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FOR JNUEE EXAM PREPARATION

JNUEE 2022 Question Paper · Ph.D Molecular Medicine

EXAM	YEAR	TYPE	SUBJECT
JNUEE	2022	Question Paper	Ph.D Molecular Medicine

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National Testing Agency
Excellence in Assessment

Test Date : 09 Dec 2022 **Test Slot : Slot 1**

Subject : CMMH-Molecular Medicine

Sl. No.1
QBID:9052001

Which of the following statements about glucose metabolism is true?

(1) Glucagon increases the rate of glycolysis
(2) Glycolysis requires NAPDP as substrate of one of its enzymes
(3) The main product of glycolysis in red blood cells is pyruvate
(4) In glycolysis, glucose is cleaved in two three-carbon compounds

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13601]
2[Option ID=13602]
3[Option ID=13603]
4[Option ID=13604]

Sl. No.2
QBID:9052002

Match the enzymes with the metabolic pathway from the following table

A	Arginase	1	Gluconeogenesis
B	Acetyl-CoA carboxylase	2	Glycogenesis
C	Acyl-CoA dehydrogenase	3	Fatty acid synthesis
D	Phosphoenolpyruvate carboxykinase	4	Urea cycle
E	Phosphoglucomutase	5	Beta-oxidation

Chose the correct combination from the below given options:

(1) A-3; B-4; C-5; D-2; E-1
(2) A-4; B-5; C-3; D-2; E-1
(3) A-4; B-5; C-3; D-1; E-2
(4) A-4; B-3; C-5; D-1; E-2

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13605]
2[Option ID=13606]
3[Option ID=13607]
4[Option ID=13608]

Sl. No.3
QBID:9052003

Read the below given two statements carefully:

Statement I: High levels of bilirubin can cause damage to the brains of new born infants.

Statement II: Bilirubin is a cyclic tetrapyrrole molecule

In the light of the above statements, choose the most appropriate answer from the options given below:

(1) Both Statement I and Statement II are correct
(2) Both Statement I and Statement II are incorrect
(3) Statement I is correct but Statement II is incorrect
(4) Statement I is incorrect but Statement II is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13609]
2[Option ID=13610]
3[Option ID=13611]
4[Option ID=13612]

Sl. No.4
QBID:9052004

A 15-year-old adolescent girl came to the clinic with bruises on her lower extremities. Which of the followings is the *least likely* reason to explain the bleeding sign exhibited by her?

(1) Low platelet count
(2) Von Willebrand disease
(3) Haemophilia
(4) Aspirin ingestion

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13613]
2[Option ID=13614]
3[Option ID=13615]
4[Option ID=13616]

Sl. No.5
QBID:9052005

What disease is often associated with a breakdown of a cell's ability to regulate or control its own division?

(1) Emphysema
(2) Hypertrophy
(3) Apoptosis
(4) Neoplasia

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13617]
2[Option ID=13618]
3[Option ID=13619]
4[Option ID=13620]

Sl. No.6
QBID:9052006

Which of the following amino acids is main contributor to the transport of nitrogen destined for its excretion as urea:

(1) Alanine
(2) Glutamine
(3) Lysine
(4) Ornithine

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13621]
2[Option ID=13622]
3[Option ID=13623]
4[Option ID=13624]

Sl. No.7
QBID:9052007

Given below are two statements:

Statement I: The great majority of mitochondrial proteins are encoded by the nuclear genome.

Statement II: Import of proteins into mitochondria involves proteins known as importins.

In the light of the above statements, choose the *correct* answer from the options given below

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is correct but Statement II is false
(4) Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13625]
2[Option ID=13626]
3[Option ID=13627]
4[Option ID=13628]

Sl. No.8
QBID:9052008

Read the below given two statements carefully:

Statement I: Albumin is stabilised by multiple intrachain disulfide bonds.

Statement II: Albumin facilitates the movement of fatty acids through the circulation.

In the light of the above statements, choose the *correct* answer from the options given below

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is correct but Statement II is false
(4) Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13629]
2[Option ID=13630]
3[Option ID=13631]
4[Option ID=13632]

Sl. No.9
QBID:9052009

Match List I with List II

List I	List II
A. Complex-I	I. Q-Cyt c oxidoreductase
B. Complex-II	II. Cyt c oxidase
C. Complex-III	III. NADH-Q oxidoreductase
D. Complex-IV	IV. Succinate-Q reductase

Choose the correct answer from the options given below:

(1) A-II; B-III; C-I; D-IV
(2) A-I; B-II; C-IV; D-III
(3) A-III; B-IV; C-I; D-II
(4) A-II; B-I; C-IV; D-III

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13633]
2[Option ID=13634]
3[Option ID=13635]
4[Option ID=13636]

Sl. No.10
QBID:9052010

Which one of the followings is not a reducing sugar?

(1) Erythrose
(2) Galactose
(3) Ribose
(4) Fructose

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13637]
2[Option ID=13638]
3[Option ID=13639]
4[Option ID=13640]

Sl. No.11
QBID:9052011

Tubulins and actins are subunits of microtubules and actin filaments, respectively. They bind and hydrolyse which of the following nucleoside triphosphates for their activity?

(1) Actin binds GTP and tubulin binds ATP
(2) Actin binds both ATP and GTP while tubulin binds only ATP
(3) Actin binds UTP and tubulin binds GTP
(4) Actin binds ATP and tubulin binds GTP

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13641]
2[Option ID=13642]
3[Option ID=13643]
4[Option ID=13644]

Sl. No.12
QBID:9052012

In a population of unsynchronized mammalian cells, the maximum number of cells will coincide with which of the following phase of the cell cycle?

