदेव बघेल किस कार्यक्षेत्र से संबंधित थे?

Options :

1. ☒ शिल्प
2. ☐ संगीत
3. ☐ साहित्य
4. ☐ चिकित्सा
5. ☐ अन्य विकल्पों में से कोई नहीं

Question Number : 114 Question Id : 9593764114 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Another name of Mahanadi is:

Options :

1. ☐ Shuni
2. ☐ Suvarn Rekha
3. ☒ Chitrotpala
4. ☐ Mandakini
5. ☐ None of the other options

Question Number : 114 Question Id : 9593764114 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

महानदी का एक अन्य नाम है:

Options :

1. ☐ शुनि
2. ☐ सुवर्ण रेखा
3. ☒ चित्रोत्पला
4. ☐ मन्दाकिनी

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 115 Question Id : 9593764115 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

In which monument of Sirpur, the 'Panch Tantra' based famous stories are depicted?

Options :

1. ✖ Anand prabhu kuti vihar
2. ✖ Swastik vihar
3. ✔ Teevar dev vihar
4. ✖ Laxman temple
5. ✖ None of the other options

Question Number : 115 Question Id : 9593764115 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

इनमें से सिरपुर स्थित किस स्मारक में 'पंचतंत्र' आधारित प्रसिद्ध कहानियां रूपायित हैं?

Options :

1. ✖ आनंद प्रभु कुटी विहार
2. ✖ स्वास्तिक विहार
3. ✔ तीवर देव विहार
4. ✖ लक्ष्मण मंदिर
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 116 Question Id : 9593764116 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

From which of the following does the literary reference of Rishabh Teerth of Chhattisgarh is derived?

Options :

1. ✖ Raghuvansha
2. ✔ Mahabharat
3. ✖ Adipurana
4. ✖ Arthshatra
5. ✖ None of the other options

Question Number : 116 Question Id : 9593764116 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

छत्तीसगढ़ में ऋषभ तीर्थ की जानकारी का साहित्यिक स्रोत क्या है?

Options :

1. ✘ रघुवंश
2. ✔ महाभारत
3. ✘ आदिपुराण
4. ✘ अर्थशास्त्र
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 117 Question Id : 9593764117 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

The Gundadthur University is situated at:

Options :

1. ✘ Bilaspur
2. ✔ Jagadapur
3. ✘ Bhilai
4. ✘ Janjgir
5. ✘ None of the other options

Question Number : 117 Question Id : 9593764117 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

गुंडाधूर विश्वविद्यालय _____ में स्थित है।

Options :

1. ✘ बिलासपुर
2. ✔ जगदलपुर
3. ✘ भिलाई
4. ✘ जांजगीर
5. ✘ अन्य विकल्पों में से कोई नहीं

Question Number : 118 Question Id : 9593764118 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

'Paritranay Sadhunam' is a modal sentence of which dept. of Chhattisgarh administration?

Options :

1. ✔ Police dept.
2. ✘ Culture and tourism
3. ✘ Education
4. ✘ Forest dept.

5. ✖ None of the other options

Question Number : 118 Question Id : 9593764118 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

“परित्राणाय साधुनाम्” छत्तीसगढ़ प्रशासन के किस विभाग का आदर्श वाक्य है?

Options :

1. ✔ पुलिस विभाग
2. ✖ पर्यटन एवं संस्कृति
3. ✖ शिक्षा विभाग
4. ✖ वन विभाग
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 119 Question Id : 9593764119 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

The Hindi meaning of ‘Salwa judum’ is:

Options :

1. ✔ Shanti Ki Or Lauto
2. ✖ Public awareness
3. ✖ Tribal education
4. ✖ Vande Matram
5. ✖ None of the other options

Question Number : 119 Question Id : 9593764119 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

“सलवा जुडुम” का हिन्दी अर्थ है:

Options :

1. ✔ शांति की और लौटो
2. ✖ जनजागरण
3. ✖ आदिवासी शिक्षा
4. ✖ वंदे मातरम्
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 120 Question Id : 9593764120 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

Out of the following, which scheduled tribe celebrate “Kak Sad Parab”?

