IMPORTANT INSTRUCTIONS

- The maximum marks are 300. Time allotted is **90 MINUTES.**
- There are five sections in the question paper having total **75 questions:**
  - Section – A : Maths (20 Questions)
  - Section – B : Science (20 Questions)
  - Section – C : English (15 Questions)
  - Section – D : Aptitude (10 Questions)
  - Section – E : General Knowledge (10 Questions)
- Each question carries **4 marks.**
- **Negative Marking : ¼ (One-fourth) mark** will be deducted for every incorrect answer.
- **Use only BLUE / BLACK ball pen to fill the circles in bubble sheet.**
- Use of PENCIL is strictly **not allowed.**
- **Use of marker and correction pen is strictly prohibited.**

SECTION – A
MATHS

Choose the correct option.

1) A two-digit number is such that, it exceeds the number formed by reversing the digits by 9. Also, the sum of the digits of the number is 7. Find the product of the digits.

a) 12 b) 18

c) 8 d) None of these

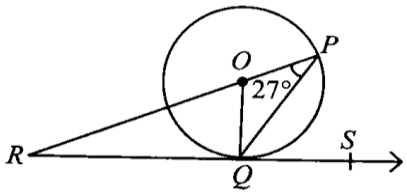
2) In the given figure (not drawn to scale), if O is centre of the circle with ∠QPR = 27° , then find the value of ∠SQP.

a) 46°

b) 63°

c) 38°

d) 54°



3) Determine the value of α, for which the quadratic equation $x^2 + (2\alpha - 1)x + \alpha^2 = 0$ has equal roots.

a) $\frac{1}{4}$ b) $\frac{3}{4}$

c) $\frac{7}{8}$ d) $\frac{2}{5}$

4) If 100 more than the sum of n consecutive natural numbers is equal to the sum of the next n consecutive natural numbers, find n.

a) 8 b) 10

c) 11 d) 12

5) If $x = a(sec\theta + tan\theta) and\ y = b(tan\theta - sec\theta)$, then

a) $xy - ab = 0$ b) $xy + ab = 0$

c) $\frac{x}{a} + \frac{y}{b} = 1$ d) $x^2y^2 = ab$

6) In a parallelogram ABCD, if ∠A = $(3x - 20)°$, ∠B = $(y + 15)°$ and ∠C = $(x + 40)°$, then the values of x and y respectively are

a) 30, 95 b) 95, 30

c) 60, 30 d) 30, 60

7) If the HCF of 135 and 216 is expressed as $87x - 147$, then the value of x is

a) 2 b) 6

c) 4 d) 1

8) The square of three positive integers are in arithmetic progression and the third integer is 12 more than the first. Find the least among these integers.

a) 2 b) 3

c) 4 d) 5

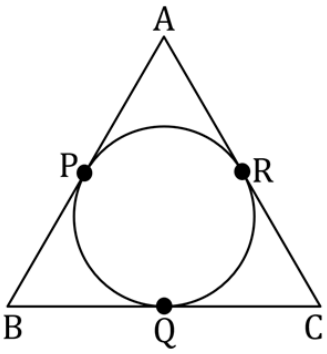
9) In the given figure (not drawn to scale), if AB = 18 cm, BC = 23 cm and AR = 8 cm, then find the value of BP + CQ + AR.

a) 24 cm

b) 42 cm

c) 36 cm

d) 31 cm



10) If the mid-point of the line joining the points (2, 5) and (3, k) and also passes through $4x + 3y - 1 = 0$, then the value of k is

a) 19 b) −11

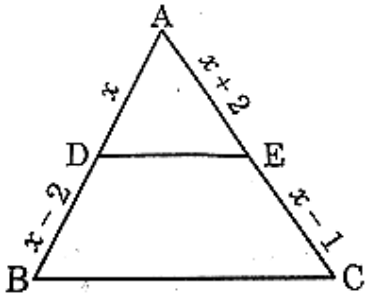
c) 13 d) −17

11) Fill in the blanks.

i) In the given figure, DE||BC. If AD = x cm, DB = (x - 2) cm, AE = (x + 2) cm and EC = (x - 1) cm, then the value of x is_____.

ii) ABCD is a trapezium such that BC||AD and AD = 4 cm. If the diagonals AC and BD intersect at O such that $\frac{AO}{OC} = \frac{DO}{0B} = \frac{1}{2}$, then BC = _____.

iii) In a right-angle triangle KEY, sides are x cm, 40 cm, and 41 cm such that x cm is the shortest side, then x = ____.



	i)	ii)	iii)		i)	ii)	iii)
a)	8cm	7cm	6cm	b)	9cm	10cm	11cm
c)	12cm	13cm	14cm	d)	4cm	8cm	9cm

12) Let ABC be a right-angled triangle with hypotenuse BC of length 20cm. If AP is perpendicular on BC, then the maximum possible length of AP, in cm, is

a) $6\sqrt{2}$ b) 5

c) $8\sqrt{2}$ d) 10

13) Read the following statements carefully and select the correct option.