(1) S
(2) G1
(3) G2
(4) M

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13645]
2[Option ID=13646]
3[Option ID=13647]
4[Option ID=13648]

Sl. No.13
QBID:9052013

One copy of telomerase RNA gene is non-functional in dyskeratosis congenita disease causing progressive bone marrow failure. This is due to

(1) Telomere lengthening
(2) Telomere duplication
(3) Telomere instability
(4) Telomere shortening

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13649]
2[Option ID=13650]
3[Option ID=13651]
4[Option ID=13652]

Sl. No.14
QBID:9052014

Leucine rich repeat (LRR) receptor kinases contain two important domains. Receptor serine-threonine kinases and leucine rich repeats that contain coiled-coil domain required for protein-protein interaction. What are the organization of two domains?

(1) LRR domain is extracellular whereas the kinase domain is cytoplasmic
(2) Kinase domain is extracellular whereas LRR domain is cytoplasmic
(3) Kinase domain is buried in membrane and LRR domain is cytoplasmic
(4) LRR domain is buried in membrane and kinase domain is extracellular

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13653]
2[Option ID=13654]
3[Option ID=13655]
4[Option ID=13656]

Sl. No.15
QBID:9052015

Which one the following statements is not true for helix-loop-helix motif containing proteins?

(1) They contain two alpha helices, one short and one long
(2) They are connected by a short loop
(3) They bind to DNA
(4) They are acidic in nature

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13657]
2[Option ID=13658]

3[Option ID=13659]
4[Option ID=13660]

Sl. No.16
QBID:9052016

Cells contain several kinds of RNA. The smallest RNA molecules are

(1) Ribosomal RNA: rRNA
(2) Small nuclear RNA: snRNA
(3) Transfer RNA: tRNA
(4) Messenger RNA: mRNA

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13661]
2[Option ID=13662]
3[Option ID=13663]
4[Option ID=13664]

Sl. No.17
QBID:9052017

A polypeptide contains six glutamine, five aspartic acid, four arginine, two glutamic acid, three histidine and two lysine residues. The overall charge will be

(1) Five (-)
(2) Two (+)
(3) Three (+)
(4) Four (-)

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13665]
2[Option ID=13666]
3[Option ID=13667]
4[Option ID=13668]

Sl. No.18
QBID:9052018

Hydroxyurea blocks DNA replication by

(1) Inhibiting DNA polymerase
(2) Inhibiting ribonucleotide reductase
(3) Inhibiting lagging strand DNA synthesis
(4) Inhibiting replicative helicase

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13669]
2[Option ID=13670]

3[Option ID=13671]
4[Option ID=13672]

Sl. No.19
QBID:9052019

Sickle cell anemia: abnormal hemoglobin causing deformation of RBC results in resistance from

(1) *Plasmodium falciparum*
(2) *Leishmania donovani*
(3) *Toxoplasma gondi*
(4) *Entamoeba histolytica*

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13673]
2[Option ID=13674]
3[Option ID=13675]
4[Option ID=13676]

Sl. No.20
QBID:9052020

Depending on the photosynthetic mechanism there are different types of plants. Approximately 95% plants on earth are what types of plants?

(1) C3 plants
(2) C4 plants
(3) CAM plants
(4) C5 plants

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13677]
2[Option ID=13678]
3[Option ID=13679]
4[Option ID=13680]

Sl. No.21
QBID:9052021

One example of a pathway of Juxtacrine signalling is:

(1) Notch-delta pathway
(2) Wnt signaling pathway
(3) EGF signaling pathway
(4) VEGF signaling pathway

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13681]
2[Option ID=13682]
3[Option ID=13683]
4[Option ID=13684]

Sl. No.22
QBID:9052022

A man wants to paint a wall having dimensions of 35m length and 20m width. The painting rates are Rs. 16 per sq. m. How much will he need to pay for painting the wall?

(1) Rs. 10,800
(2) Rs. 11,000
(3) Rs. 11,200
(4) Rs. 11,400

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13685]
2[Option ID=13686]
3[Option ID=13687]
4[Option ID=13688]

Sl. No.23
QBID:9052023

During embryonic development, the term epiboly refers to:

(1) The movement of cells
(2) The movement of DNA
(3) Movement of actin
(4) Movement of spectrin

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13689]
2[Option ID=13690]
3[Option ID=13691]
4[Option ID=13692]

Sl. No.24
QBID:9052024

One way to inhibit the formation of new blood vessels in tumor tissues is to:

(1) Block VEGF signaling
(2) Block EGF signaling
(3) Block BMP signaling
(4) Block TGF signaling

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13693]
2[Option ID=13694]
3[Option ID=13695]
4[Option ID=13696]

Sl. No.25
QBID:9052025

Fibroblasts are cells which can regenerate:

(1) The epithelial layer
(2) The endothelial layer
(3) Both epithelial and endothelial layers
(4) The extracellular matrix

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13697]
2[Option ID=13698]
3[Option ID=13699]
4[Option ID=13700]

Sl. No.26
QBID:9052026

Which of the following animals was cloned by somatic nuclear transfer technique?

(1) Dolly the sheep
(2) Billy the goat
(3) Tommy the dog
(4) Kitty the cat

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13701]
2[Option ID=13702]
3[Option ID=13703]
4[Option ID=13704]

Sl. No.27
QBID:9052027

A student has to perform SDS-PAGE and needs to make 25mM Tris buffer pH 8.3. The stock solution of Tris in the lab is 1M. How much volume should he add from the stock solution to make 250 ml solution of 25mM Tris buffer pH 8.3?

