

National Testing Agency

Question Paper Name :	ICMR Veterinary Science and Medicine 14th Sep 2024 Shift 2
Subject Name :	ICMR Veterinary Science and Medicine
Creation Date :	2024-09-14 18:16:46
Duration :	120
Total Marks :	150
Display Marks:	Yes

Veterinary Science and Medicine

Group Number :	1
Group Id :	7495724
Group Maximum Duration :	0
Group Minimum Duration :	120
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0
Group Marks :	150

Section A General Aptitude

Section Id :	74957210
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	42
Number of Questions to be attempted :	42
Section Marks :	50
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	74957216
Question Shuffling Allowed :	No

Question Id : 749572457 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix

Question Numbers : (1 to 5)

Question Label : Comprehension

Read the passage and answer the questions that follow :

The opportunity that beckons India is to make optimal use of technology, management, entrepreneurship and investments to overcome the challenges of this decade and beyond. Yesterday's goals cannot be a benchmark as India contemplates graduating to the company of the developed nations of the world. Our targets must be higher, our coverage more inclusive and above all, the methods to achieve must be unique.

Since, Independence, India as a nation has indeed made massive progress in almost every social and economic field. But, as we strive to have an economically developed nation by 2020, each incremental step opens up new vistas before us. After every few pages, we mark our place in history, heading for a new chapter of challenges not experienced earlier.

Following a steady decline in world income – from about 33 per cent in 0 CE to around 25 per cent in 1600 CE – India's share declined even further during the British Raj, falling sharply from about 16 per cent in 1820 CE, to less than 4 per cent at the time of Independence. Since Independence, there has been a steady rise in income, and the per capita national product has increased by more than five times, from Rs. 5,700 in 1950 to about Rs. 32,000 in 2008, and today, India's share in world income – purchasing power parity (PPP) – stands at about 6.3 per cent. But while the economy has been growing steadily and poverty, as a percentage, declining steadily, the absolute number of people below the poverty line has been constant.

Sub questions

Question Number : 1 Question Id : 749572458 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

According to the passage, use of the phrase "make optimal use of" means :

- (1) set a higher benchmark for growth
- (2) using the methods effectively and efficiently
- (3) experiment with new challenges
- (4) mark our place in history

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 2 Question Id : 749572459 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which word in the given passage means "without interruption"?

- | | |
|----------------|--------------|
| (1) Consistent | (2) Steady |
| (3) Optimal | (4) Constant |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 3 Question Id : 749572460 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

What does India need to become a developed nation?

- (A) Take rapid and incremental steps towards progress
- (B) Contemplate on only yesterday's goals
- (C) Make thoughtful usage of technology in various fields
- (D) Work steadily on economic indicators
- (E) Set higher, inclusive and unique targets

Choose the correct answer from the options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 4 Question Id : 749572461 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Since Independence, there has been a steady rise in income and the increase of per capita national product by five times from ₹ 5,700 in 1947 to about ₹ 32,000 in 2008.

Statement II : Poverty has declined while the economy has grown but the absolute number of people below poverty line has been constant.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 5 Question Id : 749572462 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Read the given passage and Match List I with List II.

List I (India's share in world GDP)	List II (Year)
(A) 16 percent	(I) 0 CE
(B) 33 percent	(II) 1820 CE
(C) 25 percent	(III) 1947 CE
(D) 4 percent	(IV) 1600 CE

Choose the correct options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Sub-Section Number : 2
Sub-Section Id : 74957217
Question Shuffling Allowed : No

Question Id : 749572463 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Question Numbers : (6 to 10) Question Label : Comprehension

Read the following passage and answer the questions that follow :

Let us discuss coal, another fossil fuel. Even though India has abundant quantities of coal, it is constrained by regional locations, a high ash content that affects the thermal efficiency of our power plants, besides which there are also environmental concerns. Thus, a movement towards energy independence would demand accelerated work in the production of energy from the coal sector through integrated gasification and a combined cycle route.

In 2030, the total energy requirement of the nation is expected to be 4,00,000 MW. By that time, if we were to follow the present route, the power generated from coal-based power plants would increase from the existing 80,000 MW to 2,00,000 MW. This would demand a significant build-up of thermal power stations and a large-scale expansion of coal fields, leading, naturally, to much higher levels of pollution.

The hydel capacity generated through normal water sources and by the interlinking of rivers is expected to contribute an additional 50,000 MW. Numerous large-scale solar energy farms with a capacity of hundreds of megawatts could together contribute around 55,000 MW. The nuclear power plants should have a target of 50,000 MW of power. At least 64,000 MW of electrical power should come from wind energy. The balance 51,000 MW has to be generated through conventional thermal plants, through coal and gas, and renewable sources of energy such as biomass, through burning municipal solid waste and solar thermal power. The most significant aspect, however, is that the power generated through renewable energy technologies has to be increased to 28 per cent from the present 5 per cent.

Sub questions

Question Number : 6 Question Id : 749572464 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

To meet the energy requirements of the nation, the power generation through renewable energy technologies should be :

- (1) increased from 80,000 MW to 4,00,000 MW
- (2) covering the remaining balance of 51,000 MW generated through various modes
- (3) accelerated through integrated gasification and combined cycle route
- (4) increased by 23 percent from the present 5 percent

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 7 Question Id : 749572465 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which word in the passage is the antonym of "rare"?

- | | |
|-----------------|----------------|
| (1) existing | (2) numerous |
| (3) significant | (4) additional |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 8 Question Id : 749572466 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which of the following factor(s) are a reason behind the constrained utilization of coal as a fuel for generating energy?

- (A) low thermal efficiency of our power plants
- (B) regional locations
- (C) lack of integrated gasification
- (D) high ash content
- (E) environmental concerns

Choose the correct answer from the options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 9 Question Id : 749572467 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements that are based on the passage mentioned above :

Statement I : To meet the expected energy requirements in 2030, the power generation through renewable energy technologies has to be increased by percent.

Statement II : The balance 51,000 MW will be generated through conventional thermal plants.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 10 Question Id : 749572468 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match List I with List II on the basis of the passage mentioned above :

List I (Power)	List II (Energy Source)
(A) 50,000 MW	(I) Wind energy
(B) 55,000 MW	(II) Thermal energy
(C) 51,000 MW	(III) Hydel energy
(D) 64,000 MW	(IV) Solar energy

Choose the correct options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3

4. 4

Sub-Section Number : 3
Sub-Section Id : 74957218
Question Shuffling Allowed : Yes

Question Number : 11 Question Id : 749572469 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

If it was Saturday on 17th December, 2002, what was the day on 26th December 2004?

- (1) Monday
- (2) Sunday
- (3) Tuesday
- (4) Thursday

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 12 Question Id : 749572470 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Study the given pattern and select the number that can replace question mark in the given matrix :

11	103	9
13	157	6
15	?	7

- (1) 175
- (2) 196
- (3) 211
- (4) 225

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 13 Question Id : 749572471 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

If in a certain code language 'FRIEND' is written as 'JPMCRB', 'UNCLE' is written as 'YLGJI', then what will be the code for 'LEADER'?

- | | |
|------------|------------|
| (1) QCDBIP | (2) PDFBDL |
| (3) PCEBIP | (4) RBFCNR |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 14 Question Id : 749572472 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Find the missing number from the given alternatives.

$$\begin{array}{c} 9 \\ 5 \quad \textcircled{61} \quad 3 \\ 6 \end{array}$$

$$\begin{array}{c} 8 \\ 4 \quad \textcircled{?} \quad 2 \\ 3 \end{array}$$

$$\begin{array}{c} 11 \\ 3 \quad \textcircled{125} \quad 1 \\ 2 \end{array}$$

- | | |
|--------|--------|
| (1) 41 | (2) 56 |
| (3) 67 | (4) 79 |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 15 Question Id : 749572473 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

If, $P \times Q$ means P is the husband of Q.

