

# Andhra Pradesh State Council of Higher Education

## Notations :

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

<b>Question Paper Name :</b>	Zoology 4th May 2024 Shift 2
<b>Duration :</b>	120
<b>Total Marks :</b>	140
<b>Display Marks:</b>	No
<b>Share Answer Key With Delivery Engine :</b>	Yes
<b>Calculator :</b>	None
<b>Magnifying Glass Required? :</b>	No
<b>Ruler Required? :</b>	No
<b>Eraser Required? :</b>	No
<b>Scratch Pad Required? :</b>	No
<b>Rough Sketch/Notepad Required? :</b>	No
<b>Protractor Required? :</b>	No
<b>Show Watermark on Console? :</b>	Yes
<b>Highlighter :</b>	No
<b>Auto Save on Console?</b>	Yes
<b>Change Font Color :</b>	No
<b>Change Background Color :</b>	No
<b>Change Theme :</b>	No
<b>Help Button :</b>	No
<b>Show Reports :</b>	No

Show Progress Bar :	No
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

## Research Methodology

Section Id :	971036535
Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	66
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 1 Question Id : 97103637648 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In a research study investigating the relationship between sleep duration and academic performance, "sleep duration" is an example of a

Options :

1. ✘ Hypothesis

2. ✘ Concept

3. ✔ Variable

#### 4. ✘ Causation

Question Number : 2 Question Id : 97103637649 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the primary purpose of research methodology?

Options :

1. ✘ To prove personal beliefs
2. ✔ To discover new knowledge
3. ✘ To validate existing theories
4. ✘ To promote authoritarian ideologies

Question Number : 3 Question Id : 97103637650 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which characteristic is essential for a good hypothesis?

Options :

1. ✘ Complexity
2. ✘ Generality
- 3.

✓ Falsifiability

4. ✘ Subjectivity

**Question Number : 4 Question Id : 97103637651 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Positivism is associated with which tradition of scientific research?

**Options :**

1. ✓ Empirical-analytic

2. ✘ Hermeneutic

3. ✘ Critical theory

4. ✘ Phenomenological

**Question Number : 5 Question Id : 97103637652 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which method of evaluation is conducted at the end of the programme?

**Options :**

1. ✘ Process Evaluation

2. ✘ Impact Evaluation
3. ✘ Outcome Evaluation
4. ✔ Summative Evaluation

**Question Number : 6 Question Id : 97103637653 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following methods of evaluation will minimize the subjectivity of the examiner?

**Options :**

1. ✘ Fill in the Blanks type (open end response)
2. ✔ Objective Multiple Choice Type (Closed end response)
3. ✘ Very short answer type
4. ✘ Descriptive and Narrative type

**Question Number : 7 Question Id : 97103637654 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

If a researcher wants to test the effect of temperature on plant growth and predicts that higher temperatures will lead to increased growth, this is an example of a

**Options :**

1. ✘ Null hypothesis
2. ✘ Non-directional hypothesis
3. ✔ Directional hypothesis
4. ✘ Alternative hypothesis

**Question Number : 8 Question Id : 97103637655 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following method of research is appropriate in Applied Sciences with experimentation?

**Options :**

1. ✔ Quantitative research
2. ✘ Qualitative research
3. ✘ Classical research
4. ✘ Abstract research

**Question Number : 9 Question Id : 97103637656 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is core objective of any research?

**Options :**

1. ✘ Knowledge Dissemination
2. ✔ Knowledge Discovery
3. ✘ Knowledge Procurement
4. ✘ Knowledge Propagation

**Question Number : 10 Question Id : 97103637657 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the relevance between Data and Information?

**Options :**

1. ✘ It is non structured Identification of research methodology
2. ✘ Information will explore the data and data will conceal the information
3. ✘ Data is the partial ambiguous information that will provide the inferences
4. ✔ Data is non processed information and information is the processed data



**Question Number : 11 Question Id : 97103637658 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What are the scales that can measure the categorical data?

**Options :**

1. ✘ Nominal & Interval scales
2. ✘ Ratio & Interval scales
3. ✔ Nominal & Ordinal Scales
4. ✘ Ordinal & Ratio Scales

**Question Number : 12 Question Id : 97103637659 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following does not come under the category of statistical data scale?

**Options :**

1. ✘ Nominal Scale
2. ✘ Ordinal Scale
3. ✘ Interval Scale
4. ✔ Robert Scale



**Question Number : 13 Question Id : 97103637660 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Historical data refers to

**Options :**

1. ✓ The time series data
2. ✗ Cross sectional data
3. ✗ Qualitative data
4. ✗ Multivariate data

**Question Number : 14 Question Id : 97103637661 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the full form of SPSS, software that is using for data analysis?

**Options :**

1. ✗ Statistical Programming for Software Solutions
2. ✓ Statistical Packages for Social Sciences
3. ✗ Scientific Programs for Social Studies

4. ✘ Scientific Packages for Science Studies.

**Question Number : 15 Question Id : 97103637662 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which three things are most important and essential entities in any communication process?

**Options :**

1. ✘ Buyer, Seller and Production Process
2. ✘ Teacher, Student and Class Room
3. ✘ Speaker, Member and Assembly House.
4. ✔ Sender, Receiver and the Channel (medium)

**Question Number : 16 Question Id : 97103637663 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following are non-synonymous matching with respect to the communications?

**Options :**

1. ✔ Class room - computer
2. ✘ Teacher - encoder
- 3.

✘ Student – decoder

4. ✘ Black Board – channel

**Question Number : 17 Question Id : 97103637664 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Television is an audio visual medium that decoded the electronic signals into audio visuals to the audience comes under the category of

**Options :**

1. ✘ Encoder

2. ✘ Decoder

3. ✓ Channel

4. ✘ Sender

**Question Number : 18 Question Id : 97103637665 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The device of communication such as idea, information, view, fact, feeling, statement, etc. that are generated by the sender intended for communicating further is referred as

**Options :**

1. ✘ Encode
2. ✔ Message
3. ✘ Decode
4. ✘ Software

**Question Number : 19 Question Id : 97103637666 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A communication that happened between hierarchically located persons and both upward and downward communication flows is usually referred as

**Options :**

1. ✔ Vertical Communication
2. ✘ Horizontal Communication
3. ✘ Diagonal Communication
4. ✘ Random Communication

**Question Number : 20 Question Id : 97103637667 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

How many minimum number of nodes that require to initiate any communication process among the networking ?