(1) 6.0 ml
(2) 6.25 ml
(3) 6.50 ml
(4) 6.75 ml

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13705]
2[Option ID=13706]
3[Option ID=13707]
4[Option ID=13708]

Sl. No.28
QBID:9052028

Fill in the missing number in the sequence below:

75.0, 50.0, 33.3, 22.2, X

(1) 14.8
(2) 15.8
(3) 16.8
(4) 17.8

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13709]
2[Option ID=13710]
3[Option ID=13711]
4[Option ID=13712]

Sl. No.29
QBID:9052029

Water passes through the paracellular space via:

(1) Aquaporins
(2) Tight junctions
(3) Hemidesmosomes
(4) Focal adhesions

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13713]
2[Option ID=13714]
3[Option ID=13715]
4[Option ID=13716]

Sl. No.30
QBID:9052030

A supervisor asks the student to perform cell fractionation to separate the cytosolic components and the mitochondria. What should he use as markers of the cytoplasm and mitochondria fractions?

(1) Tubulin and Cox-IV
(2) Actin and Rho A
(3) Keratin and cadherin
(4) Spectrin and collagen

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13717]
2[Option ID=13718]

3[Option ID=13719]
4[Option ID=13720]

Sl. No.31
QBID:9052031

Which one of them is the weakest?

(1) Ionic bond
(2) Covalent bond
(3) Metallic bond
(4) Van der Waals force

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13721]
2[Option ID=13722]
3[Option ID=13723]
4[Option ID=13724]

Sl. No.32
QBID:9052032

Which of the following substances has a dipole moment more than zero?

(1) Water
(2) Methane
(3) Carbon dioxide
(4) Nitrogen

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13725]
2[Option ID=13726]
3[Option ID=13727]
4[Option ID=13728]

Sl. No.33
QBID:9052033

Which of the following properties decrease along a period?

(1) Ionization energy
(2) Metallic character
(3) Electron affinity
(4) Valency

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13729]
2[Option ID=13730]
3[Option ID=13731]
4[Option ID=13732]

Sl. No.34
QBID:9052034

The stabilization of a lyophobic colloid is due to

(1) Preferential adsorption of similar charged particles on colloid surface
(2) The large electrokinetic potential developed in the colloid
(3) The formation of covalent bond between two phases
(4) The viscosity of medium

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13733]
2[Option ID=13734]
3[Option ID=13735]
4[Option ID=13736]

Sl. No.35
QBID:9052035

Which one is best colligative property in determining the molecular mass of the polymer?

(1) Osmotic pressure
(2) Elevation in boiling point
(3) Depression in freezing point
(4) Osmosis

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13737]
2[Option ID=13738]
3[Option ID=13739]
4[Option ID=13740]

Sl. No.36
QBID:9052036

Which of the following is not a characteristic property of arenes?

(1) Delocalization of π-electrons
(2) Resonance
(3) Greater stability
(4) Electrophilic additions

(1) 1

(2) 2

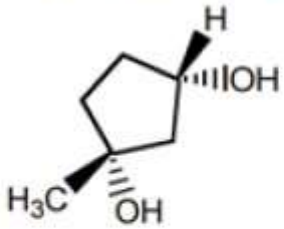
(3) 3

(4) 4

1[Option ID=13741]
2[Option ID=13742]
3[Option ID=13743]
4[Option ID=13744]

Sl. No.37
QBID:9052037

What is the complete IUPAC name of the following substance?



(1) (1S,3R)-1-methylcyclopentane-1,3-diol
(2) (1S,3S)-1-methylcyclopentane-1,3-diol
(3) (1R,3R)-1-methylcyclopentane-1,3-diol
(4) (1R,3S)-1-methylcyclopentane-1,3-diol

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13745]
2[Option ID=13746]
3[Option ID=13747]
4[Option ID=13748]

Sl. No.38
QBID:9052038

Which of the following compound is yielded after the reduction of nitro alkanes?

(1) Amine
(2) Acid
(3) Diazo compounds
(4) Alcohols

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13749]
2[Option ID=13750]
3[Option ID=13751]
4[Option ID=13752]

Sl. No.39
QBID:9052039

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: In the human genetic code, multiple codons can code for the same amino acid.

Reason R : The last nucleotide of the codon triplet does not always strictly follow the Watson-Crick rule of complementary base pairing between the last base of the codon and the first base of the anticodon.

In the light of the above statements, choose the correct answer from the options given below

(1) Both A and R are true and R is the correct explanation of A
(2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false
(4) A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13753]
2[Option ID=13754]
3[Option ID=13755]
4[Option ID=13756]

Sl. No.40
QBID:9052040

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Isoelectric focussing is able to separate proteins on the basis of isoelectric pH

Reason R: Ampholytes generate a pH gradient within a polyacrylamide gel matrix and proteins with greater molecular weight migrate faster than proteins having small molecular weight in this type of electrophoresis.

In the light of the above statements, choose the *correct* answer from the options given below

(1) Both A and R are true and R is the correct explanation of A
(2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false
(4) A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13757]
2[Option ID=13758]
3[Option ID=13759]
4[Option ID=13760]

Sl. No.41
QBID:9052041

Given below are two statements: one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Physiological (neonatal) jaundice comprises of increased conjugated fraction of bilirubin.

Reason R: Physiological (neonatal) jaundice results from accelerated hemolysis and an immature hepatic system for the uptake, conjugation and secretion of bilirubin.