Options :

1. ✖ Kamar
2. ✔ Abujhmadia
3. ✖ Baiga
4. ✖ Pahari korwa
5. ✖ None of the other options

Question Number : 120 Question Id : 9593764120 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

निम्नलिखित में से कौन सी अनुसूचित जनजाति "काकसाइ परब" मनाते है?

Options :

1. ✖ कमार
2. ✔ अबुझमाड़िया
3. ✖ बैगा
4. ✖ पहाड़ी कोरवा
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 121 Question Id : 9593764121 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who celebrate "Bali Parab"?

Options :

1. ✔ Halba
2. ✖ Oraoh
3. ✖ Kamar
4. ✖ Kanwar
5. ✖ None of the other options

Question Number : 121 Question Id : 9593764121 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

बाली परब कौन मनाते है?

Options :

1. ✔ हल्बा
2. ✖ उरांव
3. ✖ कमार
4. ✖ कंवर
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 122 Question Id : 9593764122 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who speaks "Baigani" dialect?

Options :

1. ✗ Korwa
2. ✗ Korku
3. ✗ Kamar
4. ✗ Gond
5. ✓ None of the other options

Question Number : 122 Question Id : 9593764122 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

"बैगानी" बोली कौन बोलते हैं?

Options :

1. ✗ कोरवा
2. ✗ कोरकू
3. ✗ कमार
4. ✗ गोंड
5. ✓ अन्य विकल्पों में से कोई नहीं

Question Number : 123 Question Id : 9593764123 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who perform "Gaur Dance" (Bison Dance)?

Options :

1. ✗ Oraon
2. ✗ Baiga
3. ✗ Kamar
4. ✓ Madia
5. ✗ None of the other options

Question Number : 123 Question Id : 9593764123 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

"गौर नृत्य" कौन करते हैं?

Options :

1. ✗ उरांव
2. ✗ बैगा

3. ✖ कमार
4. ✔ माड़िया
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 124 Question Id : 9593764124 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Jamidar (landlord) of the Sonakhan estate of Chhattisgarh, belonged to which scheduled tribe?

Options :

1. ✖ Kanwar
2. ✔ Binjhwar
3. ✖ Gond
4. ✖ Halba
5. ✖ None of the other options

Question Number : 124 Question Id : 9593764124 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ के सोनाखान स्टेट के जमीदार किस जनजाति के थे?

Options :

1. ✖ कंवर
2. ✔ बिझंवार
3. ✖ गोंड
4. ✖ हल्बा
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 125 Question Id : 9593764125 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

"Dhumakuria" youth dormitory belongs to which of the following scheduled tribe?

Options :

1. ✖ Muria
2. ✖ Madia
3. ✖ Kamar
4. ✔ Oraon
5. ✖ None of the other options

Question Number : 125 Question Id : 9593764125 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

निम्नांकित अनुसूचित जनजातियों में "धुमकुरिया" युवागृह किस जनजाति की थी?

Options :

1. ✗ मुरिया
2. ✗ माड़िया
3. ✗ कमार
4. ✓ उरांव
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 126 Question Id : 9593764126 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

What was the minimum support price of 'A' grade paddy in the year 2014-15 in Chhattisgarh state?

Options :

1. ✗ Rs 1350 per quintal
2. ✓ Rs 1400 per quintal
3. ✗ Rs 1470 per quintal
4. ✗ Rs 1425 per quintal
5. ✗ None of the other options

Question Number : 126 Question Id : 9593764126 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

वर्ष 2014-15 में छत्तीसगढ़ राज्य में 'A' ग्रेड के धान का न्यूनतम समर्थन मूल्य क्या था?

Options :

1. ✗ ₹ 1350 प्रति क्विंटल
2. ✓ ₹ 1400 प्रति क्विंटल
3. ✗ ₹ 1470 प्रति क्विंटल
4. ✗ ₹ 1425 प्रति क्विंटल
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 127 Question Id : 9593764127 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

What percentage of subsidy can be provided to small and marginal farmers under "National Micro Irrigation Mission"?

Options :

1. ✓ 75 percent
2. ✗ 60 percent

- 3. ✖ 50 percent
- 4. ✖ 80 percent
- 5. ✖ None of the other options

Question Number : 127 Question Id : 9593764127 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

“राष्ट्रीय माइक्रो सिंचाई मिशन” के अन्तर्गत सीमांत एवं लघु कृषकों को कितनी प्रतिशत सब्सिडी दी जा सकती है?