$P + Q$ means P is the father of Q.

$P - Q$ means P is the mother of Q.

$P \div Q$ means P is the sister of Q.

Then, which of the following relations shows that C is the paternal grandfather of D?

(1) $C \times B - E \div D + A$

(2) $C + A \times B \div E \div D$

(3) $C + B \times A - E \div D$

(4) $C \times B \div E + A - D$

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 16 Question Id : 749572474 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In this question a number series is given. Choose the correct alternative that will continue the same pattern and replace the question mark in the given series.

856, 849, 824, 763, ?, 431

(1) 681

(2) 642

(3) 535

(4) 495

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 17 Question Id : 749572475 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Sunita starts from her home towards North. After walking 15 meters, she turned to her right and walked 55 meters. Then she turned to her left and after walking a distance of 20 meters turned to her left again and walked 67 meters. What is the shortest distance between her home and final position and what is the direction of final position with respect to her home?

(1) 26 m, North-West

(2) 35 m, North-East

(3) 37 m, North-West

(4) 49 m, North-East

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 18 Question Id : 749572476 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Seven friends A, B, C, D, E, F and G are sitting on a straight bench all facing north. There are exactly three friends sitting between A and B. D is sitting to the left of B. Only one friend is sitting to the left of A. B is sitting immediately left of F. Only one friend is sitting between D and A. Who is sitting at the extreme right end?

- | | |
|-------|-------|
| (1) E | (2) F |
| (3) C | (4) D |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 19 Question Id : 749572477 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.

BSNT : YXGC :: MXRV : ? :: FPCY : CUVH

- | | |
|----------|----------|
| (1) JDKE | (2) JCKD |
| (3) JCKE | (4) JCLE |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 20 Question Id : 749572478 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

A cube is painted black on two adjacent faces and on one apposite face, yellow on two apposite faces and green on the remaining face. It is then cut into 64 equal cubes. How many cubes have one black coloured face only?

- | | |
|--------|--------|
| (1) 12 | (2) 24 |
| (3) 16 | (4) 8 |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 21 Question Id : 749572479 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In the given question, two statements are given followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements : All Hammers are pliers. All screws are pliers.

Conclusions I : Some hammers are screws.

II : Some screws are hammers is a possibility.

- (1) Both Conclusions I and II follow
- (2) Both Conclusions I and II do not follow
- (3) Conclusion I follows but conclusion II does not follow
- (4) Conclusion I does not follow but conclusion II follows

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 22 Question Id : 749572480 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In this question there is a statement followed by two assumptions numbered I and II. You have to consider the statement and the following assumptions and decide which of the assumption(s) is/are implicit in the statement.

Statement : Rohan always studies from the reference books of publication X for his competitive exams.

Assumptions I : Many of the questions asked in competitive exams are from the reference books of publication X.

II : Studying from reference books are necessary for competitive exams.

- (1) Only Assumption I is implicit
- (2) Only Assumption II is implicit
- (3) Neither assumption I nor II is implicit
- (4) Both assumptions I and II are implicit

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 23 Question Id : 749572481 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Following table provides the marks obtained by four friends in five different subjects. Maximum marks in each subject are 100.

Friends	Physics	Chemistry	Mathematics	English	Physical Education
Rahul	89	92	79	81	90
Vinay	75	96	85	86	92
Abeer	94	90	89	77	90
Sudesh	93	91	84	86	92

Who has scored exactly 88% marks in total?

- (1) Rahul
- (2) Vinay
- (3) Abeer
- (4) Sudesh

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 24 Question Id : 749572482 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In this question there is a statement, followed by two courses of action numbered I and II. You have to assume everything in the statement to be true and on the basis of the information given in the statement, decide which of the suggested courses of action logically follow(s) for pursuing.

Statement : A large number of people got ill due to eating cut fruits from road side shops.

Courses of Action I. Municipal corporation should penalize the road side vendors if they sell cut fruits.

II. People should be made aware about the dangers of eating cut fruits sold in open.

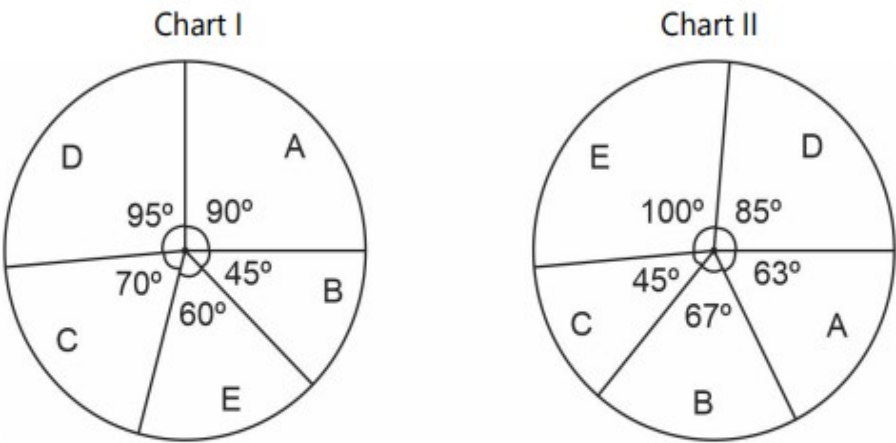
- (1) Only I follows
- (2) Only II follows
- (3) Neither I nor II follows
- (4) Both I and II follow

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 25 Question Id : 749572483 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The following pie chart show the distribution of students appearing in the Board examination (Chart I) and the students who have passed the Board examination (Chart II) from the different schools A, B, C, D and E.



Total number of students appeared = 1800

Which school has the lowest percentage of students passed with respect to those appeared?

- (1)

A
- (2)

B
- (3)

C
- (4)

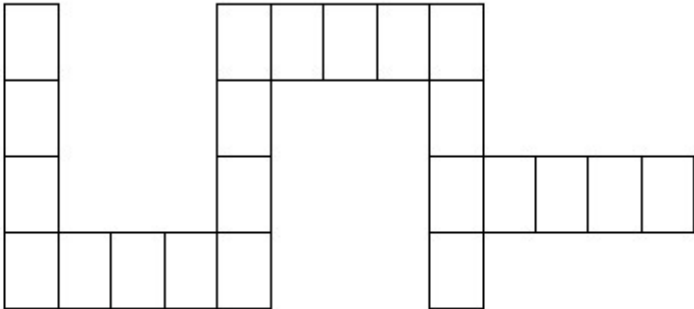
D

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 26 Question Id : 749572484 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

How many rectangles are there in the given figure?



- (1)

65
- (2)

70
- (3)

75
- (4)

80

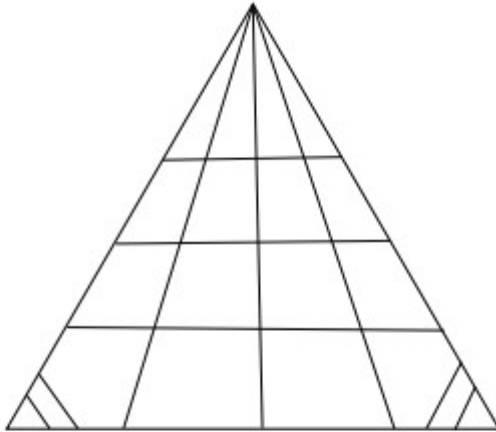
Options :

1. 1

- 2. 2
- 3. 3
- 4. 4

Question Number : 27 Question Id : 749572485 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

How many triangles are there in the given figure?