**Options :**

1. ✘ Three

2. ✔ Two

3. ✘ One

4. ✘ Zero

**Is Section Default? :**

null

**Question Id : 97103637668 Sub Question Shuffling Allowed : Yes Group Comprehension**

**Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A**

**Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (21 to 25)**



### Read the Passage and answer the following questions:

Reading is a fundamental skill that plays a vital role in our lives. It's not just about deciphering words on a page but about the doors it opens, the knowledge it imparts, and the worlds it allows us to explore. Reading is an essential tool for learning, expanding our horizons, and fostering imagination. When we read, we acquire knowledge. Whether it's reading textbooks, newspapers, or online articles, we gain information that helps us understand the world. Books, in particular, are a treasure trove of knowledge. They contain the wisdom of generations, the discoveries of great minds, and the stories of diverse cultures. Reading books can educate us on history, science, literature, and countless other subjects. It's like having a mentor, guiding us through the complexities of life.

Reading also broadens our horizons. It exposes us to different viewpoints, perspectives, and experiences. When we read about characters from various backgrounds or explore far-off lands through the pages of a novel, we step into their shoes and see the world from a different angle. This broadening of perspective fosters empathy and understanding, making us more tolerant and open-minded individuals. Furthermore, reading fuels our imagination. Whether it's a fantasy novel, a science fiction story, or a compelling mystery, books transport us to other worlds and challenge us to envision the unimaginable. Our minds become the canvas, and words paint the pictures. It's a magical experience that ignites creativity and inspiration. Moreover, reading is a skill that transcends academic boundaries. It's not just about scoring well on tests; it's about developing critical thinking, analytical skills, and the ability to communicate effectively. A person who reads regularly is likely to have a broader vocabulary, better writing skills, and an improved ability to express their thoughts and ideas.

In our modern digital age, reading has taken on new forms. E-books and audiobooks have made it more accessible and convenient. With just a few clicks or taps, we can access a vast library of literature. However, there's something timeless and intimate about holding a physical book, flipping its pages, and smelling the scent of paper and ink. In conclusion, reading is not just a hobby; it's a cornerstone of education, personal growth, and cultural enrichment. It empowers us with knowledge, broadens our perspectives, ignites our imagination, and equips us with essential skills. Whether we're reading for pleasure, information, or self-improvement, reading is a journey that enriches our lives and shapes us into more informed, empathetic, and creative individuals.

### Sub questions

**Question Number : 21 Question Id : 97103637669 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What does the passage emphasize as the fundamental role of reading?

**Options :**

1. ✘ Deciphering words
2. ✔ Opening doors

3. ✘ Expanding horizons

4. ✘ Acquiring knowledge

**Question Number : 22 Question Id : 97103637670 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

According to the passage, what do books offer readers?

**Options :**

1. ✘ Online articles

2. ✔ Stories of diverse cultures

3. ✘ Sports news

4. ✘ Travel guides

**Question Number : 23 Question Id : 97103637671 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

How does reading help in developing personal skills, as mentioned in the passage?

**Options :**

1. ✘ Improving physical fitness



2. ✓ Enhancing critical thinking
3. ✘ Learning to play musical instruments
4. ✘ Mastering cooking techniques

**Question Number : 24 Question Id : 97103637672 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What aspect of reading does the passage highlight as a magical experience?

**Options :**

1. ✘ Learning new languages
2. ✘ Developing coding skills
3. ✓ Imagining the unimaginable
4. ✘ Studying historical events

**Question Number : 25 Question Id : 97103637673 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

How has reading been evolved in the modern digital age, according to the passage?

**Options :**

1. ✘ It has become less accessible
2. ✘ It has become less convenient
3. ✔ It has taken on new forms like e-books and audiobooks
4. ✘ It has lost its importance

**Is Section Default? :** null

**Question Number : 26 Question Id : 97103637674 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is NOT a characteristic of the scientific method?

**Options :**

1. ✘ Empirical observation
2. ✘ Systematic process
3. ✔ Subjectivity
4. ✘ Replicability

**Question Number : 27 Question Id : 97103637675 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

Which city in Andhra Pradesh is known as the "City of Destiny"?

**Options :**

1. ✘ Vijayawada
2. ✔ Visakhapatnam
3. ✘ Tirupati
4. ✘ Kakinada

**Question Number : 28 Question Id : 97103637676 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

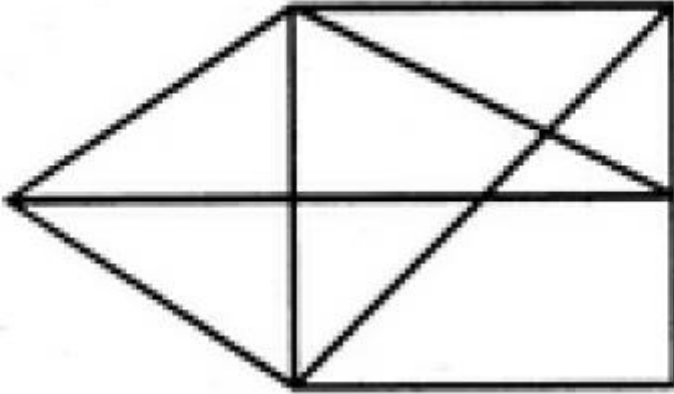
What does the acronym LPG stand for in the context of the policy adopted by the Indian government during Prime Minister PV Narasimha Rao's tenure?

**Options :**

1. ✔ Liquid Petroleum Gas
2. ✘ Liberalization, Privatization, Globalization
3. ✘ Low-Price Goods
4. ✘ Long-term Planning Goals

Question Number : 29 Question Id : 97103637677 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Find the number of triangles in the given figure.



Options :

1. ✘ 12

2. ✘ 13

3. ✘ 14

4. ✔ 15

Question Number : 30 Question Id : 97103637678 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following letter is appropriate in the mentioned blank space, in the letter series of

B, C, E, G, \_\_\_

Options :

1. ✘ J

2. ✘ I

3. ✔ K

4. ✘ L

**Question Number : 31 Question Id : 97103637679 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the angle between the two hands of hours and minutes in a wall clock when the time is showing as 4:12

**Options :**

1. ✘ 51

2. ✘ 52

3. ✘ 53

4. ✔ 54

**Question Number : 32 Question Id : 97103637680 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

As per calendar it is observed that it is Monday today. What will be the day after 64 days?