Statement-1: The height and length of the shadow of a pole is 12 m and 7 m respectively. At the same time if the length of the shadow of a pillar is 14 m, then height of the pillar is 24 m.

Statement-2: The height of a chimney is 12 m. If the angle of elevation of the Sun is 60°, then the height of the chimney is 3 times the length of its shadow.

a) Statement-1 is true but Statement-2 is false.

b) Statement-1 is false but Statement-2 is true.

c) Both Statement-1 and Statement-2 are false.

d) Both Statement-1 and Statement-2 are true.

14) Let A (4, 2) B (6, 5) and C (1,4) be the vertices of triangle ABC Find the coordinates of point Q on median BE such that BQ : QE = 2 : 1.

a) $\frac{11}{3}, \frac{11}{3}$ b) $\frac{7}{3}, \frac{4}{3}$

c) $\frac{8}{3}, \frac{5}{3}$ d) $\frac{10}{3}, \frac{11}{3}$

15) The angles of a triangle are in A.P. If the greatest angle is twice the least, then find the smallest angle.

a) 20° b) 60°

c) 40° d) 30°

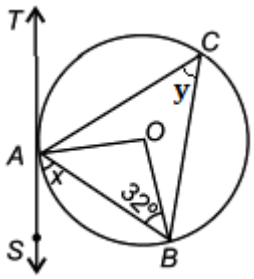
16) In the given figure, TAS is a tangent to the circle, with centre O, at a point A . If ∠OBA= 32° , then find the values of x and y respectively.

a) 32°, 58°

b) 58°, 48°

c) 58°, 58°

d) 42°, 58°



17) Seven times of a two-digit number is equal to four times the number obtained by reversing the order of digits and the sum of the digits is 3. Find the number.

a) 12 b) 10

c) 15 d) 20

18) Let a, b be the roots of the equation $(x-a)(x-b)+c=0, c \neq 0$. The roots of the equation $(x-a)(x-b)-c=0$ are _____.

a) a, c b) b, c

c) a, b d) $a+c, b+c$

19) If $x = (sec\ A - tan\ A)\ (sec\ B - tan\ B)(sec\ C - tan\ C) = (sec\ A + tan\ A)\ (sec\ B + tan\ B)$, $(sec\ C + tan\ C)$ then $x =$

a) 0 b) 1

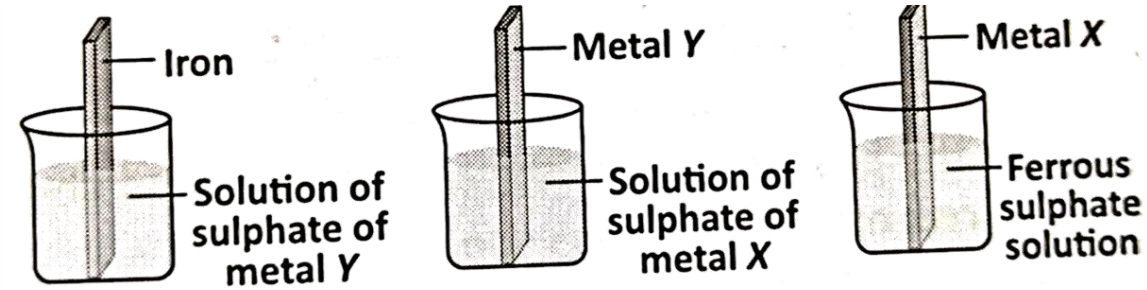
c) −1 d) ±1

20) Pairs of natural numbers whose least common multiple is 78 and the greatest common divisor is 13 are _____.

a) 58 and 13 or 16 and 29
b) 68 and 23 or 36 and 49
c) 18 and 73 or 56 and 93
d) 78 and 13 or 26 and 39

SECTION – B
SCIENCE

21) The following set-up was arranged by Rachit to find out the reactivity order of metals
The following observations were made by him during the experiment.