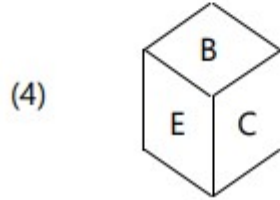
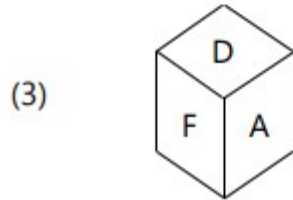
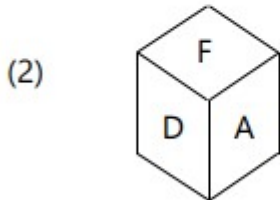
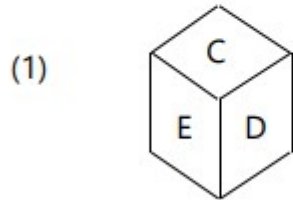
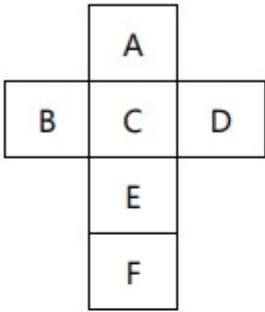
- | | |
|--------|--------|
| (1) 26 | (2) 34 |
| (3) 44 | (4) 46 |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 28 Question Id : 749572486 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Select the box that cannot be formed by folding the given unfolded box.

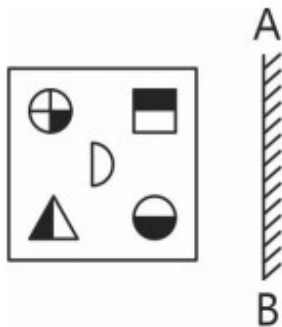


Options :

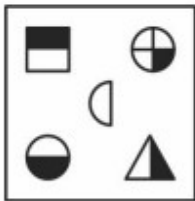
- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 29 Question Id : 749572487 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

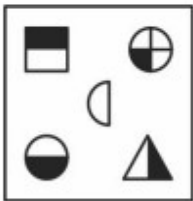
Choose the correct mirror image of the given figure when the mirror is placed at line AB.



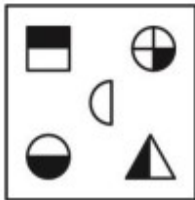
(1)



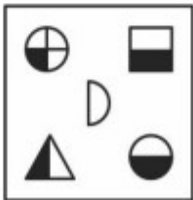
(2)



(3)



(4)

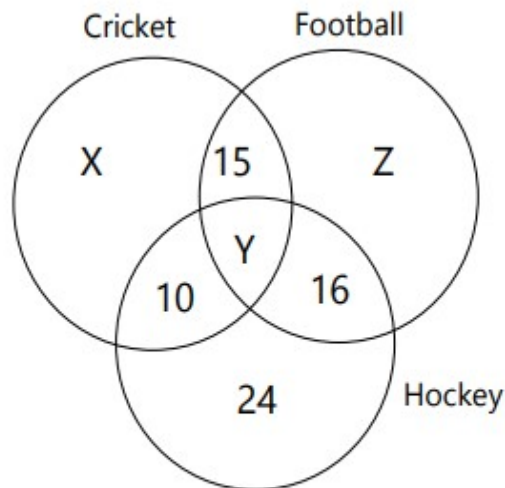


Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 30 Question Id : 749572488 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Study the Venn diagram and answer the question. The alphabets and numbers in different sections indicate the number of persons who play different games in a school.



If the total number of persons who play games in the school is 108 and the number of persons who play at least two games is 54, find the number of persons who play all the three games.

- | | |
|--------|--------|
| (1) 11 | (2) 13 |
| (3) 19 | (4) 21 |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 31 Question Id : 749572489 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

If 'AMAN' is written as 'CLCM' in a certain code then in the same code 'ARUN' is written as

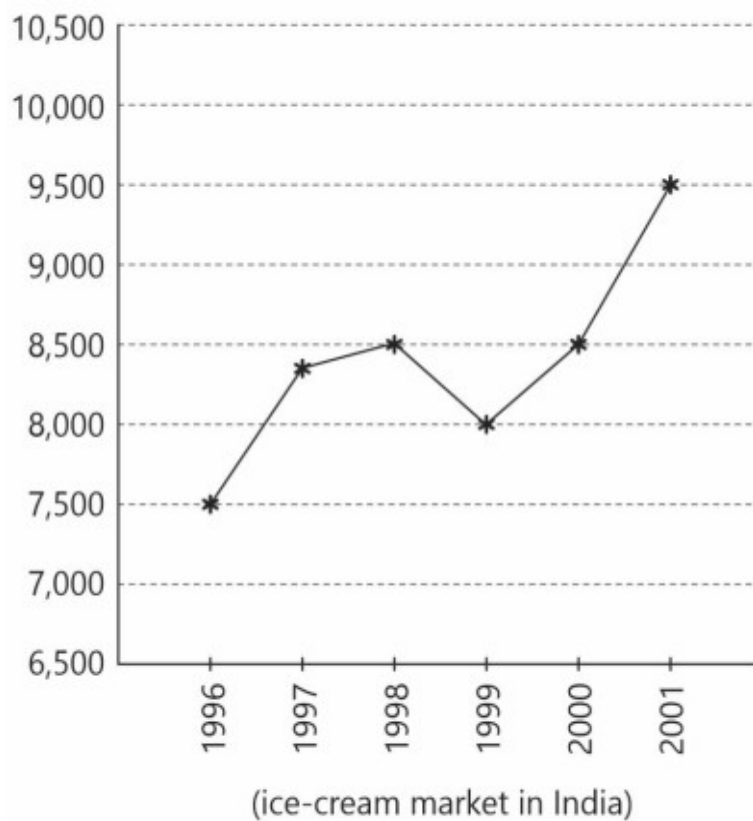
- | | |
|----------|----------|
| (1) CQWO | (2) CQVM |
| (3) CPWM | (4) CQWM |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 32 Question Id : 749572490 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Direction : Refer the chart below and answer the question. What is annual average rate of increase in the ice-cream market from 1996 to 2001?



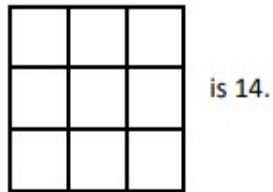
- | | |
|-----------|------------|
| (1) 5.33% | (2) 26.67% |
| (3) 6.67% | (4) 10% |

Options :

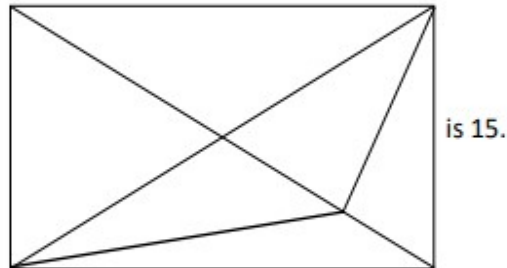
1. 1
2. 2
3. 3
4. 4

Question Number : 33 Question Id : 749572491 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Statement I : The number of squares in the figure.



Statement II : The number of triangles in the figure.



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 true but statement II is false
- (4) Statement I is false but statement II is true

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 34 Question Id : 749572492 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Statement I : The mirror-image of U T Z F Y 6 K H is H K Ø Y J Σ T U.

Statement II : The water-image of D 6 Z 7 F 4 is D Ø Σ Δ E ¶.

In the light of 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 true but statement II is false
- (4) Statement I is false but statement II is true

Options :

- 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Number : 35 Question Id : 749572493 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

If '−' means '÷' means '+' means '×', '÷' means '−', '×' means '+', then which of the following equations is correct?

- (1) $52 \div 4 + 5 \times 8 - 2 = 36$
- (2) $43 \times 7 \div 5 + 4 - 8 = 25$
- (3) $36 \times 4 - 12 + 5 \div 3 = 420$
- (4) $36 - 12 \times 6 \div 3 + 4 = 60$

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 36 Question Id : 749572494 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Complete the figure matrix.