**Options :**

1. ✘ Sunday

2. ✘ Monday

3. ✔ Tuesday

4. ✘ Wednesday

**Question Number : 33 Question Id : 97103637681 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

If the students A,B,C,D,E,F and G were asked to sit in a circle such that A is left to B, B is Left to C, and so on with F is left to G. Then how many students are in between D and A if we count them in anti-clockwise direction?

**Options :**

1. ✘ 2

2. ✔ 3

3. ✘ 4

4. ✘ 5

**Question Number : 34 Question Id : 97103637682 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction**

**Time : 0**

Eight students by name A, B, C, D, E, F, G, H are asked to sit on the sides of the Symmetric Octagon table by allotting them the serial numbers 1,2,3,4,5,6,7, and 8 respectively. They have seated in antilock wise direction begin with odd numbered students 1,3,5,7 are adjacent in the said order followed by 2,4,6,8 are adjacent in the same order. Then how many students are in between A, C and C, B if we are counting their positions in clockwise direction

**Options :**

1. ✓ 6,4

2. ✗ 2,3

3. ✗ 4,5

4. ✗ 2,4

**Question Number : 35 Question Id : 97103637683 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

If two symmetric dice are thrown simultaneously, the sum on the two dice is calculating. How many such outcomes one can get for the sum 8.

**Options :**

1. ✗ 3

2. ✗ 4

3. ✓ 5



4. ✘ 6

**Question Number : 36 Question Id : 97103637684 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What will be the number after the final in the following series of 2, 1,  $\frac{1}{2}$ ,  $\frac{1}{4}$ , \_\_\_\_

**Options :**

1. ✘  $\frac{1}{6}$

2. ✔  $\frac{1}{8}$

3. ✘  $\frac{1}{10}$

4. ✘  $\frac{1}{12}$

**Question Number : 37 Question Id : 97103637685 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is the odd?

**Options :**

1. ✘ Triangle

2. ✘ Rectangle

3. ✘ Pentagon

4. ✓ Circle

**Question Number : 38 Question Id : 97103637686 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is the word that suits in the blank Parts : Strap :: Wolf : \_\_

**Options :**

1. ✗ Lowest

2. ✓ Flow

3. ✗ Flak

4. ✗ Wax

**Question Number : 39 Question Id : 97103637687 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

If there are altogether 25 students in a class, 6 students belong to both two courses, 10 students are neither of the courses, and 11 students belong to course-1, how many number of students are in course-2 ?

**Options :**

1. ✓ 10

2. ✘ 11

3. ✘ 9

4. ✘ 8

**Question Number : 40 Question Id : 97103637688 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Statement: A medicine by name 'M' is a drug that is causing the ripples in the medical field.

Assumption: (i) No other drug is causing ripples in the medical field; (ii) Medicine 'M' is a great drug

**Options :**

1. ✘ If assumption-(i) only is implicit

2. ✘ If assumption-(ii) only is implicit

3. ✘ If either assumption-(i) or (ii) is implicit

4. ✔ If neither assumption-(i) nor (ii) is implicit

**Question Number : 41 Question Id : 97103637689 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The 'M' state government has decided hence forth to award the road construction contracts through open tenders only. Courses of action: I. The 'M' state will not be able to get the work done swiftly as it will have to go through tender and other procedures; II. Hence forth the quality of roads constructed may be far better

**Options :**

1. ✓ If neither I nor II follows
2. ✗ If either I or II follows
3. ✗ If only I follows
4. ✗ If only II follows

**Question Number : 42 Question Id : 97103637690 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

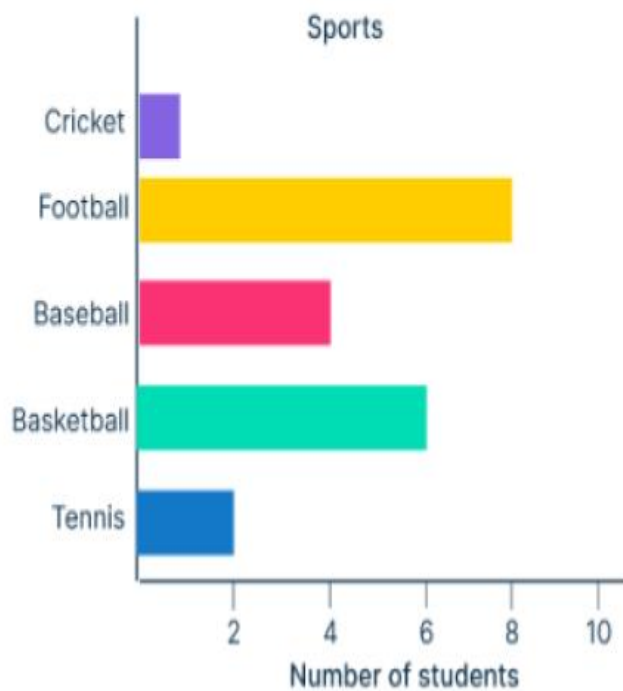
Deductive reasoning is characterized by

**Options :**

1. ✗ Specific to general
2. ✓ General to specific
3. ✗ Specific to specific
4. ✗ General to general

**Question Number : 43 Question Id : 97103637691 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What are the Modal game, Median game and Least preferred game respectively among Cricket, Football, Baseball, Basketball and Tennis by the students of a specific college based on the following display.



**Options :**

1. ✘ Cricket, Tennis and Basketball
2. ✘ Football, Baseball and Basketball
3. ✔ Football, Baseball and Cricket
4. ✘ Tennis, Football and Cricket

**Question Number : 44 Question Id : 97103637692 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The following is the data of sales of motor pumps by 6 agencies in 5 years. Which agency has recorded maximum sales overall from 2019 to 2023 and what is the total sales of that agency.