In the light of the above statements, choose the *correct* answer from the options given below

(1) Both A and R are true and R is the correct explanation of A
(2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false
(4) A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13761]
2[Option ID=13762]
3[Option ID=13763]
4[Option ID=13764]

Sl. No.42
QBID:9052042

Match List I with List II

List I	List II
A. Hepatitis B virus	I. Skin cancer
B. Human papilloma virus	II. Nasopharyngeal cancer
C. Epstein Barr virus	III. Cervical cancer
D. Herpes virus	IV. Hepatocellular cancer

Choose the correct answer from the options given below:

(1) A- III, B- II, C- IV, D-I
(2) A- II, B- IV, C- I, D- III
(3) A- I, B-III , C- II, D- IV
(4) A- IV, B- III, C-II, D-I

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13765]
2[Option ID=13766]
3[Option ID=13767]
4[Option ID=13768]

Sl. No.43
QBID:9052043

Which of the following molecules are considered to be the chief regulator of systemic iron homeostasis in the human body by binding to the cellular iron exporter, Ferroportin, and triggering its internalization and degradation?

(1) Transferrin
(2) Hepcidin
(3) Ferritin
(4) Ceruloplasmin

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13769]
2[Option ID=13770]
3[Option ID=13771]
4[Option ID=13772]

Sl. No.44
QBID:9052044

Which of the following statements about collagen is NOT true?

(1) It is the most abundant of the fibrous proteins in the human body.
(2) It derives its tensile strength from its triple helical structure.
(3) It undergoes post-translational modification
(4) Every third amino acid residue in collagen is glutamine

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13773]
2[Option ID=13774]
3[Option ID=13775]
4[Option ID=13776]

Sl. No.45
QBID:9052045

Recombinant fusion proteins synthesized with the help of recombinant DNA technology usually contain a new domain that is added to the protein of interest, so that they can be purified with the help of which of the following types of chromatography?

(1) Ion exchange chromatography
(2) Size exclusion chromatography
(3) Affinity chromatography
(4) HPLC – High performance liquid chromatography

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13777]
2[Option ID=13778]
3[Option ID=13779]
4[Option ID=13780]

Sl. No.46
QBID:9052046

Glycogen stored in the muscle is unable to produce glucose on breaking down because muscle lacks the enzyme:

(1) Glycogen phosphorylase
(2) Debranching enzyme
(3) Glucokinase
(4) Glucose 6-phosphatase

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13781]
2[Option ID=13782]
3[Option ID=13783]
4[Option ID=13784]

Sl. No.47
QBID:9052047

Water potential (Ψw) is a measure of potential energy of water under constant temperature and pressure. It is determined by solute potential (Ψs) and pressure potential (Ψp). Under drought conditions, accumulation of osmolyte will cause:

(1) Increase in water potential (Ψw)
(2) Lowering of pressure potential (Ψp)
(3) Decrease in water potential (Ψw)
(4) Increase in pressure potential (Ψp)

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13785]
2[Option ID=13786]
3[Option ID=13787]
4[Option ID=13788]

Sl. No.48
QBID:9052048

Given below are two statements:

Statement I: Passive absorption is regulated by transpiration created by tension pull by the xylem, and requires both symplastic and apoplastic movement.

Statement II: Respiratory energy is required in the process.

In the light of the above statements, choose the *most appropriate* answer from the options given below

(1) Statement I is correct but Statement II is incorrect
(2) Both Statement I and Statement II are correct
(3) Both Statement I and Statement II are incorrect
(4) Statement I is incorrect but Statement II is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13789]
2[Option ID=13790]
3[Option ID=13791]
4[Option ID=13792]

Sl. No.49
QBID:9052049

Match List I with List II

List I	List II
A. *Xanthomonas campestris*	I. Symbiosis/nodulation
B. *Agrobacterium rhizogenes*	II. Powdery mildew disease
C. *Rhizobium meliloti*	III. Leaf blight disease
D. *Erysiphe pisi*	IV. Hairy root disease

Choose the correct answer from the options given below:

(1) A-IV, B-II, C-I, D-III
(2) A-III, B-IV, C-I, D-II
(3) A-I, B-II, C-III, D-IV
(4) A-II, B-III, C-IV, D-I

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13793]
2[Option ID=13794]
3[Option ID=13795]
4[Option ID=13796]

Sl. No.50
QBID:9052050

For formation of flowers in a plant, pink flowers (P) are dominant over green (p). Also, tall height (T) is dominant over short (t) stature. What would be the phenotypic and genotypic ratio if a parent with both pink and tall homozygous feature is crossed with another parent with both properties in heterozygous genotype?

(1) Phenotypically all plants would be tall with pink flowers. Genotypically, four combinations would be there.
(2) Half of the siblings will have pink flowers and would be tall, and the other half with green flowers and short plant stature. Genotypically, only two types would be there.
(3) There would be all categories of plants, pink flowers and tall stature, pink flowers and short stature, green flowers and tall stature, green flowers and short stature. Each will be homozygous for the respective allele.
(4) All plants will have red flowers and tall stature. They would be homozygous for the respective allele.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13797]
2[Option ID=13798]
3[Option ID=13799]
4[Option ID=13800]

Sl. No.51
QBID:9052051

Photoblastic seeds require light of specific wavelength for germination. If a set of seeds are given 4 separate treatments, which set or sets will germinate?
Set1: Red light followed by far red light
Set2: Dark cycle followed by red light
Set3: Dark cycle followed by far red light
Set4: Far red light followed by red light

Choose the correct answer from the options given below:
(1) Only Set1 will germinate
(2) Both Set2 and Set3 will germinate
(3) Both Set1 and Set3 will germinate
(4) Only Set 2 and Set4 will germinate.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13801]
2[Option ID=13802]
3[Option ID=13803]
4[Option ID=13804]

Sl. No.52
QBID:9052052

The major difference between viruses and viroids are:
(1) Viruses have DNA genome, whereas viroids have RNA genome.
(2) Viruses have replicases, whereas viroids do not.
(3) Viruses use the host translation machinery for protein synthesis, whereas viroids have their own translation machinery.
(4) Viroids have linear genome, whereas viruses have circular genome.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13805]
2[Option ID=13806]
3[Option ID=13807]
4[Option ID=13808]

Sl. No.53
QBID:9052053

One of the arms of a triangle is extended and the relevant exterior angle measures 110°. If the opposite interior angles are equal to each other, which of the following is the measure of the equal angles of the triangle?