↑ ↑	↑ ↓	↓ ↑
↑ →	↑ ←	↓ →
↑ ↓	?	↓ ↓

- (1)

↑

↑
- (2)

↓

↑
- (3)

↑

↓
- (4)

↑

→

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 37 Question Id : 749572495 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

A cube whose two adjacent faces are coloured is cut into 64 identical small cubes.
How many of these small cubes are not coloured at all?

- | | |
|--------|--------|
| (1) 60 | (2) 48 |
| (3) 36 | (4) 32 |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 38 Question Id : 749572496 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

A dealer marks his goods at 20% above the cost price and allows a discount of 16% on the marked price. What is his gain percentage?

- | | |
|----------|-----------|
| (1) 1% | (2) 2% |
| (3) 0.8% | (4) 0.08% |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 39 Question Id : 749572497 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

If $2a = 3b = 4c = 6d$, then value of $\frac{a^2 + b^2}{c^2 + d^2}$, is :

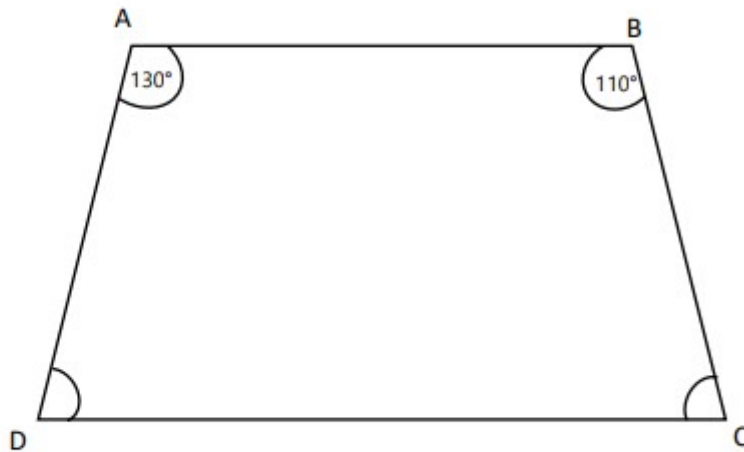
- | | |
|-------------------|-------------------|
| (1) $\frac{2}{3}$ | (2) 4 |
| (3) $\frac{1}{6}$ | (4) $\frac{7}{3}$ |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 40 Question Id : 749572498 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In trapezium $ABCD$, in which $AB \parallel DC$,



$\angle A = 130^\circ$ and $\angle B = 110^\circ$. What is the value of $\angle C - \angle D$?

- | | |
|-----------------|----------------|
| (1) 10° | (2) 20° |
| (3) -20° | (4) 40° |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 41 Question Id : 749572499 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In a town, 65% people watched the news on television, 40% read a newspaper and 25% read a newspaper and watched the news on television also. What percent of the people neither watched the news on television nor read a newspaper?

- | | |
|--------|--------|
| (1) 10 | (2) 14 |
| (3) 16 | (4) 20 |

Options :

1. 1
2. 2
3. 3

4. 4

Question Number : 42 Question Id : 749572500 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

- (A) The missing term of the series
4, 8, 28, 80, 244, ? , is 728.
- (B) The missing term of the alphabet series
UPI, SHJ, ODP, MBQ, ? is IAV.
- (C) The missing term of the letter – number series
Q1F, S2E, U6D, W21C, ? is Y88B.
- (D) The missing term of the letter – number series
D–4, F–6, H–8, J–10, ? is L–22

Choose the correct answer from the options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 43 Question Id : 749572501 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The ratio of the ages of man and his wife is 4 : 3. After 4 years, this ratio will be 9 : 7. If at the time of their marriage, the ratio of their ages was 5 : 3, then how many years ago were they married?

- | | |
|--------|--------|
| (1) 8 | (2) 10 |
| (3) 12 | (4) 15 |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 44 Question Id : 749572502 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

Read the following information and answer the question :

Alka is older than Mala. Gopal is older than Mala but younger than Alka. Kapil is younger than Ram and Mala. Mala is older than Ram.

- (A) Mala's age is between Gopal and Ram.
- (B) Gopal age is between Mala and Kapil.
- (C) Mala lies in the middle.
- (D) Alka is the youngest.
- (E) Kapil is the eldest.

Choose the correct answer from the options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 45 Question Id : 749572503 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Direction : Study the table carefully and answer the question :

Number of washing machines and refrigerators manufactured by a company.

	2005	2006	2007	2008	2009
Washing machine	14400	20500	12800	16400	18600
Refrigerator	12800	24700	19200	20200	14900

Find, what was the difference in the total number of washing machines and refrigerators manufactured in 2006 to the total number of washing machines and refrigerators manufactured in 2008?

- (1) 6,800
- (2) 5,600
- (3) 8,600
- (4) 8,200

Options :

- 1. 1
- 2. 2

3. 3

4. 4

Question Number : 46 Question Id : 749572504 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : A compound interest on a certain sum for 2 years at 10% per annum is ₹ 525. The simple interest on the same sum for double the time at half the rate percent per annum is ₹ 500.

Statement II : The respective ratio of milk and water in the mixture is 4 : 3. If 6 litres of water is added to this mixture, the respective ratio of milk and water becomes 8 : 7, then the quantity of milk in the original mixture is 24 litres.

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

- (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

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 47 Question Id : 749572505 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

If $x + \frac{1}{x} = 10$, then what is the value of $\left(x^2 - \frac{1}{x^2}\right)^2$?

- | | |
|-----------|-----------|
| (1) 9,600 | (2) 9,604 |
| (3) 9,608 | (4) 9,610 |

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 48 Question Id : 749572506 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

A sector of a circle of radius 6 cm is formed with central angle 60° . What will be its area (in cm^2)? (Here ' π ' refers to $\frac{22}{7}$)

(1) $\frac{3}{4}\pi$

(2) $\frac{5}{4}\pi$

(3) 6π

(4) 12π

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 49 Question Id : 749572507 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

How many four digit numbers can be formed by using the digits 0, 1, 3, 7 if repetition of digits are allowed?

(1) 160

(2) 500

(3) 2400

(4) 2500

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 50 Question Id : 749572508 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

What is the difference between simple interest and compound interest on sum ₹ 10,000 at the rate of 10% per annum for the period of two years?

(1) ₹ 110

(2) ₹ 100

(3) ₹ 150

(4) ₹ 160

Options :

1. 1
2. 2
3. 3
4. 4

Section B Cross Disciplinary

Section Id :	74957211
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	50
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	74957219
Question Shuffling Allowed :	Yes

Question Number : 51 Question Id : 749572509 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

A short microtubular organelle projecting into extra cellular medium used for locomotion

- | | |
|------------------|----------------|
| (1) Cisternae | (2) Cilium |
| (3) Pesudopodium | (4) Basal Body |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 52 Question Id : 749572510 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Organelle that is involved in carbohydrate digestion, autophagy, hydrolysis etc.

- | | |
|----------------|------------------|
| (1) Golgi body | (2) Nucleus |
| (3) Lysosome | (4) Mitochondria |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 53 Question Id : 749572511 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Microtubular protein having ATPase activity and required for movement

- | | |
|--------------|-----------------|
| (1) Ecdysone | (2) Fibronectin |
| (3) Dynein | (4) Sarcopin |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 54 Question Id : 749572512 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which of the following principle of bioethics emphasizes the importance of minimizing harm and maximizing benefits in health care decisions?

- | | |
|-----------------|---------------------|
| (1) Justice | (2) Autonomy |
| (3) Beneficence | (4) Non-maleficence |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 55 Question Id : 749572513 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which of the following ethical principle supports the idea that health care resources should be distributed fairly among individuals and communities?