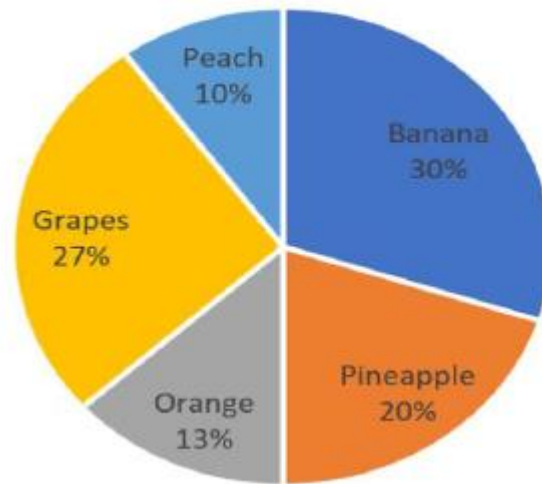
Years	A	B	C	D	E	F
2019	18	12	27	16	17	23
2020	17	27	26	19	37	19
2021	13	16	22	17	23	27
2022	26	10	23	22	22	23
2023	27	22	23	28	29	19

**Options :**

1. ✘ Agency A with Total sales =101
2. ✘ Agency C with Total sales =121
3. ✘ Agency D with Total sales =102
4. ✔ Agency E with Total sales =128

**Question Number : 45 Question Id : 97103637693 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Observing the Pie diagram the following options are true.



Options :

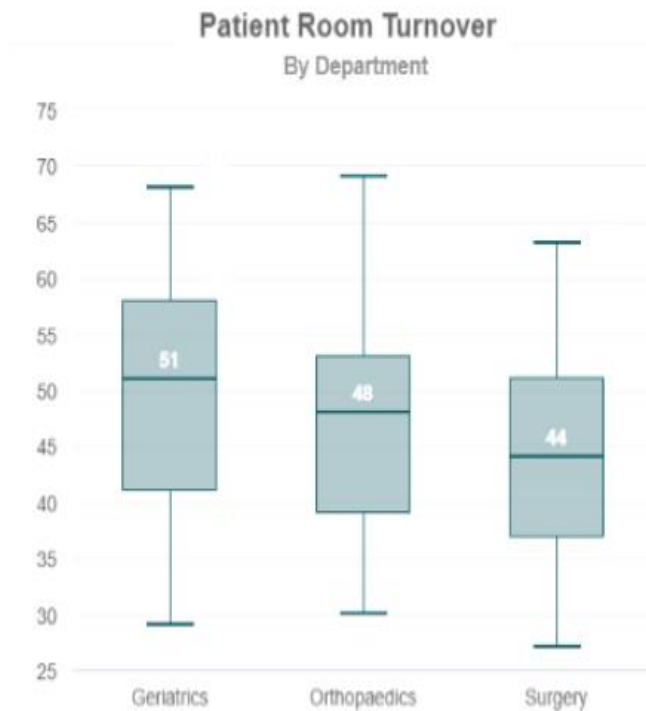
1. ✓ Banana sales are more among all the sales
2. ✗ Highest sales observed with the Grapes
3. ✗ Lowest sales is observed with the Oranges
4. ✗ Sales of Banana > Grapes > Pineapple > Peach

Question Number : 46 Question Id : 97103637694 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0



From the data presented through the following Boxplots which of the following statement is

true



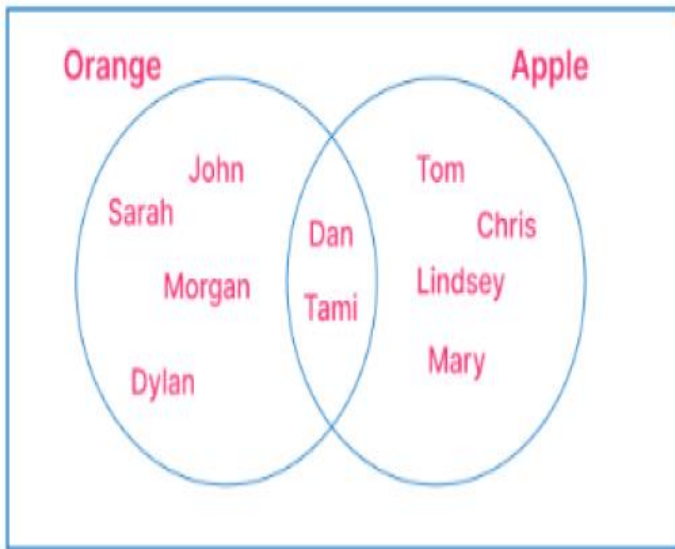
**Options :**

1. ✘ The maximum patient room turnovers is observed with Surgery department
2. ✘ The median patient room turnover of Orthopedics is less than that of Surgery
3. ✘ The minimum patient room turnovers is observed with Orthopedics department
4. ✔ The minimum patient room turnovers is observed with Surgery department

**Question Number : 47 Question Id : 97103637695 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What are the percentages of people who likes oranges, Apples and Both form the display given

below

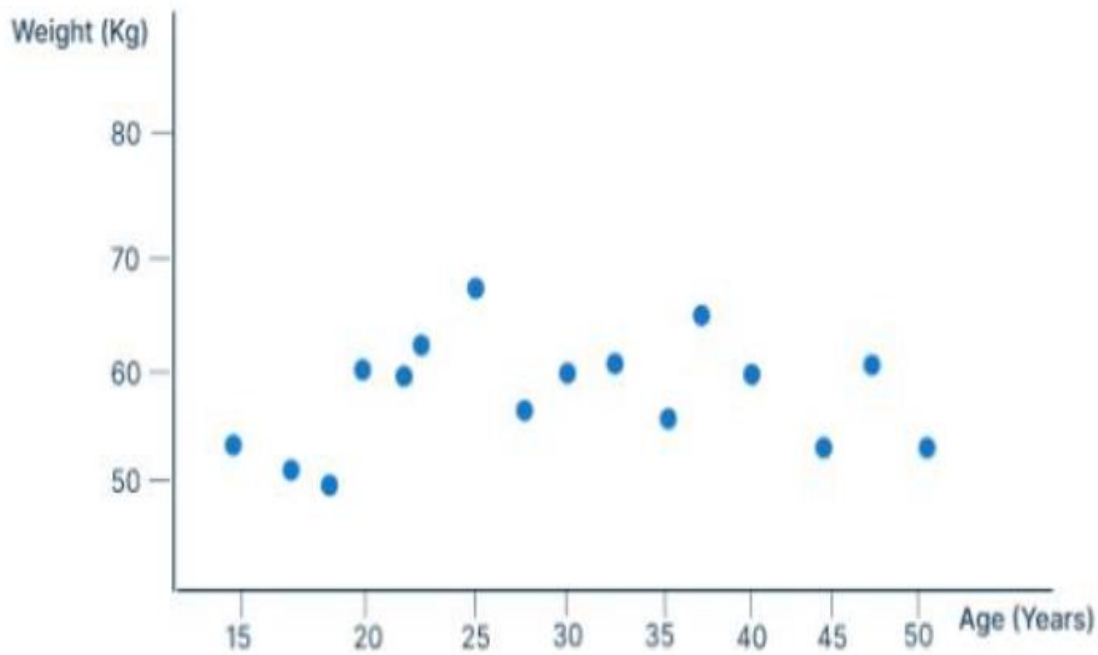


Options :