(1) 35
(2) 70
(3) 60
(4) 55

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13809]
2[Option ID=13810]
3[Option ID=13811]
4[Option ID=13812]

Sl. No.54
QBID:9052054

A large circle has a small circle inside it; the perimeter of the small circle is 4∏cm and its diameter is equal to the radius of the large circle. What is the difference between the area of large and small circle?

(1) 12∏ cm^2
(2) 8∏ cm^2
(3) 16 ∏ cm^2
(4) 2∏ cm^2

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13813]
2[Option ID=13814]
3[Option ID=13815]
4[Option ID=13816]

Sl. No.55
QBID:9052055

What is the supplementary of the largest angle if the interior angles of a triangle are given as 2A + 5, 6A, and 3A- 23?

(1) 108^0
(2) 54^0
(3) 72^0
(4) 126^0

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13817]
2[Option ID=13818]

3[Option ID=13819]
4[Option ID=13820]

Sl. No.56
QBID:9052056

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Sickle cell disease is an autosomal recessive disorder in the β-chain of hemoglobin.

Reason R: The normal glutamine residue at the position 6 of the β-chain is replaced with valine.

In the light of the above statements, choose the correct answer from the options given below

(1) Both A and R are true and R is the correct explanation of A
(2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false
(4) A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13821]
2[Option ID=13822]
3[Option ID=13823]
4[Option ID=13824]

Sl. No.57
QBID:9052057

Elevation of which one of the following is not treated as a biomarker for cardiovascular disease?

(1) C-reactive protein
(2) High-density lipoprotein (HDL)
(3) Homocysteine
(4) Lipoprotein A

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13825]
2[Option ID=13826]
3[Option ID=13827]
4[Option ID=13828]

Sl. No.58
QBID:9052058

Given below are two statements:

Statement I: Blood vessel walls are organized into three concentric layers: intima, media and adventitia.

Statement II: The media is primarily composed of smooth muscle cells and extracellular matrix.

In the light of the above statements, choose the most appropriate answer from the options given below

(1) Both Statement I and Statement II are correct
(2) Both Statement I and Statement II are incorrect
(3) Statement I is correct but Statement II is incorrect
(4) Statement I is incorrect but Statement II is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13829]
2[Option ID=13830]
3[Option ID=13831]
4[Option ID=13832]

Sl. No.59
QBID:9052059

Which one of the following statements is not true for bacterial endotoxins?

(1) It is a component of the outer membrane of gram-positive bacteria.
(2) Bacterial endotoxin is composed of lipopolysaccharides (LPS).
(3) LPS is composed of sugar chains connected to a long-chain fatty acid anchor.
(4) Lipid A binds to the Toll-like receptor 4 (TLR4) via CD14.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13833]
2[Option ID=13834]
3[Option ID=13835]
4[Option ID=13836]

Sl. No.60
QBID:9052060

Which one of the following diseases is not a lysosomal storage disorder?

(1) Tay-Sachs disease
(2) Niemann-Pick Type C disease
(3) Von Gierke disease
(4) Gaucher disease

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13837]
2[Option ID=13838]
3[Option ID=13839]
4[Option ID=13840]

Sl. No.61
QBID:9052061

Given below are two statements:

Statement I: Autosomal dominant disorders affect both males and females equally

Statement II: X-linked disorders are only transmitted by the heterozygous females to their sons.

In the light of the above statements, choose the most appropriate answer from the options given below

(1) Both Statement I and Statement II are correct
(2) Both Statement I and Statement II are incorrect
(3) Statement I is correct but Statement II is incorrect
(4) Statement I is incorrect but Statement II is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13841]
2[Option ID=13842]
3[Option ID=13843]
4[Option ID=13844]

Sl. No.62
QBID:9052062

Most cases of Zellweger syndrome are due to the mutations in genes involving the biogenesis of which organelle?

(1) Mitochondria
(2) Endoplasmic reticulum
(3) Lysosomes
(4) Peroxisomes

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13845]
2[Option ID=13846]
3[Option ID=13847]
4[Option ID=13848]

Sl. No.63
QBID:9052063

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Fragile X syndrome is a loss of function of single gene disorder.

Reason R: Affected individuals usually have less repeats of the CGG sequence in the *FMR1* gene.

In the light of the above statements, choose the correct answer from the options given below

(1) Both A and R are true and R is the correct explanation of A
(2) Both A and R are true but R is NOT the correct explanation of A
(3) A is true but R is false
(4) A is false but R is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13849]
2[Option ID=13850]
3[Option ID=13851]
4[Option ID=13852]

Sl. No.64
QBID:9052064

The term xenophagy refers to which one of the following modes of autophagy?

(1) Autophagy of peroxisomes
(2) Autophagy of mitochondria
(3) Autophagy of protein aggregates
(4) Autophagy of bacteria and viruses

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13853]
2[Option ID=13854]
3[Option ID=13855]
4[Option ID=13856]

Sl. No.65
QBID:9052065

Which one of the following proteins involved in blood coagulation is not activated by Thrombin?