- | | |
|---------------------|----------------------|
| (1) Confidentiality | (2) Informed consent |
| (3) Justice | (4) Beneficence |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 56 Question Id : 749572514 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match List I with List II.

List I	List II
(A) Released by anterior pituitary and affects the adrenal gland	(I) FSH
(B) Influences extracellular fluid volume	(II) Oxytocin
(C) Stimulates estrogen secretion and egg maturation in females	(III) ADH
(D) Causes uterine contractions during child birth	(IV) ACTH

Choose the correct options given below :

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

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 57 Question Id : 749572515 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : An endocrine gland releases substances through tubes or ducts.

Statement II : An exocrine gland releases substances it makes directly into the fluid bathing the glands.

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 true but statement II is false
- (4) Statement I is false but statement II is true

Options :

1. 1
2. 2

3. 3

4. 4

Question Number : 58 Question Id : 749572516 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match List I with List II.

List I	List II
(A) Mechanoreceptor	(I) Detects change in water volume of a solution
(B) Nociceptor	(II) Responds to heat or cold
(C) Osmoreceptor	(III) Detects tissue damage
(D) Thermoreceptor	(IV) Detects changes in pressure, position or acceleration

Choose the correct answer from the options given below :

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

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 59 Question Id : 749572517 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which of the following connective tissues has a matrix of collagen and elastin fibres in a rubbery ground substance?

- | | |
|---------------|-----------|
| (1) Adipose | (2) Bone |
| (3) Cartilage | (4) Blood |

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 60 Question Id : 749572518 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

All of the following acts as anaphylotoxins EXCEPT

- | | |
|---------|---------|
| (1) C3a | (2) C4a |
| (3) C5a | (4) C6a |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 61 Question Id : 749572519 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The mechanism by which B cells ensure that only one heavy and one light chain allele is translated is referred to as

- | | |
|------------------------|-------------------------|
| (1) Co-dominance | (2) Allelic exclusion |
| (3) Isotypic selection | (4) Idiotypic selection |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 62 Question Id : 749572520 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements regarding Major Histocompatibility Complex (MHC).

Statement I : MHC I contains two different polypeptide chains – α chain and β chain.

Statement II : MHC I is present on all nucleated cells.

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

- (1) Both Statement I and Statement II are correct
- (2) Statement I is correct but Statement II is incorrect
- (3) Statement I is not correct but Statement II is correct
- (4) Both Statement I and Statement II are not correct

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 63 Question Id : 749572521 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The function of the 3' to 5' exonuclease activity of a DNA polymerase is to :

- (1) Remove the 5' end of the polynucleotide strand that is attached to the template strand that is being copied
- (2) Remove incorrect nucleotides from the newly synthesized strand of DNA
- (3) Remove damaged nucleotide from the template strand during DNA synthesis
- (4) Remove nucleotides from the ends of DNA molecules to ensure the generation of blunt ends

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 64 Question Id : 749572522 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Identify which of the following tests is the most convincing to identify a gene as oncogene or tumor suppressor gene.

- (1) Transgenic mice overexpressing the candidate oncogene and knock-out mice lacking the candidate tumor suppressor gene
- (2) Transgenic mice overexpressing the candidate tumor suppressor gene and knock-out mice lacking the candidate oncogene
- (3) Transgenic mice that overexpresses the candidate oncogene and tumor suppressor gene
- (4) Knockout mice that lacks the candidate oncogene and tumor suppressor gene

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 65 Question Id : 749572523 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

A study is done on a mammalian cell line that has a doubling time of 24 hours. These cells are synchronized in G1 and then labeled for 2 days with BrdU (an analog of thymidine). At the end of labeling period, chromosomal DNA is isolated from the cells and its density analyzed by equilibrium centrifugation in cesium chloride gradients. Which of the following patterns would be expected to be seen? (H = heavy, L = light)

- | | |
|-----------------------|----------------------|
| (1) 100% H/H | (2) 100% H/L |
| (3) 50%, H/H, 50% H/L | (4) 50% H/H, 50% L/L |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 66 Question Id : 749572524 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Identify the correct order in which extra-cellular signals are transmitted.

- (A) Adenylate cyclase
- (B) cAMP
- (C) Protein kinase A

Choose the correct answer from the options given below :

- | | |
|-------------------|-------------------|
| (1) (A), (B), (C) | (2) (C), (B), (A) |
| (3) (A), (C), (B) | (4) (B), (C), (A) |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 67 Question Id : 749572525 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Which of the following is not a function of the lysosomes?

- (1) Engulf worn-out components of the cells
- (2) Engulf exogeneous substances
- (3) Suicidal bags
- (4) Power generating units

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 68 Question Id : 749572526 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : In Anaphase I, homologous chromosomes separate which sister chromatids remain together.

Statement II : In Anaphase II, chromosomes line up along the metaphase plate.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 69 Question Id : 749572527 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The function of the hepatic portal circulation is to :

- (1) carry toxins to the venous system for disposal through the urinary tract
- (2) hormone distribution
- (3) collect absorbed nutrients for metabolic processing or storage
- (4) transfer bile to the liver from the pancreas

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 70 Question Id : 749572528 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which of the following statements is incorrect?

- (1) Aldosterone stimulates the reabsorption of Na^+
- (2) Aldosterone affects water resorption
- (3) Aldosterone is made in the hypothalamus and released from the anterior pituitary
- (4) Aldosterone stimulates the secretion of K^+

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 71 Question Id : 749572529 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Regarding BLAST (Basic Local Alignment Search Tool) all the following statements are correct EXCEPT :

- (1) The tool is used to compare newly sequenced genomic DNA to known sequences stored in various databases
- (2) Once aligned the result is showed as output of three lines : Query, Sbject (Subject) and human sequence
- (3) Access to BLAST is provided by NCBI
- (4) BLAST report also provides an 'Expect' value or E value based on number of matches

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 72 Question Id : 749572530 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements ; in which one is Assertion (A) and the other one is Reason (R) :

Assertion (A) : Cri du chat syndrome is a classical example of endopolyploidy in human.

Reasoning (R) : In Cri du chat syndrome there is partial monosomy resulting from small terminal deletion involving chromosome 5.

In the light of above statements choose the correct answer :

- (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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 73 Question Id : 749572531 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : The genetic code is written in linear form with three nucleotide letters, thus referred as triplet code.

Statement II : The coding system is highly variable, in different organisms one triplet code can specify different amino acids in different organisms.

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

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 74 Question Id : 749572532 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In a pedigree, the first person identified to be suffering from a genetic disease is called as :

- | | |
|----------------|----------------|
| (1) Consultant | (2) Proband |
| (3) Kindred | (4) Consultand |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 75 Question Id : 749572533 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Two hypothetical SNPs (Single Nucleotide Polymorphism) in humans are 4 map units (m.u.) apart. The allele at SNP1 can be A or T ; the allele at SNP2 can be C or G. A male with genotype AG/TC and a female with genotype AC/AC have a child. What is the probability they have a child with genotype AG/AC?

- | | |
|---------|---------|
| (1) 96% | (2) 4% |
| (3) 48% | (4) 16% |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 76 Question Id : 749572534 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The clover leaf structure is a unique feature of which of the following molecules?

- | | |
|-----------------------------|-----------------------------|
| (1) 28S subunit of ribosome | (2) Unspliced mRNA molecule |
| (3) Spliced tRNA molecule | (4) Pre-processed sno RNA |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 77 Question Id : 749572535 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

An autosomal recessive condition affects 1 new born in 10,000. What is the expected frequency of carriers?