1. ✘ 60%, 40% and 20%
2. ✘ 40%, 60% and 10%
3. ✔ 60%, 60% and 20%
4. ✘ 40%, 40% and 10%

Question Number : 48 Question Id : 97103637696 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the name of the following statistical disclosure



Options :

1. ✘ Area diagram
2. ✘ Bar diagram
3. ✘ Line diagram
4. ✔ Scatter diagram

Question Number : 49 Question Id : 97103637697 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the following stem-leaf diagram is converted as frequency table with class intervals 0-10, 10-20; 20-30; 30-40; 40-50 and 50-60, how many elements will be observed in the classes of 30-40 and 50-60 ?

Stem	Leaf
0	5
1	6, 7
2	3, 6, 8
3	4, 5, 5, 5, 5, 8, 9
4	7, 7, 7, 8
5	4, 5
6	0

Options :

1. ✘ 7 and 2
2. ✘ 6 and 2
3. ✔ 7 and 3
4. ✘ 6 and 3

Question Number : 50 Question Id : 97103637698 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is immediate next upper level of Kilobyte in the computer memory context?

Options :

1. ✘ Gigabyte
2. ✔ Megabyte
3. ✘ Petabyte
4. ✘ Terabyte

**Question Number : 51 Question Id : 97103637699 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is the correct full form of NMEICT?

**Options :**

1. ✘ National Ministry for Engineering through ICT
2. ✘ National Ministry on E-learning through ICT
3. ✘ National Mission of Engineering through ICT
4. ✔ National Mission on Education through ICT

**Question Number : 52 Question Id : 97103637700 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following MS office package will be suitable tool for managing the database?

**Options :**

1. ✘ MS Excel
2. ✘ MS Word
3. ✔ MS Access
4. ✘ MS Publisher

**Question Number : 53 Question Id : 97103637701 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

If the decimal number 45 is converted to binary number, it is 101101. Then what will be the binary code for a decimal number 64?

**Options :**

1. ✔ 1000000
2. ✘ 1000001
3. ✘ 1000010
4. ✘ 1000011

**Question Number : 54 Question Id : 97103637702 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is not an output device with the computer system?

**Options :**

1. ✘ Monitor
2. ✘ Printer
3. ✔ Scanner
4. ✘ Speaker

**Question Number : 55 Question Id : 97103637703 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the role of the rationale mode in research?

**Options :**

1. ✔ To emphasize logical reasoning
2. ✘ To prioritize personal experiences
3. ✘ To reject empirical evidence
4. ✘ To rely solely on authorities



**Question Number : 56 Question Id : 97103637704 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is relevance of UPS in making use of the personal computer ?

**Options :**

1. ✓ It's a hardware device that accommodates the continuous power supply to the PC
2. ✗ It's a hardware device that can be used for working with PC as input device
3. ✗ It's a hardware device that will provide the audio or video output
4. ✗ It's hardware device that is working inside the central processing unit of the PC

**Question Number : 57 Question Id : 97103637705 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following gases are harmful to protect the ozone layer.

**Options :**

1. ✗ Carbon dioxide
2. ✓ Chlorofluorocarbon
3. ✗ Nitrogen dioxide
4. ✗ Sulfur dioxide

**Question Number : 58 Question Id : 97103637706 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following category of the pollution is due to the emissions of Carbon monoxide during the industrial functioning, vehicle operations and burning of plastics etc. ?

**Options :**

1. ✓ Air pollution
2. ✗ Soil pollutions
3. ✗ Sound pollution
4. ✗ Water pollution

**Question Number : 59 Question Id : 97103637707 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following measures may affect adversely on the environmental health ?

**Options :**

1. ✗ Increasing the use of green energy
2. ✗ Growth of more trees and plants
3. ✗ Decreasing the gaseous emissions from different sources

4. ✓ Increased carbon emission activities

**Question Number : 60 Question Id : 97103637708 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the full form of AQI in the context of measuring the environmental pollution

**Options :**

1. ✗ Adverse Quantity Index

2. ✓ Air Quality Index

3. ✗ Air Quantity Index

4. ✗ Atmosphere Quantity Index

**Question Number : 61 Question Id : 97103637709 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The study that deals with earthquakes is

**Options :**

1. ✗ Entomology

2. ✗ Epidemiology

3. ✘ Ecology

4. ✔ Seismology

**Question Number : 62 Question Id : 97103637710 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The atmospheric disturbances around low-pressure area distinguished by and often destructive air circulation is referred as

**Options :**

1. ✔ Cyclone

2. ✘ Earthquake

3. ✘ Tsunami

4. ✘ Wildfire

**Question Number : 63 Question Id : 97103637711 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following are the major causing factors that influence the rain fall in overall India

**Options :**

1. ✘ Climate changes in the Bay of Bengal and Arabian Sea

2. ✘ Cyclones & Depressions in the Bay of Bengal and Arabian Sea
3. ✘ Eastern and Western Ghats in the southern peninsula of India
4. ✔ Seasonal Monsoons namely North-East & South-West

**Question Number : 64 Question Id : 97103637712 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

STEM education in NEP-2020 is having the focus of the following disciplines of study

**Options :**

1. ✘ Society, Technology, Environment, Management
2. ✔ Science, Technology, Engineering, Mathematics
3. ✘ Society, Technology, Engineering, Management
4. ✘ Science, Technology, Environment, Mathematics

**Question Number : 65 Question Id : 97103637713 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What precaution should researchers take during data interpretation?

**Options :**

1. ✘ Make assumptions without evidence
2. ✘ Jump to conclusions quickly
3. ✔ Consider alternative explanations
4. ✘ Ignore contradictory findings

**Question Number : 66 Question Id : 97103637714 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Who among the following is appointed by the President of India?

**Options :**

1. ✘ Prime minister of the nation
2. ✔ Governor of a state
3. ✘ Chief minister of a state
4. ✘ Speaker of a state legislative assembly

**Question Number : 67 Question Id : 97103637715 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**



What is the significance of using graphics in data presentation?