Options :

- 1. ✔ 75 प्रतिशत
- 2. ✖ 60 प्रतिशत
- 3. ✖ 50 प्रतिशत
- 4. ✖ 80 प्रतिशत
- 5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 128 Question Id : 9593764128 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

What was the total production of sugarcane in the year 2012-13 in Chhattisgarh state?

Options :

- 1. ✖ 32.60 thousand tonnes
- 2. ✔ 37.30 thousand tonnes
- 3. ✖ 38.67 thousand tonnes
- 4. ✖ 38.88 thousand tonnes
- 5. ✖ None of the other options

Question Number : 128 Question Id : 9593764128 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

वर्ष 2012-13 में छत्तीसगढ़ राज्य में गन्ने का कुल उत्पाद कितना था?

Options :

- 1. ✖ 32.60 हजार टन
- 2. ✔ 37.30 हजार टन
- 3. ✖ 38.67 हजार टन
- 4. ✖ 38.88 हजार टन
- 5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 129 Question Id : 9593764129 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

How many districts are covered under "National Horticulture Mission" in Chhattisgarh state?

Options :

1. ✗ 27
2. ✗ 24
3. ✗ 20
4. ✓ 19
5. ✗ None of the other options

Question Number : 129 Question Id : 9593764129 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ में 'राष्ट्रीय उद्यानिकी' मिशन के अन्तर्गत कितने जिले शामिल किए गये हैं?

Options :

1. ✗ 27
2. ✗ 24
3. ✗ 20
4. ✓ 19
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 130 Question Id : 9593764130 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which district of Chhattisgarh has covered the maximum area of forest?

Options :

1. ✗ Bastar
2. ✓ Narayanpur
3. ✗ Koriya
4. ✗ Sukma
5. ✗ None of the other options

Question Number : 130 Question Id : 9593764130 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य में सर्वाधिक वनों का विस्तार वाला जिला कौन सा है?

Options :

1. ✗ बस्तर
2. ✓ नारायणपुर
3. ✗ कोरिया

4. ✖ सुकमां

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 131 Question Id : 9593764131 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the class has given the higher number of ration card in Chhattisgarh state?

Options :

1. ✖ Antyodaya (pink)

2. ✔ Priority (blue)

3. ✖ General (brown)

4. ✖ Disabled (green)

5. ✖ None of the other options

Question Number : 131 Question Id : 9593764131 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य में सर्वाधिक राशनकार्ड की संख्या किस को प्रदान की गयी है?

Options :

1. ✖ अन्त्योदय (गुलाबी)

2. ✔ प्राथमिकता (नीला)

3. ✖ सामान्य (भुरा)

4. ✖ निःशक्तजन

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 132 Question Id : 9593764132 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

How many project division are working for forest development in Chhattisgarh state?

Options :

1. ✖ Four

2. ✔ Seven

3. ✖ Ten

4. ✖ Three

5. ✖ None of the other options

Question Number : 132 Question Id : 9593764132 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य में वन विकास हेतु कितने परियोजना मण्डल काम कर रहे हैं?

Options :

1. ✖ चार
2. ✔ सात
3. ✖ दस
4. ✖ तीन
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 133 Question Id : 9593764133 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which is Biggest Pat of Chhattisgarh?

Options :

1. ✖ Main Pat
2. ✖ Jarang Pat
3. ✖ Samri Pat
4. ✔ Jashpur Pat
5. ✖ None of the other options

Question Number : 133 Question Id : 9593764133 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ का सबसे बड़ा पाट कौन सा है?

Options :

1. ✖ मैन पाट
2. ✖ जारंग पाट
3. ✖ सामरी पाट
4. ✔ जशपुर पाट
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 134 Question Id : 9593764134 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

One third of total disabled population of Chhattisgarh state lives only in the following two district:

Options :

1. ✖ Surguja and Raigarh
2. ✖ Bilaspur and Korba
3. ✖ Bastar and Koriya

4. ✓ Raipur and Drug
5. ✗ None of the other options

Question Number : 134 Question Id : 9593764134 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य की कुल निःशक्त जनसंख्या का एक तिहाई केवल निम्न दो जिलों में रहती है?