- | | |
|----------------|---------------|
| (1) 198/10,000 | (2) 99/10,000 |
| (3) 1/100 | (4) 99/100 |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 78 Question Id : 749572536 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The Hardy Weinberg principle is integral to population genetics. All of the following options can disturb the Hardy Weinberg equilibrium EXCEPT

- | | |
|-------------------|---------------------------|
| (1) Random mating | (2) Mutation |
| (3) Gene Flow | (4) Small population size |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 79 Question Id : 749572537 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In genetic linkage, the concept of recombination fraction is very important, of the characteristics given here, choose the correct ones.

- (A) Recombination fraction is usually designated as θ (theta)
 - (B) It is the measure of the distance separating two loci on different chromosomes
 - (C) It gives an indication of the likelihood that a cross-over will occur between the two loci
 - (D) Genes at loci are not linked then $\theta = 0.5$
 - (E) Genes at unlinked loci will segregate together during 20% of all meiosis
- | | |
|-------------------|-------------------|
| (1) (B), (C), (E) | (2) (A), (D), (E) |
| (3) (A), (C), (D) | (4) (A), (B), (C) |

Options :

- 1. 1

- 2. 2
- 3. 3
- 4. 4

Question Number : 80 Question Id : 749572538 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The process of genetic counselling involves various steps. These steps have been randomised and listed below. From the options given below, choose the correct sequence in which the counselling steps should be undertaken/performed.

- (A) Risk assessment
- (B) Diagnosis based on history and investigation
- (C) Long term contact and support group
- (D) Discussion of options

- (1) (B), (D), (C), (A)
- (2) (B), (A), (D), (C)
- (3) (A), (B), (C), (D)
- (4) (B), (C), (A), (D)

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 81 Question Id : 749572539 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In which stage of the cell cycle, the cells double their amount of DNA?

- | | |
|--------------|--------------|
| (1) G1 phase | (2) G2 phase |
| (3) M phase | (4) S phase |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 82 Question Id : 749572540 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In Eukaryotes, citric acid cycle takes place in

- | | |
|------------------|------------------|
| (1) Nucleus | (2) Cytoplasm |
| (3) Mitochondria | (4) Golgi bodies |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 83 Question Id : 749572541 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

What is the approximate molecular mass of polypeptide containing 100 amino acid residues?

- | | |
|---------------|---------------|
| (1) 300 Da | (2) 11,000 Da |
| (3) 30,000 Da | (4) 110 Da |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 84 Question Id : 749572542 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Human genomic DNA isolated with concentration of 400 µg/ml, needs to be digested with restriction enzyme Bam H1 (2000 U/ml). Investigator needs to set reaction with 10 µg of genomic DNA with 10 units of enzyme. How much volume (in µl – micro litre) needs to be drawn from the two stock solutions respectively to get 10 µg of DNA and 10 U of enzyme?

- (1) DNA stock – 25µl Enzyme – 5 µl
- (2) DNA stock – 35µl Enzyme – 7.5 µl
- (3) DNA stock – 27.5µl Enzyme – 7.5 µl
- (4) DNA stock – 10µl Enzyme – 10 µl

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 85 Question Id : 749572543 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match the List I with List II.

List I	List II
(A) Taq DNA polymerase	(I) used to make cDNA
(B) MMLV Reverse Transcriptase	(II) used to phosphorylate oligos or DNA
(C) RNA polymerase II	(III) used to amplify DNA
(D) T ₄ polynucleotide kinase	(IV) Transcription particularly of mRNA, LncRNA

Choose the correct options given below :

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

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 86 Question Id : 749572544 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Select the correct primer pair of forward and reverse primer sequence that amplify full length of sequence given below :

5' – TAC TAT CGA GTA CTA GAC TAC TAAGT 1 – 100 – 1 ACT, AGA, CGT ACG, TAG, TAC, GTT ACT AC – 3'

- (1) 5' – ATG ATA GCT CAT GAT CTG AT – 3' Forward
5' – GTA GTA ACG TAC TAC GTA CG – 3' Reverse
- (2) 5' – TAC TAT CGA GTA CTA GAC TA – 3' Forward
5' – GTA GTA ACG TAC TAC GTA CG – 3' Reverse
- (3) 5' – ATG ATA GCT CAT GAT CTG AT – 3' Forward
5' – GCA TGC ATC ATG CAA TGA TG – 3' Reverse
- (4) 5' – TAG TCT AGT ACT CGA TAG TA – 3' Forward
5' – GCA TGC ATC ATG CAA TGA TG – 3' Reverse

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 87 Question Id : 749572545 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

_____ variant of BLAST, compares a DNA query sequence to the protein database.

- | | |
|-------------|-------------|
| (1) BLASTP | (2) BLASTX |
| (3) BLAST N | (4) TBLASTN |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 88 Question Id : 749572546 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is not a primary database?

- | | |
|------------------|--------------|
| (1) SWISS – PROT | (2) EMBL |
| (3) DDBJ | (4) Gen Bank |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 89 Question Id : 749572547 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The computational approaches to predict the three-dimensional structures of proteins are :

- (A) Homology modeling
- (B) X-ray crystallography
- (C) NMR
- (D) Threading
- (E) Ab-initio

Choose the correct answer from the options given below:

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 90 Question Id : 749572548 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

What happens to transferrin when iron is bound to it and it interacts with its receptor?

- (1) It is degraded inside the lysosome
- (2) Undergoes a conformational change allowing binding to its receptor
- (3) It is converted to apotransferrin
- (4) Permanently internalized and degraded

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 91 Question Id : 749572549 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which non-viral gene delivery method utilizes physical forces to introduce genetic material into cells?

- | | |
|---------------------|---------------------|
| (1) Liposomes | (2) Poly (L-lysine) |
| (3) Electroporation | (4) Adenoviruses |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 92 Question Id : 749572550 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which protein is responsible for cleaving double stranded RNA into smaller fragments during RNA interference?

- | | |
|------------|--------------|
| (1) Slicer | (2) Helicase |
| (3) RISC | (4) Dicer |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 93 Question Id : 749572551 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

What is the main advantage of using Short Tandem Repeats (STRs) over restriction fragment length polymorphism (RFLP) in DNA fingerprinting?

- (1) STRs are easier to visualize on a gel
- (2) STRs requires less DNA and are more resistant to degradation
- (3) STRs produce more distinct band pattern
- (4) STRs are less expensive to analyze

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 94 Question Id : 749572552 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

Which of the following steps in PCR is responsible for separating double-stranded DNA into single strands?

- | | |
|---------------|----------------|
| (1) Annealing | (2) Extension |
| (3) Melting | (4) Elongation |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 95 Question Id : 749572553 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match the following :

List I	List II
(A) Autotroph	(I) Macro consumers
(B) Phagotrops	(II) Micro consumers
(C) Saprotrops	(III) Primary producers
(D) Heliotrophs	(IV) Sun loving plants

Choose the correct answer from the options given below :

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

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 96 Question Id : 749572554 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The reductive pentose phosphate pathway is also known as

- (A) Photosynthetic Carbon Oxidation cycle (PCO)
- (B) Calvin – Benson cycle
- (C) Photorespiration
- (D) C4 cycle

Choose the correct answer from the options given below :

- (1) Both (A) and (B) are correct
- (2) Both (B) and (C) are correct
- (3) (B) only
- (4) (C) only

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 97 Question Id : 749572555 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Cortisones, used in the treatment of rheumatoid arthritis, are produced from fermentation of _____ by *Rhizopus migrans*.

- | | |
|-----------------|------------|
| (1) Amino acids | (2) Lipids |
| (3) Glycosides | (4) Starch |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 98 Question Id : 749572556 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In cell cycle there are 4 stages. M, G1, S and G2. There is another term commonly used ; G0 phase. Choose the best described statement for this G0 phase.