(1) Factor X
(2) Factor VIII
(3) Factor V
(4) Factor VII

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13857]
2[Option ID=13858]
3[Option ID=13859]
4[Option ID=13860]

Sl. No.66
QBID:9052066

Given the following values of ΔH and ΔS, which one of the following process can spontaneously take place at 300 K without violating the second law of thermodynamics?ΔH ($Kcal.Mol^{-1}$) and ΔS ($cal.Mol^{-1}.K^{-1}$).

(1) –20, +80
(2) –20, –80
(3) +20, +30
(4) +20, +80

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13861]
2[Option ID=13862]
3[Option ID=13863]
4[Option ID=13864]

Sl. No.67
QBID:9052067

Among the following interactions that stabilize protein structure, which of the following is an entropic contribution?

(1) Covalent bonds
(2) Hydrogen bonds
(3) Hydrophobic interaction
(4) Disulphide bridges

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13865]
2[Option ID=13866]
3[Option ID=13867]
4[Option ID=13868]

Sl. No.68
QBID:9052068

X-ray diffraction (XRD) is a widely used technique to analyze the structure of solids. In an XRD experiment, a solid crystal is irradiated with monochromatic X-rays and the resulting data consists of diffraction spots. These spots occur due to explanation given by which one of the following statements?

(1) X-rays are absorbed by the crystals and the structure in turn emits radiation at specific wavelengths
(2) X-rays are refracted through the crystal and the rays bend at specific angles
(3) Fluorescence of solids when irradiated by X-rays
(4) X-rays are scattered by individual atoms in the solids.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13869]
2[Option ID=13870]
3[Option ID=13871]
4[Option ID=13872]

Sl. No.69
QBID:9052069

Given below are two statements:

Statement I: In FT-IR or NMR spectroscopy if the number of scans is doubled then the signal intensity gets doubled.

Statement II: In FT-IR or NMR spectroscopy if the number of scans is doubled then the sensitivity (signal-to-noise) increases by about 40%.

In the light of the above statements, choose the *Correct* answer from the options given below

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is correct but Statement II is false
(4) Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13873]
2[Option ID=13874]
3[Option ID=13875]
4[Option ID=13876]

Sl. No.70
QBID:9052070

Two identical containers A and B hold equal amount of water. Initially the water in container A is at 90 °C, and water in container B is at 50 °C. Now both are allowed to cool in the cold room (4 °C). Which of the following statement is correct?

(1) The rate of cooling of water in the container A is slower than in the container B.
(2) The rate of cooling of water in the container A is faster than in the container B.
(3) The rate of cooling of water in the container A is same as in the container B.
(4) The container A will cool while the container B will heat.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13877]
2[Option ID=13878]
3[Option ID=13879]
4[Option ID=13880]

Sl. No.71
QBID:9052071

Match List I with List II

List I	List II
A. NMR spectroscopy	I. Gamma
B. Vibrational spectroscopy	II. Ultra Violet and Visible
C. Fluorescence Spectroscopy	III. Radio wave
D. Mössbauer spectroscopy	IV. Infrared wave

Choose the correct answer from the options given below:

(1) A-IV, B-III, C-I, D-II
(2) A-III, B-IV, C-II, D-I
(3) A-I, B-III, C-II, D-IV
(4) A-II, B-IV, C-III, D-I

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13881]
2[Option ID=13882]
3[Option ID=13883]
4[Option ID=13884]

Sl. No.72
QBID:9052072

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: From earth only one hemisphere of moon is seen.

Reason R: While moon revolves around earth in 28 days, it does not rotate on its axis.

In the light of the above statements, choose the *most appropriate* answer from the options given below

(1) Both A and R are correct and R is the correct explanation of A
(2) Both A and R are correct but R is NOT the correct explanation of A
(3) A is correct but R is not correct
(4) A is not correct but R is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13885]
2[Option ID=13886]
3[Option ID=13887]
4[Option ID=13888]

Sl. No.73
QBID:9052073

A window air conditioner (AC) is placed in the middle of the room and running with temperature set to 20 °C. At the time of switching on the AC the room temperature was 40 °C. What will be the temperature of the room after 2 hrs.?

(1) ~20 °C
(2) ~30 °C
(3) ~40 °C
(4) ~ 45 °C

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13889]
2[Option ID=13890]
3[Option ID=13891]
4[Option ID=13892]

Sl. No.74
QBID:9052074

A body starts at t = 0 s and accelerate till t = 100 s where its acceleration is 5 m.s^{-2}. After that it start retarding and attains acceleration equal to 0 m.s^{-2} at t = 150 s. Finally, at t =200 s, its acceleration is equal to -5 m.s^{-2}. At what time, t, it has the maximum velocity?

(1) 100 s
(2) 150 s
(3) 180 s
(4) 200 s

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13893]
2[Option ID=13894]
3[Option ID=13895]
4[Option ID=13896]

Sl. No.75
QBID:9052075

From the following options identify the cell type where cell-cell junctions are in abundant?

(1) Epithelial cells
(2) Sertoli cells
(3) Prokaryotic cells
(4) Hepatocytes

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13897]
2[Option ID=13898]
3[Option ID=13899]
4[Option ID=13900]

Sl. No.76
QBID:9052076

Which of the following events is associated with Epithelial-Mesenchymal Transition (EMT)?

(1) Formation of mesenchymal cells
(2) 'Switching on' of E-cadherin gene expression
(3) Loss of migration and gain of adhesion
(4) Gain of migration and loss of adhesion

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13901]
2[Option ID=13902]
3[Option ID=13903]
4[Option ID=13904]

Sl. No.77
QBID:9052077

Identify the cell type(s) that release hormone insulin when glucose levels increase in our body?