Options :

1. ✗ सरगुजा और रायगढ़
2. ✗ बिलासपुर और कोरबा
3. ✗ बस्तर और कोरिया
4. ✓ रायपुर और दुर्ग
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 135 Question Id : 9593764135 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

What is the percentage of protected forest to total area in Chhattisgarh?

Options :

1. ✓ 40.21
2. ✗ 43.13
3. ✗ 50.00
4. ✗ 32.00
5. ✗ None of the other options

Question Number : 135 Question Id : 9593764135 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

छत्तीसगढ़ के कुल वनक्षेत्र में संरक्षित वन का प्रतिशत कितना है?

Options :

1. ✓ 40.21
2. ✗ 43.13
3. ✗ 50.00
4. ✗ 32.00
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 136 Question Id : 9593764136 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical
Correct : 2 Wrong : 1

If a member of Janpad Panchayat quitting the Janpad and start living in other Janpad, then what will happen?

Options :

1. ✓ He shall not remain member
2. ✗ He shall remain member
3. ✗ He will complete this term
4. ✗ Janpad Panchayat will decide in this matter
5. ✗ None of the other options

Question Number : 136 Question Id : 9593764136 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

यदि कोई जनपद सदस्य उस जनपद को छोड़कर दूसरे जनपद में रहना शुरू कर दे तो क्या होगा?

Options :

1. ✓ वह सदस्य नहीं रहेगा
2. ✗ वह सदस्य बना रहेगा
3. ✗ वह अपना कार्यकाल पूरा करेगा
4. ✗ जनपद पंचायत इस विषय पर निर्णय लेगी
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 137 Question Id : 9593764137 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

What is correct about the minimum & maximum no. of members?

- I. Gram Panchayat 10-20 member
- II. Gram Panchayat 10-15 member
- III. Janpad Panchayat 10-20 member
- IV. Janpad Panchayat 10-25 member
- V. Zila Panchayat 10-35 member
- VI. Zila Panchayat 10-30 member

Options :

1. ✗ I, III, V
2. ✗ II, IV, VI
3. ✗ I, IV, VI
4. ✗ II, III, V
5. ✓ I, IV, V

Question Number : 137 Question Id : 9593764137 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

पंचायतों की न्यूनतम और अधिकतम संख्या के विषय में सही क्या है?

- I. ग्राम पंचायत 10-20 सदस्य
- II. ग्राम पंचायत 10-15 सदस्य
- III. जनपद पंचायत 10-20 सदस्य
- IV. जनपद पंचायत 10-25 सदस्य
- V. जिला पंचायत 10-35 सदस्य
- VI. जिला पंचायत 10-30 सदस्य

Options :

- 1. ✗ I, III, V
- 2. ✗ II, IV, VI
- 3. ✗ I, IV, VI
- 4. ✗ II, III, V
- 5. ✓ I, IV, V

Question Number : 138 Question Id : 9593764138 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which is not included in obligatory taxes imposed by Gram Panchayat?

- I. Light tax, light arrangement provided by Gram Panchayat
- II. Professional tax
- III. Tax on sarais/dharmshalas
- IV. Water tax
- V. Market fees
- VI. Fees on bullock cart stand

Options :

- 1. ✗ I, II, III
- 2. ✗ IV, V, VI
- 3. ✗ II, IV, VI
- 4. ✗ I, III, V
- 5. ✓ I, II, V

Question Number : 138 Question Id : 9593764138 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

ग्राम पंचायत द्वारा अधिरोपित किए जानेवाले अनिवार्य करों में क्या सम्मिलित नहीं है?

- I. ग्राम पंचायत द्वारा प्रदत्त प्रकाश व्यवस्था पर प्रकाश कर
- II. वृत्ति कर
- III. सरायों / धर्मशालाओं पर कर
- IV. जलकर
- V. बाजार फीस
- VI. बैलगाड़ी स्टेण्ड के लिए फीस

Options :

1. ✗ I, II, III
2. ✗ IV, V, VI
3. ✗ II, IV, VI
4. ✗ I, III, V
5. ✓ I, II, V

Question Number : 139 Question Id : 9593764139 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who of the following compared the Collector to a tortoise on whose back stood the elephant like Govt. of India?