- (1) Cells are at growing stage
- (2) Cells are at the stage of differentiation
- (3) Cells have ceased to divide
- (4) Cells are about to double

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 99 Question Id : 749572557 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Based on series of events outlined in Central Dogma, there are enzymes that convert from one stage to the other. However, one conversion is not possible yet. Identify the stage :

- | | |
|----------------|--------------------|
| (1) DNA to RNA | (2) Protein to RNA |
| (3) DNA to DNA | (4) RNA to DNA |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 100 Question Id : 749572558 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In lactose operon, the following events happen.

- (A) The operon is normally in an "off" mode when appropriate substrate is absent.
- (B) Lactose is an inducer substrate.
- (C) If lactose is added to the cell's environment, it triggers events that turn the operator "on".
- (D) The structural genes are transcribed in 3 different transcripts coding for all three different enzymes.
- (E) As lactose is depleted, operon is repressed.

Which of the answers is correct?

- | | |
|-------------------|-------------------|
| (1) (A), (B), (C) | (2) (B), (C), (D) |
| (3) (A), (D), (E) | (4) (C), (D), (E) |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Section C Veterinary Science and Medicine

Section Id :	74957212
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	50
Number of Questions to be attempted :	50
Section Marks :	50
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	74957220
Question Shuffling Allowed :	Yes

Question Number : 101 Question Id : 749572559 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Which one of the following is NOT a characteristic of phase I biotransformation?

- | | |
|-----------------------------|----------------|
| (1) Oxidation | (2) Reduction |
| (3) Glucoronate conjugation | (4) Hydrolysis |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 102 Question Id : 749572560 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

Chlorpheniramine acts through which one of the following histaminic receptors?

- | | |
|--------------------|--------------------|
| (1) H ₁ | (2) H ₂ |
| (3) H ₃ | (4) H ₄ |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 103 Question Id : 749572561 Question Type : MCQ Option Shuffling : No
Correct Marks : 1 Wrong Marks : 0.25

The total dextrose in entire bottle of 500 ml of five percent dextrose normal saline (5% DNS) will be :

- | | |
|--------------------|-------------------|
| (1) 25 g dextrose | (2) 5 g dextrose |
| (3) 25 mg dextrose | (4) 5 mg dextrose |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 104 Question Id : 749572562 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which one of the following drugs is used as an antidote for opioid toxicity?

- | | |
|-----------------|------------------|
| (1) Neostigmine | (2) Pencillamine |
| (3) Naloxone | (4) Atropine |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 105 Question Id : 749572563 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Cyanide (HCN) poisoning in ruminants is due to consumption of cyanogenic glycoside containing plants.

Statement II : Cyanide has high affinity to cytochrome oxidase and antidote for cyanide poisoning in ruminants is sodium nitrate.

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 true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

- 1. 1
- 2. 2

3. 3

4. 4

Question Number : 106 Question Id : 749572564 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Ergot alkaloids are derivatives of lysergic acid.

Statement II : Ergotism occurs in chronic (gangrenous) and acute (nervous or convulsive) form in animals.

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 true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 107 Question Id : 749572565 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The milk pasteurization temperature has been increased from 61.7°C for 30 min. to 62.8°C (63°C) for 30 min. to account for the destruction of :

- | | |
|---------------------------------------|-----------------------------------|
| (1) <i>Mycobacterium tuberculosis</i> | (2) <i>Coxiella burnetti</i> |
| (3) <i>E. coli</i> | (4) <i>Pseudomonas aeruginosa</i> |

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 108 Question Id : 749572566 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Occurrence of a disease in a community clearly in excess of normal expectation for the population based on experience is called as :

- | | |
|--------------|--------------|
| (1) Endemic | (2) Pandemic |
| (3) Epidemic | (4) Sporadic |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 109 Question Id : 749572567 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match List I with List II.

List I	List II
(A) Viral	(I) Japanese encephalitis
(B) Rickettsial	(II) Histoplasmosis
(C) Mycotic	(III) Q-fever
(D) Parasitic	(IV) Toxoplasmosis

Choose the correct answer with respect to zoonosis from the options given below :

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

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 110 Question Id : 749572568 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The diseases which normally pass from man to other vertebrate animals are referred to as :

- | | |
|------------------------|-------------------------|
| (1) Amphixenoses | (2) Zooanthropozoonosis |
| (3) Anthropolozoonosis | (4) Enzootic |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 111 Question Id : 749572569 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In a herd of 150 cattle, 50 animals developed an acute disease and resulted in the death of 5 animals. The case fatality rate in this case is :

- | | |
|---------|----------|
| (1) 10% | (2) 3.3% |
| (3) 5% | (4) 2.5% |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 112 Question Id : 749572570 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : The sensitivity of a test is a measure of the test's ability to detect animals that are positive for the disease.

Statement II : The specificity of a test is a measure of the test's ability to detect animals that are negative for the disease.

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 true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 113 Question Id : 749572571 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

A new diagnostic test has been developed for the detection of brucellosis in animals. The new test's performance is listed below. Calculate the sensitivity of the newly developed test.

Positive test results	True positive 90	False positive 5
Negative test results	False negative 5	True negative 180

- (1) 97.2% (2) 94.7%
(3) 98.5% (4) 92.5%

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 114 Question Id : 749572572 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

A new diagnostic has been developed for the diagnosis of Ranikhet disease in poultry. The test's performance is tabulated below. Calculate the specificity of the newly developed test.

Positive test results	True positive 90	False positive 5
Negative test results	False negative 5	True negative 180

- (1) 97.2% (2) 94.7%
(3) 98.5% (4) 92.5%

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 115 Question Id : 749572573 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Nervous form of ketosis in cattle is due to :

- | | |
|-----------------------|-------------------------------|
| (1) Isopropyl alcohol | (2) Beta hydroxy butyric acid |
| (3) Propionic acid | (4) Butyric acid |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 116 Question Id : 749572574 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Match List I with List II.

List I	List II
(A) Shipping fever	(I) <i>Clostridium haemolyticum</i>
(B) Black quarter	(II) <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i>
(C) Bacillary hemoglobinuria	(III) <i>Clostridium chauvoei</i>
(D) Paratuberculosis	(IV) <i>Pasteurella multocida</i>

Choose the correct answer from the options given below :

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

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 117 Question Id : 749572575 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : In lactic acidosis in ruminants, the pH of ruminal fluid usually fall below 6.

Statement II : Lactic acidosis is due to the accumulation of excess D-lactic acid.

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 true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 118 Question Id : 749572576 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which one of the followings is not a part of 3R principle in the use of animals in biomedical experiments?

- | | |
|------------|------------------|
| (1) Reduce | (2) Rehabilitate |
| (3) Reuse | (4) Replace |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 119 Question Id : 749572577 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Ruminants can synthesize Vitamin-K in their intestine through bacteria.

Statement II : Prolonged use of antibiotics does not have any effect on the Vitamin-K synthesis in ruminants.

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 true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 120 Question Id : 749572578 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

In case of diabetes mellitus in dogs, the specific gravity of urine is :

- | | |
|---------------|--------------------|
| (1) Increased | (2) Decreased |
| (3) No change | (4) Breed-specific |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 121 Question Id : 749572579 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

“Ring tail” is a disease of rats caused by :

- | | |
|----------------------------|---------------------------|
| (1) Virus | (2) Low relative humidity |
| (3) High relative humidity | (4) Fungus |

Options :

- 1. 1
- 2. 2
- 3. 3

4. 4

Question Number : 122 Question Id : 749572580 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Cryosurgery involves the use of the following :

- | | |
|----------------------------|---------------------|
| (1) Liquid CO ₂ | (2) Liquid nitrogen |
| (3) Nitrous oxide | (4) Cryogel |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 123 Question Id : 749572581 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Incised or surgical wounds with proper apposition heal by :

- | | |
|----------------------|---------------------|
| (1) Second intention | (2) First intention |
| (3) Mixed intention | (4) Scab formation |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 124 Question Id : 749572582 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Patent ductus arteriosus is the persistence of normal shunt in the foetus between the aorta and pulmonary artery even after birth.