Options :

1. ✘ To confuse readers
2. ✘ To hide important findings
3. ✔ To simplify complex data
4. ✘ To increase word count

Question Number : 68 Question Id : 97103637716 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In research report writing, what is the purpose of the introduction section?

Options :

1. ✘ To present data analysis
2. ✘ To discuss ethical considerations
3. ✘ To summarize the conclusion
4. ✔ To provide background information

Question Number : 69 Question Id : 97103637717 Display Question Number : Yes Is Question

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which type of report provides a detailed account of the entire research process and findings?

**Options :**

1. ✘ Executive summary
2. ✔ Technical report
3. ✘ Progress report
4. ✘ Brief report

**Question Number : 70 Question Id : 97103637718 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What does plagiarism refer to in research ethics?

**Options :**

1. ✔ Using someone else's ideas without credit
2. ✘ Citing sources properly
3. ✘ Collaborating with other researchers
4. ✘ Sharing research findings openly

## Zoology

Section Id :	971036536
Section Number :	2
Mandatory or Optional :	Mandatory
Number of Questions :	70
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 71 Question Id : 97103637719 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Gemoplasm theory was proposed by

Options :

1. ✘ Dobzhansky
2. ✘ Meyer
3. ✘ Mendel
4. ✔ Weismann

Question Number : 72 Question Id : 97103637720 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction

**Time : 0**

The gradual mode of speciation in a single lineage in which species diverge in spurts of relatively rapid change which result in an increase in species is termed as

**Options :**

1. ✓ Punctuated equilibrium
2. ✗ Anagenesis
3. ✗ Cladogenesis
4. ✗ Adaptive radiation

**Question Number : 73 Question Id : 97103637721 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

With time molecular distance between organisms increases during evolution due to

**Options :**

1. ✗ Point mutations
2. ✗ Random drift
3. ✓ Neutral mutations
4. ✗ Natural selection

Question Number : 74 Question Id : 97103637722 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Major cause of the evolution of genes and proteins are

Options :

1. ✘ Chromosomal aberrations
2. ✘ Point mutations
3. ✔ Gene duplication and divergence
4. ✘ Sexual reproduction

Question Number : 75 Question Id : 97103637723 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Sickle cell anaemia is caused by mutation in

Options :

1. ✘ Haemoglobin B
2. ✘ Haemoglobin A
3. ✘ Haemoglobin F
4. ✔ Haemoglobin S

**Question Number : 76 Question Id : 97103637724 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

In human males, autosomal and sex trisomy mainly occurs due to

**Options :**

1. ✘ Error in meiosis
2. ✘ Dominant Y chromosome
3. ✘ Faulty repair mechanism
4. ✔ Non-disjunction of chromosome

**Question Number : 77 Question Id : 97103637725 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Chromosome aberration in which suppression of crossing over, pseudo-dominance, lethal gene and non-reversal mutation occurs in

**Options :**

1. ✔ Inversion
2. ✘ Translocation
3. ✘ Duplication



4. ✘ Deletion

Question Number : 78 Question Id : 97103637726 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The primary cause of variation among individuals is

Options :

1. ✔ Mutation
2. ✘ Recombination
3. ✘ Isolation
4. ✘ Hybridization

Question Number : 79 Question Id : 97103637727 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Split genes are present in

Options :

1. ✘ All eukaryotes
2. ✔ Most eukaryotes and some archaeobacteria
3. ✘ Most eukaryotes and some eubacteria

4. ✘ All organisms

Question Number : 80 Question Id : 97103637728 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

All of the Mendelian alleles for different traits showed

Options :

1. ✘ Epistasis
2. ✘ Co-dominance
3. ✘ Incomplete dominance
4. ✔ Dominance and recessiveness

Question Number : 81 Question Id : 97103637729 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which statement is correct for capacitation?

Options :

1. ✔ Maturation of mammalian spermatozoa after entering into oviduct of female
2. ✘ Meiotic division in egg after penetration of sperm
3. ✘ Maturation of egg in oviduct after fertilization

4. ✘ Maturation of spermatozoa in male body

**Question Number : 82 Question Id : 97103637730 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The major function of cortical granules in the cytoplasm of an egg is

**Options :**

1. ✘ Early block to polyspermy
2. ✘ Allowing meiosis to complete
3. ✔ Late block to polyspermy
4. ✘ Helping in reorganization of sperm

**Question Number : 83 Question Id : 97103637731 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The part of the embryo from which the ectoderm, mesoderm and endoderm are formed in chick is known as

**Options :**

1. ✘ Primitive streak
2. ✘ Hypoblast

3. ✓ Epiblast

4. ✗ Cytotrophoblast

**Question Number : 84 Question Id : 97103637732 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The dorsal most vegetal cells of the amphibian embryo that is capable of inducing the organiser is called the Nieuwkoop centre and is marked by the presence of

**Options :**

1. ✗ Chordin

2. ✓  $\beta$ -catenin

3. ✗ Goosecoid

4. ✗ Nanos

**Question Number : 85 Question Id : 97103637733 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What kind of cleavage is shown in mammals?

**Options :**

1. ✗ Meroblastic rotational

2. ✓ Holoblastic rotational

3. ✗ Holoblastic radial

4. ✗ Meroblastic radial

**Question Number : 86 Question Id : 97103637734 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The fluid mosaic model of plasma membrane given by Singer and Nicolson applies to

**Options :**

1. ✗ Only prokaryotic membrane

2. ✗ Only eukaryotic membrane

3. ✓ Both prokaryotic and eukaryotic membranes

4. ✗ Only to organelle membranes

**Question Number : 87 Question Id : 97103637735 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which lipid is found exclusively on one face of the membrane?

**Options :**

1. ✘ Cholesterol
2. ✔ Phosphatidylcholine
3. ✘ Phosphatidylinositol
4. ✘ Phosphatidylethanolamine

**Question Number : 88 Question Id : 97103637736 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which enzyme is involved in the repair mechanism?