Options :

1. ✗ Sir George Campbell
2. ✗ Sir William Wilson
3. ✗ The Imperial Gazetteer of India
4. ✓ Ramsay McDonald
5. ✗ None of the other options

Question Number : 139 Question Id : 9593764139 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

निम्न में से किस व्यक्ति ने जिलाधीश की तुलना एक ऐसे कछुए से की थी जिसकी पीठ पर हाथी रूपी भारत सरकार खड़ी है?

Options :

1. ✗ सर जार्ज कैम्पबेल
2. ✗ सर विलियम विल्सन
3. ✗ दि इम्पीरियल गजेटियर ऑफ़ इण्डिया
4. ✓ रेम्जे मेकडोनाल्ड
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 140 Question Id : 9593764140 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who chairs the annual meeting of the chief secretaries of all the states?

Options :

1. ☒ Cabinet Secretary
2. ☐ Home Secretary of Govt. of India
3. ☐ Home Minister
4. ☐ Prime Minister
5. ☐ None of the other options

Question Number : 140 Question Id : 9593764140 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

सभी राज्यों के मुख्य सचिवों के वार्षिक सम्मेलन की अध्यक्षता कौन करता है?

Options :

1. ☒ मन्त्रिमण्डलीय सचिव
2. ☐ भारत सरकार का गृह सचिव
3. ☐ केन्द्रीय गृह मन्त्री
4. ☐ प्रधान मन्त्री
5. ☐ अन्य विकल्पों में से कोई नहीं

Question Number : 141 Question Id : 9593764141 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Udanti sanctuary is situated at the boundary of which state?

Options :

1. ☐ Madhya Pradesh
2. ☐ Bihar
3. ☐ Maharashtra
4. ☒ Odisha
5. ☐ None of the other options

Question Number : 141 Question Id : 9593764141 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

उदन्ती अभयारण्य किस राज्य की सीमा पर स्थित है?

Options :

1. ☐ मध्य प्रदेश
2. ☐ बिहार

3. ✖ महाराष्ट्र
4. ✔ ओडिशा
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 142 Question Id : 9593764142 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which of the following tribes of Chhattisgarh is identified as extremely backward tribe by the central government?

Options :

1. ✖ Kol
2. ✔ Kamar
3. ✖ Halba
4. ✖ Kanwar
5. ✖ None of the other options

Question Number : 142 Question Id : 9593764142 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ की निम्नलिखित में से किस आदिवासी जनजाति को केन्द्र सरकार ने विशेष पिछड़ी जनजाति घोषित किया है?

Options :

1. ✖ कोल
2. ✔ कमार
3. ✖ हल्बा
4. ✖ कंवर
5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 143 Question Id : 9593764143 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

What percentage of water is estimated under surface water in Chhattisgarh state?

Options :

1. ✔ 80.6 Percent
2. ✖ 75.7 Percent
3. ✖ 82.5 Percent
4. ✖ 76.0 Percent
5. ✖ None of the other options

Question Number : 143 Question Id : 9593764143 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य में सतहजल के अन्तर्गत कितने प्रतिशत जल की उपलब्धता अनुमानित की गयी है?

Options :

1. ✓ 80.6 प्रतिशत
2. ✗ 75.7 प्रतिशत
3. ✗ 82.5 प्रतिशत
4. ✗ 76.0 प्रतिशत
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 144 Question Id : 9593764144 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

“Save girl, Educate girl” plan was launched in Chhattisgarh on:

Options :

1. ✗ 20 Jan, 2015
2. ✓ 22 Jan, 2015
3. ✗ 23 Jan, 2015
4. ✗ 26 Jan, 2015
5. ✗ None of the other options

Question Number : 144 Question Id : 9593764144 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

“बेटी बचाओ बेटी पढ़ाओ” योजना छत्तीसगढ़ राज्य में कब लागू की गई?

Options :

1. ✗ 20 जनवरी 2015
2. ✓ 22 जनवरी 2015
3. ✗ 23 जनवरी 2015
4. ✗ 26 जनवरी 2015
5. ✗ अन्य विकल्पों में से कोई नहीं

Question Number : 145 Question Id : 9593764145 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

When was state woman commission constituted?

Options :

1. ✓ 24 Mar, 2001
2. ✗ 26 Jan, 2002

- 3. ✖ 15 Aug, 2010
- 4. ✖ 26 Jan, 2011
- 5. ✖ None of the other options

Question Number : 145 Question Id : 9593764145 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

राज्य महिला आयोग का गठन कब किया गया था?