Statement II : Patent ductus arteriosus produces a typical murmur due to shunting of blood from the aorta to the pulmonary artery.

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 true
- (2) Both Statement I and Statement II are false
- (3) Statement I is true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 125 Question Id : 749572583 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which one of the followings is a dissociative anesthetic?

- | | |
|----------------|------------------------|
| (1) Xylazine | (2) Tiletamine |
| (3) Isoflurane | (4) Thiopentone sodium |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 126 Question Id : 749572584 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which of the followings is an absorbable suture material?

- | | |
|-------------------|---------------------|
| (1) Silk | (2) Polyglactin 910 |
| (3) Polypropylene | (4) Polyethylene |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 127 Question Id : 749572585 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The ideal anticoagulant for blood glucose estimation is :

- | | |
|---------------------|-------------|
| (1) Sodium citrate | (2) EDTA |
| (3) Sodium fluoride | (4) Heparin |

Options :

- 1. 1
- 2. 2

3. 3

4. 4

Question Number : 128 Question Id : 749572586 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Retained placental membrane is uncommon except in :

- | | |
|----------|-------------|
| (1) Sows | (2) Cats |
| (3) Cows | (4) Bitches |

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 129 Question Id : 749572587 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Only birds and mammals are able to regulate their internal temperature.

Statement II : Other living organisms conforms to prevailing external temperature.

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 true but Statement II is false
- (4) Statement I is false but Statement II is true

Options :

1. 1

2. 2

3. 3

4. 4

Question Number : 130 Question Id : 749572588 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The largest foramen in the skull is :

- | | |
|----------------------------|--------------------|
| (1) Foramen lacerum | (2) Foramen magnum |
| (3) Foramen orbitorotundum | (4) Optic foramen |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 131 Question Id : 749572589 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The valve situated in the left atrio-ventricular opening is :

- | | |
|---------------------|-----------------------|
| (1) Tricuspid valve | (2) Mitral valve |
| (3) Semilunar valve | (4) Tetracuspid valve |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 132 Question Id : 749572590 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

DNA sequencing method, that involves the creation of a series of labelled single strand of varying length is called as :

- | | |
|------------------------------|--------------------------------|
| (1) Chain termination method | (2) Next Generation Sequencing |
| (3) Expressed sequence tags | (4) Pyrosequencing |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 133 Question Id : 749572591 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

FMD is not seen in :

- (A) Buffaloes
- (B) Sheep and Goats
- (C) Pigs
- (D) Horses

Choose the correct answer from the options given below :

- (1) (A) only
- (2) (B) only
- (3) (C) only
- (4) (D) only

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 134 Question Id : 749572592 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Assertion (A) : Venomous snake bite is always easy to diagnose in animals.

Reason (R) : Swelling and a heavy hair coat obscure puncture wounds.

In the light of the above statements, choose the correct 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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 135 Question Id : 749572593 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Assertion (A) : Corticosteroids should not be used and have no place in the treatment of venomous snake bites.

Reason (R) : Corticosteroids can be used in the treatment of allergic reactions to antivenom if it occurs.

In the light of the above statements, choose the correct 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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 136 Question Id : 749572594 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Microbes not only grow faster but they are highly diverse also and can mutate much faster than the infected animal can respond.

Statement II : Sentinel cell receptors of innate immune cells are designated to recognize all possible microbial molecules.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 137 Question Id : 749572595 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Bacterial deoxyribonucleic acid (DNA) is strong stimulator of innate immune cells.

Statement II : Unmethylated CpG dinucleotides can induce innate immune response.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 138 Question Id : 749572596 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : All tissue macrophages have originated from mononuclear phagocytes stem cell monoblasts.

Statement II : Tissue macrophages are relatively long lived cells, that can originate from monocytes and cannot be divide within tissues.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 139 Question Id : 749572597 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Exposure to oxygen causes pH to rise due to loss of dissolved CO₂ and bicarbonate.

Statement II : Cells can be grown in sealed containers or exogenous CO₂ may be provided at a rate of 20 to 25%.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 140 Question Id : 749572598 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Mucosal mast cells are relatively smaller than connective tissue mast cells.

Statement II : Connective tissue mast cells have chondroitin sulfate, while mucosal mast cells have heparin and proteoglycan.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 141 Question Id : 749572599 Question Type : MCQ Option Shuffling : No

Correct Marks : 1 Wrong Marks : 0.25

The Bm 86 vaccine was the first commercially successful recombinant vaccine against the following parasite :

- | | |
|------------------------------------|---------------------------------|
| (1) <i>Boophilus microplus</i> | (2) <i>Taenia saginata</i> |
| (3) <i>Cysticercus fasciolaris</i> | (4) <i>Haemonchus contortus</i> |

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 142 Question Id : 749572600 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Assertion (A) : Zearalenone is a potent non-steroidal oestrogen produced by certain *Fusarium* spp.

Reason (R) : Low conception rates have been recorded in cattle and sheep which are accidentally fed with the maize.

In the light of the above statements, choose the correct 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

Options :

1. 1
2. 2
3. 3
4. 4

Question Number : 143 Question Id : 749572601 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Ochratoxin A is a heat-labile potent hepatotoxin.

Statement II : All ruminants cannot detoxify ochratoxin.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 144 Question Id : 749572602 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : *Pasteurella* together with viruses represent a sufficient cause for respiratory diseases in feedlot cattle.

Statement II : The presence of *Pasteurella* is a necessary cause for pasteurellosis, but it is not a necessary cause for pneumonia.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 145 Question Id : 749572603 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Henz body anaemia in cats is caused by :

- | | |
|----------------------------------|----------------------------------|
| (1) Parasitic infestation | (2) Dexamethasone treatment |
| (3) Accetaminophen / paracetamol | (4) Blood loss of unknown origin |

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 146 Question Id : 749572604 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Which among the following zoonotic diseases is transmitted by?

- (A) Bites and scratches
- (B) Fecal contact
- (C) Arthropod transmission
- (D) Ingestion of contaminated food

Choose the correct answer from the options given below :

- (1) Leptospirosis
- (2) Lyme disease
- (3) Cryptosporidiosis
- (4) Toxoplasmosis

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 147 Question Id : 749572605 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Commonly used method to measure sampling bias in a population is 95% confidence intervals.

Statement II : The correct interpretation of a 95% confidence interval is that given repeated sampling and calculation of 95% confidence intervals for each sample estimate, 95% of them will include the true estimate.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 148 Question Id : 749572606 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Given below are two statements :

Statement I : Harmful recessive genes are maintained in populations by balance between selection and mutation. Majority of these genes are hidden in heterozygotes.

Statement II : Inbreeding decreases the frequency of heterozygotes and it leads to bring these harmful recessive genes out into the open in the form of heterozygotes.

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 149 Question Id : 749572607 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

Common chromosomal abnormalities seen in early stage embryo are :

- (A) Haploidy
- (B) Triploidy
- (C) Translocation
- (D) Polyploidy
- (E) Centric fusion

Choose the correct answer from the options given below :

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

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4

Question Number : 150 Question Id : 749572608 Question Type : MCQ Option Shuffling : No Correct Marks : 1 Wrong Marks : 0.25

The stain that is NOT used in the preparation of ideogram in the karyotyping is :

- (1) Giemsa
- (2) Quinacrine
- (3) Acridine-orange
- (4) Methylene blue

Options :

- 1. 1
- 2. 2
- 3. 3
- 4. 4