**Options :**

1. ✔ DNA polymerase
2. ✘ Restriction endonuclease
3. ✘ RNA polymerase
4. ✘ Photolase

**Question Number : 89 Question Id : 97103637737 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The most critical step for correct protein synthesis is

Options :

1. ✘ Binding of ribosome to m-RNA
2. ✘ Aminoacylation of t-RNA
3. ✘ Translocation of ribosome
4. ✔ Formation of initiation complex

Question Number : 90 Question Id : 97103637738 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

G protein-linked receptors are transmembrane proteins of

Options :

1. ✘ Five-pass
2. ✘ Single-pass
3. ✘ Three-pass
4. ✔ Seven-pass

Question Number : 91 Question Id : 97103637739 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction



**Time : 0**

Among the following hypothalamus peptide hormones which one is the smallest?

**Options :**

1. ✘ GnRH
2. ✔ CRH
3. ✘ GH-RH
4. ✘ TRH

**Question Number : 92 Question Id : 97103637740 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The concentration of urine in mammals depends on

**Options :**

1. ✘ Glomerulus
2. ✘ Osmotic pressure of blood
3. ✔ Length of Henley's loop
4. ✘ Size of organism

**Question Number : 93 Question Id : 97103637741 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which one of the following is the most powerful buffer system of blood?

**Options :**

1. ✓ Bicarbonate
2. ✗ Phosphate
3. ✗ Tris
4. ✗ Saline

**Question Number : 94 Question Id : 97103637742 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the simplest measure of dispersion?

**Options :**

1. ✗ Mean
2. ✗ Variance
3. ✓ Range
4. ✗ Mode

Question Number : 95 Question Id : 97103637743 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the term given to a duplicate specimen of the original type?

Options :

1. ✘ Lectotype
2. ✘ Holotype
3. ✘ Neotype
4. ✔ Isotype

Question Number : 96 Question Id : 97103637744 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is the part of processed antigen that binds to the MHC molecule and are recognized by T-cells?

Options :

1. ✔ Agretope
2. ✘ Epitope
3. ✘ Chaperone
4. ✘ Immunoglobulin

Question Number : 97 Question Id : 97103637745 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In how many days Artemia grows from nauplius to adult stages ?

Options :

1. ✘ 5

2. ✘ 7

3. ✘ 6

4. ✔ 8

Question Number : 98 Question Id : 97103637746 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the tracing is NOT the role of T-cell receptor complex?

Options :

1. ✘ CD3

2. ✘ CD40L

3. ✘ CD28

4. ✔ CD19

**Question Number : 99 Question Id : 97103637747 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Identify an endoparasite found in animals

**Options :**

1. ✘ Adamsia
2. ✘ Pleurobranchia
3. ✔ Flatworms
4. ✘ Ctenoplana

**Question Number : 100 Question Id : 97103637748 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What can be added to aquaculture feeds as a digestion promoting supplement?

**Options :**

1. ✘ Glucosidase
2. ✔ Probiotic bacteria
3. ✘ Starch
4. ✘ Amylase

**Question Number : 101 Question Id : 97103637749 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Cytokinin which acts as a growth factor of B-cell is

**Options :**

1. ✘ IL - 2
2. ✘ IL - 10
3. ✔ IL - 13
4. ✘ TNF

**Question Number : 102 Question Id : 97103637750 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The horizontal distribution of different species occupying different levels is called

**Options :**

1. ✔ Zonation
2. ✘ Ecosystem
3. ✘ Stratification
4. ✘ Niche



**Question Number : 103 Question Id : 97103637751 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Thymus is required for the development of T-cells. Children who are born without Thymus undergo adverse effects of not having matured T-cells; this syndrome is known as

**Options :**

1. ✓ DiGeorge syndrome
2. ✗ Gigantism
3. ✗ Acromegaly
4. ✗ Cushing syndrome

**Question Number : 104 Question Id : 97103637752 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Oxygen depletion will occur in ponds due to high density of

**Options :**

1. ✗ Insects
2. ✗ Bacteria
3. ✗ Air-breathing fishes

4. ✓ Macrophytes

Question Number : 105 Question Id : 97103637753 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Protozoal larval stages of *Penaeus monodon* feed on \_\_\_\_\_

Options :

1. ✓ Diatoms
2. ✗ Freshly hatches artemia nauplii
3. ✗ Macrophytes
4. ✗ Rotifers

Question Number : 106 Question Id : 97103637754 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which is a source of carbohydrates in the functional feed of aquatic organisms?

Options :

1. ✗ Soya bean
2. ✗ Peptone

3. ✓ Vegetable flours

4. ✗ Fructose syrup

**Question Number : 107 Question Id : 97103637755 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The antibody class found at highest concentrations in serum is

**Options :**

1. ✓ IgG

2. ✗ IgE

3. ✗ IgM

4. ✗ IgD

**Question Number : 108 Question Id : 97103637756 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The first step in fertilization of a pond is the application of

**Options :**

1. ✗ Fertilizer

2. ✗ Bordox mixture

3. ✓ Quick lime

4. ✗ Slacked lime

**Question Number : 109 Question Id : 97103637757 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Itching, redness and blistering around ear lobes after wearing new earrings is caused by

**Options :**

1. ✗ B cells

2. ✗ Eosinophils

3. ✓ T cells

4. ✗ Basophils

**Question Number : 110 Question Id : 97103637758 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Aquaculture refers to

**Options :**

1. ✓ Culture of water-living forms

2. ✗ Cage culture

3. ✘ Culture of aquatic fishes

4. ✘ Culture of shrimps and crabs

**Question Number : 111 Question Id : 97103637759 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the spatial pattern that occurs vertically called?

**Options :**

1. ✘ Zonation

2. ✘ Ecosystem

3. ✔ Stratification

4. ✘ Niche

**Question Number : 112 Question Id : 97103637760 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Male crabs' abdomen is narrow and \_\_\_\_\_ shaped

**Options :**

1. ✘ U

2. ✘ C

3. ✘ L

4. ✔ V

**Question Number : 113 Question Id : 97103637761 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

In an ecosystem, which one shows a one-way passage?

**Options :**

1. ✔ Free Energy

2. ✘ Carbon

3. ✘ Potassium

4. ✘ Nitrogen

**Question Number : 114 Question Id : 97103637762 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Genes for MHC are located on the short arm of chromosome 6 in humans.

In human, it is also known as

**Options :**

1. ✔ HLA

2. ✘ Haplotype

3. ✘ Adjuvants

4. ✘ H2

**Question Number : 115 Question Id : 97103637763 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which is a true fish?

**Options :**

1. ✘ Star fish

2. ✔ Sea horse

3. ✘ Jelly fish

4. ✘ Cuttle fish

**Question Number : 116 Question Id : 97103637764 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following agents is responsible for turning the Taj Mahal yellow?