(1) Alpha-cells
(2) Beta-cells
(3) Gamma-cells
(4) Alpha-cells and Zeta cells

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13905]
2[Option ID=13906]
3[Option ID=13907]
4[Option ID=13908]

Sl. No.78
QBID:9052078

In plant cells, the membrane around the vacuole is termed as

(1) Tonoplast
(2) Mitoplast
(3) Amyloplast
(4) Elaioplast

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13909]
2[Option ID=13910]
3[Option ID=13911]
4[Option ID=13912]

Sl. No.79
QBID:9052079

Which of the following statements is TRUE about the DNA binding domain (DBD) present in steroid hormone receptors?

(1) It is located at the amino-terminal of the receptor protein
(2) It is located at the carboxy-terminal of the receptor protein
(3) It comprises of two zinc fingers
(4) It comprises of a leucine zipper

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13913]
2[Option ID=13914]
3[Option ID=13915]
4[Option ID=13916]

Sl. No.80
QBID:9052080

Microfilaments are the thinnest protein fibres in the cytoplasm and are composed of

(1) Tubulin
(2) Actin
(3) Myosin
(4) Chitin

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13917]
2[Option ID=13918]
3[Option ID=13919]
4[Option ID=13920]

Sl. No.81
QBID:9052081

Choose the correct answer from the options given below:

(1) NK cells recognize tumor cells by recognizing antigen presented with MHC class I.
(2) NK cells recognize tumor cells by recognizing absence of MHC Class I.
(3) Killer Inhibitory Receptor (KIR) recognize antigen presented with MHC class II.
(4) NK cells recognize tumor cells by the presence of super antigens on tumor cells.

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13921]
2[Option ID=13922]
3[Option ID=13923]
4[Option ID=13924]

Sl. No.82
QBID:9052082

Choose the correct answer from the options given below:

(1) Lymphoid progenitor cells enter in the thymus through endothelial venule in cortex
(2) Lymphoid progenitor cells enter in the thymus through endothelial venule in medulla
(3) Lymphoid progenitor cells enter in the thymus through endothelial venule in cortico-medullary junctions
(4) Lymphoid progenitor cells enter in the thymus through endothelial venule in both cortex and medulla

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13925]
2[Option ID=13926]
3[Option ID=13927]
4[Option ID=13928]

Sl. No.83
QBID:9052083

Given below are two statements:

Statement I: T helper cell 1 provides resistance against *Leishmania donovani* infection

Statement II: Leishmania donovani is an intracellular pathogen, elimination of which require IFN-g mediated macrophage activation

In the light of the above statements, choose the correct answer from the options given below

(1) Both Statement I and Statement II are true
(2) Both Statement I and Statement II are false
(3) Statement I is correct but Statement II is false
(4) Statement I is incorrect but Statement II is true

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13929]
2[Option ID=13930]
3[Option ID=13931]
4[Option ID=13932]

Sl. No.84
QBID:9052084

Read the following sentences carefully:

A. Activation of naïve T cells require MHC-TCR interaction.
B. Without co-stimulation during APC-T cell interaction T cell anergy occurs.
C. Binding of CD4 and CD8 co-receptors in the antigen binding groove of MHC molecule is required for T cell activation.
D. Both CD4 and CD8 co-receptors can bind to MHC class I molecules.
E. Both CD4 and CD8 co-receptors can bind to MHC class II molecules.

Choose the correct answer from the options given below:

(1) A and C only
(2) A and B only
(3) C, D and E only
(4) B, C and D only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13933]
2[Option ID=13934]
3[Option ID=13935]
4[Option ID=13936]

Sl. No.85
QBID:9052085

Read the following sentences carefully:

A. HIV infection leads to AIDS

B. AIDS patients often contract Tuberculosis.

C. Susceptibility to various infections in HIV patients because of diminished numbers of CD4+ T cells.

D. Susceptibility to various infections in HIV patients because of diminished numbers of CD8+ T cells.

E. Susceptibility to various infections in HIV patients because of diminished numbers of macrophages.

Choose the correct answer from the options given below:

(1) A, B and C only

(2) C, D and E only

(3) B and C only

(4) D and E only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13937]
2[Option ID=13938]
3[Option ID=13939]
4[Option ID=13940]

Sl. No.86
QBID:9052086

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Viral antigens are presented with the context of MHC class I molecules.

Reason R: Viral antigens are available in the cytosol.

In the light of the above statements, choose the most appropriate answer from the options given below

(1) Both A and R are correct and R is the correct explanation of A

(2) Both A and R are correct but R is NOT the correct explanation of A

(3) A is correct but R is not correct

(4) A is not correct but R is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13941]
2[Option ID=13942]
3[Option ID=13943]
4[Option ID=13944]

Sl. No.87
QBID:9052087

Read the following sentences carefully:

A. RAG-1 or RAG-2 deficiency leads to the impairment of T cell development.
B. RAG-1 or RAG-2 deficiency leads to the impairment of B cell development.
C. RAG-1 or RAG-2 deficiency leads to the impairment of both B and T cell development.
D. RAG-1 or RAG-2 deficiency leads to the impairment of development of neither T cells nor B cells.
E. RAG-1 or RAG-2 deficiency leads to the impairment of NK cell development.