Options :

- 1. ✔ 24 मार्च 2001
- 2. ✖ 26 जनवरी 2002
- 3. ✖ 15 अगस्त 2010
- 4. ✖ 26 जनवरी 2011
- 5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 146 Question Id : 9593764146 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

When was the National Rural Livelihood Mission (NRLM) introduced in Chhattisgarh?

Options :

- 1. ✔ 1 Apr, 2013
- 2. ✖ 2 Oct, 2014
- 3. ✖ 26 Jan, 2013
- 4. ✖ 15 Aug, 2014
- 5. ✖ None of the other options

Question Number : 146 Question Id : 9593764146 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ में "राष्ट्रीय ग्रामीण आजीविका मिशन" (NRCM) कब लागू किया गया?

Options :

- 1. ✔ 1 अप्रैल 2013
- 2. ✖ 2 अक्टूबर 2014
- 3. ✖ 26 जनवरी 2013
- 4. ✖ 15 अगस्त 2014
- 5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 147 Question Id : 9593764147 Question Type : MCQ Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Which is a major Jalashay projet in Chhattisgarh state?

Options :

1. ✖ Sukhanal Barrage
2. ✖ Ghumariya Barrage
3. ✖ Mongara Barrage
4. ✖ Saradih Barrage
5. ✔ None of the other options

Question Number : 147 Question Id : 9593764147 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ राज्य में कौन सी बड़ी जलाशय परियोजना है?

Options :

1. ✖ सुखनाला बैराज
2. ✖ घुमरीया बैराज
3. ✖ मोंगरा बैराज
4. ✖ साराडीह बैराज
5. ✔ अन्य विकल्पों में से कोई नहीं

Question Number : 148 Question Id : 9593764148 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

How many forest division are approved by the Government of India for scientific management of forest of Chhattisgarh state?

Options :

1. ✖ 32
2. ✖ 33
3. ✔ 34
4. ✖ 35
5. ✖ None of the other options

Question Number : 148 Question Id : 9593764148 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

भारत सरकार के द्वारा छत्तीसगढ़ राज्य के कितने वन संभाग को वनों के वैज्ञानिक प्रबन्धन के लिए स्वीकृति दी गयी है?

Options :

1. ✖ 32

2. ✖ 33

3. ✔ 34

4. ✖ 35

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 149 Question Id : 9593764149 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

“Manthan–Award” received by the Government of Chhattisgarh is related to which of the followings?

Options :

1. ✖ Increase in milk-production

2. ✖ Increase in rice-production

3. ✔ Computerization of public distribution system

4. ✖ Road Transport

5. ✖ None of the other options

Question Number : 149 Question Id : 9593764149 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

छत्तीसगढ़ सरकार को प्राप्त ‘मंथन-अवार्ड’ का सम्बन्ध निम्न में से किससे है?

Options :

1. ✖ दुग्ध उत्पादन वृद्धि से

2. ✖ चावल उत्पादन वृद्धि से

3. ✔ सार्वजनिक वितरण प्रणाली के कम्प्यूटरीकृत से

4. ✖ सड़क यातायत से

5. ✖ अन्य विकल्पों में से कोई नहीं

Question Number : 150 Question Id : 9593764150 Question Type : MCQ Display Question Number : Yes Single Line Question
Option : No Option Orientation : Vertical

Correct : 2 Wrong : 1

Who was awarded Sanskrit Bhasha Samman in the year 2014 in Chhattisgarh?

Options :

1. ✖ Shri Ganga Ram Paikra

2. ✔ Dr. Ramakant Shukla

3. ✖ Shri Vibhudeep Nanda

4. ✖ Shri Ambar Singh Bhardwaj

5. ✖ None of the other options

छत्तीसगढ़ में वर्ष 2014 का संस्कृत भाषा सम्मान किसे प्रदान किया गया है?

Options :

1. ✖ श्री गंगाराम पैकरा
2. ✔ डा. रमाकांत शुक्ला
3. ✖ श्री विभुदीप नंद
4. ✖ श्री अम्बर सिंह भारद्वाज
5. ✖ अन्य विकल्पों में से कोई नहीं

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