**Options :**

1. ✘ Sulphur



2. ✓ Sulphur dioxide

3. ✘ Chlorine

4. ✘ Nitrogen dioxide

**Question Number : 117 Question Id : 97103637765 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which type of hypersensitivity reaction is mediated via IgG and IgM binding to self-antigens and marking them out to the body for destruction?

**Options :**

1. ✘ TYPE I

2. ✘ TYPE III

3. ✓ TYPE II

4. ✘ TYPE IV

**Question Number : 118 Question Id : 97103637766 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Larvae of eel are called \_\_\_\_\_

**Options :**

1. ✓ Leptocephali

2. ✗ Mysis

3. ✗ Phyllosoma

4. ✗ Spawn

**Question Number : 119 Question Id : 97103637767 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What are the two basic categories of an ecosystem?

**Options :**

1. ✓ Aquatic and terrestrial

2. ✗ Aquatic and Forest

3. ✗ Rivers and forests

4. ✗ Ponds and lakes

**Question Number : 120 Question Id : 97103637768 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

CD8 is a co-receptor of T-cell and is present on the T cytotoxic cell.

It is a heterodimer of  $\alpha$  and  $\beta$  chains and recognizes

**Options :**

1. ✓ MHC I
2. ✗ MHC III
3. ✗ MHC II
4. ✗ HLA-C

**Question Number : 121 Question Id : 97103637769 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

ICAR- Central Institute of Brackish Water Aquaculture is located in

**Options :**

1. ✗ Patna
2. ✗ Lucknow
3. ✓ Chennai
4. ✗ Kochi

**Question Number : 122 Question Id : 97103637770 Display Question Number : Yes Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The cultivation of selected fishes in confined areas with utmost care to get maximum yield is known as

**Options :**

1. ✘ Pisciculture
2. ✘ Capture fisheries
3. ✔ Culture fisheries
4. ✘ Marine fisheries

**Question Number : 123 Question Id : 97103637771 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Anadromous fish are born in ----- and migrate to -----.

**Options :**

1. ✔ Freshwater; Saltwater
2. ✘ Saltwater; Freshwater
3. ✘ North; South
4. ✘ South; North

Question Number : 124 Question Id : 97103637772 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is a migratory fish?

Options :

1. ✘ Ribbon fish
2. ✘ Carp
3. ✔ Salmon
4. ✘ Shark

Question Number : 125 Question Id : 97103637773 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A common trait between tadpoles and fishes are

Options :

1. ✘ Scales
2. ✘ Fins
3. ✔ Lateral line nervous system
4. ✘ Air bladder

Question Number : 126 Question Id : 97103637774 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Placoid scales are found in

Options :

1. ✓ Cartilaginous fishes
2. ✗ Bony fishes
3. ✗ Lung fishes
4. ✗ Paleontological fishes

Question Number : 127 Question Id : 97103637775 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The pigments in fish skin that are responsible for bright red, yellow and green colour are

Options :

1. ✗ Melanin
2. ✗ Flavanoids
3. ✓ Carotenoids

4. ✘ Guanines

Question Number : 128 Question Id : 97103637776 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Oculomotor muscles are effectively attached to

Options :

1. ✘ Jaw

2. ✔ Eyes

3. ✘ Gills

4. ✘ Fin

Question Number : 129 Question Id : 97103637777 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The scientific name of silver carp is

Options :

1. ✘ *Ctenopharyngodon idella*

2. ✘ *Catla catla*

3. ✔ *Hypothalmiethys molitrix*



4. ✘ *Cyprinus carpio*

Question Number : 130 Question Id : 97103637778 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The larva of *Artemia* is known as

Options :

1. ✘ Zoea
2. ✘ Alima
3. ✘ Phyllosoma
4. ✔ Nauplii

Question Number : 131 Question Id : 97103637779 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

*Machrobrachium rosenbergii* passes through \_\_\_\_\_ number of larval stages

Options :

1. ✘ 10
2. ✔ 11
- 3.

✘ 12

4. ✘ 13

Question Number : 132 Question Id : 97103637780 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

During *rigor mortis* fish loses

Options :

1. ✔ Flexibility

2. ✘ Stiffness

3. ✘ Protein

4. ✘ Rancidity

Question Number : 133 Question Id : 97103637781 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The typical aroma of smoked fish is due to

Options :

1. ✔ Phenols

2. ✘ Ketones

3. ✘ Acids

4. ✘ Aldehydes

**Question Number : 134 Question Id : 97103637782 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is the largest brackish water lake in India ?

**Options :**

1. ✘ Jayakwadi

2. ✘ Yeldhari

3. ✘ Pench

4. ✔ Pullicat

**Question Number : 135 Question Id : 97103637783 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The physicochemical characteristic of the pelagic fishing zone is provided by

**Options :**

1. ✔ Remote sensing technique

2. ✘ Volumetric technique

3. ✘ Numerical technique

4. ✘ Qualitative and quantitative analysis

**Question Number : 136 Question Id : 97103637784 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

India has an Exclusive Economic Zone (EEZ) of about \_\_\_\_\_ million sq. km.

**Options :**

1. ✘ 1.3

2. ✔ 2.3

3. ✘ 3.3

4. ✘ 4.3

**Question Number : 137 Question Id : 97103637785 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The Directorate of Coldwater Fisheries Research (DCFR) is located at

**Options :**

1. ✔ Bhimtal

2. ✘ Kochi

3. ✘ Himachal Pradesh

4. ✘ Chennai

**Question Number : 138 Question Id : 97103637786 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which lentic water bodies of natural origin are formed due to the tectonic movement of the earth's crust?

**Options :**

1. ✔ Lakes

2. ✘ Glaciers

3. ✘ Reservoirs

4. ✘ Ponds

**Question Number : 139 Question Id : 97103637787 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

One of the peculiarities of the Kerala coastal zone is the presence of several backwaters or estuaries locally known as

**Options :**

1. ✓ Kayal
2. ✗ Payal
3. ✗ Kumbala
4. ✗ Sundarban

**Question Number : 140 Question Id : 97103637788 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

What is the name of the process by which marine organisms, particularly corals, expel the algae living in their tissues, causing them to turn white?

**Options :**

1. ✗ Coral growth
2. ✓ Coral bleaching
3. ✗ Coral calcification
4. ✗ Coral spawning