Choose the correct answer from the options given below:
(1) A and C only
(2) A and B and C only
(3) A, B, C, D and E
(4) B, C and D only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13945]
2[Option ID=13946]
3[Option ID=13947]
4[Option ID=13948]

Sl. No.88
QBID:9052088

The complement activation includes many discrete pathways. These are

A. the classical pathway which requires C1Q
B. the alternate pathways which is triggered by C3
C. the canonical pathway which is initiated by C3
D. the lectin pathway which requires mannose binding lectin
E. the prostaglandin pathway

Choose the correct answer from the options given below:

1 C, D and E only
2. B and E only
3. A, B and D only
4. A, B, C, D and E

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13949]
2[Option ID=13950]
3[Option ID=13951]
4[Option ID=13952]

Sl. No.89
QBID:9052089

Lysosomes usually maintain an acidic pH and this is important for the functions of antigen presenting cells (APCs). When the lysosomal pH of a dendritic cell (DC) is >7.8, the antigen presentation is compromised because

A. the phagocytic efficiency of the DC is diminished
B. the lysosomal cathepsins do not function efficiently
C. the lysosomal trypsin does not function efficiently
D. the DCs initiate autophagy
E. the DCs mature to naïve macrophages

Choose the correct answer from the options given below:

1 B only
2. B and C only
3. A, B, C, D and E
4. E only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13953]
2[Option ID=13954]
3[Option ID=13955]
4[Option ID=13956]

Sl. No.90
QBID:9052090

Read the following sentences about neutrophils

A. They contain antimicrobial peptides
B. They secrete reactive oxygen species
C. They mature to basophils
D. They secrete proteases
E. They are subjected to transmigration

Choose the correct answer from the options given below:

1. A, B, C, D only
2. A, B, E only
3. A, B, D and E only
4. B, D and E only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13957]
2[Option ID=13958]
3[Option ID=13959]
4[Option ID=13960]

Sl. No.91
QBID:9052091

Read all statements carefully.

A. Angiotensin II stimulates the production of aldosterone
B. Angiotensiogen is a plasma protein produced by the liver
C. Angiotensin-converting enzyme (ACE) coverts angiotensin I to angiotensin II
D. Angiotensin converting enzyme (ACE) is present in the lungs
E. Renin processes angiotensinogen.

Choose the correct answer from the options given below:

1. A, B, C, D only
2. A only
3. B, C, D and E only
4. A, B, C, D and E

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13961]
2[Option ID=13962]
3[Option ID=13963]
4[Option ID=13964]

Sl. No.92
QBID:9052092

A school is planning to take three sections of a class containing 312, 260 and 156 students to a picnic. The administration plans that the maximum and equal number of students can sit in each bus. The number of students in each bus will be:

(1) 52
(2) 48
(3) 43
(4) 55

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13965]
2[Option ID=13966]
3[Option ID=13967]
4[Option ID=13968]

Sl. No.93
QBID:9052093

In a circular path A takes 9 min and B takes 6 min to complete one round by bi-cycle. If both of them starts from the same place at the same time to the same direction then after how much time they will meet again?

(1) 54 min
(2) 18 min
(3) 6 min
(4) 9 min

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13969]
2[Option ID=13970]
3[Option ID=13971]
4[Option ID=13972]

Sl. No.94
QBID:9052094

Which of the following numbers when added to its own square is equal to 272?

(1) 12
(2) 14
(3) 16
(4) 18

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13973]
2[Option ID=13974]
3[Option ID=13975]
4[Option ID=13976]

Sl. No.95
QBID:9052095

If 2x= 8y+1 and 9y= 3x-9, then values of x and y are

(1) x= 25, y=10
(2) x= 18, y= 9
(3) x= 23, y= 4
(4) x= 21, y= 6

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13977]
2[Option ID=13978]
3[Option ID=13979]
4[Option ID=13980]

Sl. No.96
QBID:9052096

Father took 25% of a cake and had enjoyed three times than others had. If all other family members took equal then how many members are there in the family excluding father?

(1) 9
(2) 12
(3) 6
(4) 10

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13981]
2[Option ID=13982]
3[Option ID=13983]
4[Option ID=13984]

Sl. No.97
QBID:9052097

Find out the missing number of the series 2, 5, 10, 17, –, 37

(1) 23
(2) 26
(3) 29
(4) 32

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13985]
2[Option ID=13986]
3[Option ID=13987]
4[Option ID=13988]

Sl. No.98
QBID:9052098

Read the following sentences carefully:

A. The human spleen contains the largest collection of lymphoid tissue in the body
B. The reticular epithelial cells of the spleen play important role in innate immunity
C. Other than the liver, the spleenocytes produce the pigment billirubin
D. The Hassal's corpuscles of the spleen is important for phagocyte maturation
E. The spleen can store recycled blood cells.

Choose the incorrect answer from the options given below:

1. A. B. C, D and E
2. D and E only
3. A and E only
4. B only

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13989]
2[Option ID=13990]
3[Option ID=13991]
4[Option ID=13992]

Sl. No.99
QBID:9052099

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Bacterial biofilms present major challenge in healthcare associated infections

Reason R: Biofilms present higher antimicrobial resistance

In the light of the above statements, choose the most appropriate answer from the options given below:

1. Both A and R are correct and R is the correct explanation of A
2. Both A and R are correct but R is NOT the correct explanation of A
3. A is correct but R is not correct
4. A is not correct but R is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13993]
2[Option ID=13994]
3[Option ID=13995]
4[Option ID=13996]

Sl. No.100
QBID:9052100

Given below are two statements: One is labelled as Assertion A and the other is labelled as Reason R.

Assertion A: Bacterial Outer Membrane Vesicles offer novel mechanisms of virulence

Reason R: Bacterial Outer Membrane Vesicles can independently transmit infections

In the light of the above statements, choose the most appropriate answer from the options given below:

1. Both A and R are correct and R is the correct explanation of A
2. Both A and R are correct but R is NOT the correct explanation of A
3. A is correct but R is not correct
4. A is not correct but R is correct

(1) 1

(2) 2

(3) 3

(4) 4

1[Option ID=13997]
2[Option ID=13998]
3[Option ID=13999]
4[Option ID=14000]