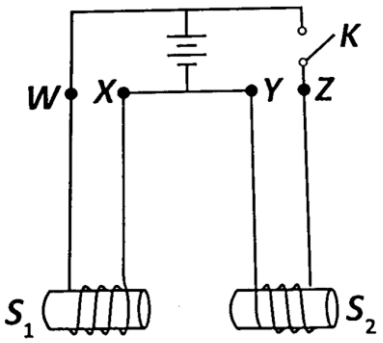


i) The clean iron metal did not react with solution of sulphate of metal Y.
ii) Clean metal Y dissolved in solution of sulphate of metal X and deposition of metal X took place.
iii) Clean metal X dissolved in ferrous sulphate solution and iron metal was deposited.

a) Metals X and Y could be zinc and aluminium respectively.
b) Metals X and Y could be copper and calcium respectively.
c) Metals X and Y could be silver and magnesium
d) The reactivity order of the three metals is X>Y>Fe

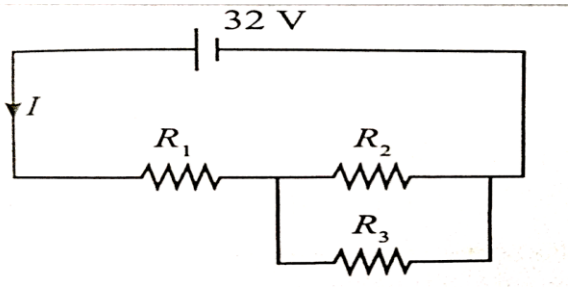
22) The given figure shows two solenoids S_1 and S_2, hanging through conducting wires from contact points W and X, and contact points Y and Z respectively, so that each can swing left and right. After the key K is closed, what will happen?

a) S_1 and S_2move towards each other
b) Both S_1 and S_2 move towards right
c) S_1 and S_2 move away from each other
d) Both S_1 and S_2 remain in their original positions

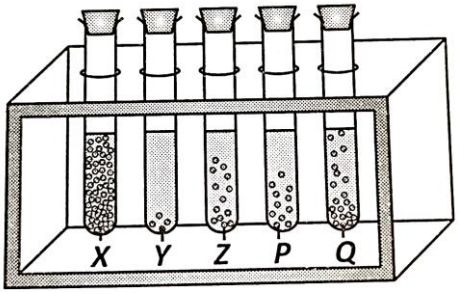


23) In the given circuit R_1 =10 Ω, R_2 = 20 Ω, R_3 = 20 Ω and the battery supplies a current I. Find the ratio of power dissipated across R_1 and R_2.

a) 2 : 1
b) 1 : 2
c) 1 : 3
d) 3 : 1



24) The following set up was prepared to study the reactions of different metals with dilute HCI. Small pieces of five metals X, Y, Z, P and Q were taken in five separate test tubes each containing 10 ml of dilute HCI. The rate of evolution of hydrogen gas in the form of bubbles was observed.



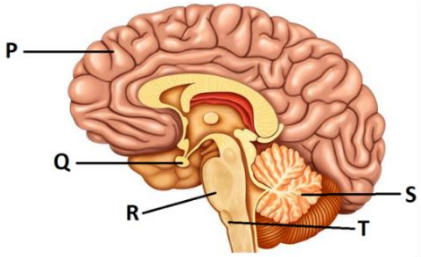
On the basis of the above experiment the conclusions that can be made are

i) Metal X is least reactive while metal Q is most reactive.
ii) Metal Z is more reactive than metal P but less reactive than metal Q.
iii) Metal P is more reactive than metal Y but less reactive than metal Q.
iv) Metal Q is less reactive than metal X but more reactive than metal Y.

Choose the correct statement.

a) iii) and iv) only
b) i) and ii) only
c) i) and iii) only
d) ii), iii) and iv) only

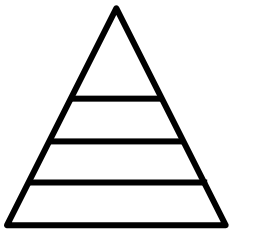
25) Refer to the given figure of the human brain. Identify the labelled parts P, Q, R, S and T and select the correct statements regarding them.

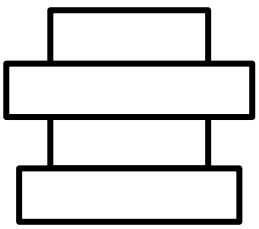


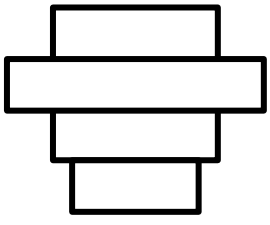
i) P contains upward folds and downward grooves called gyri and sulci respectively.
ii) Q secretes hormone that stimulates thyroid gland to secrete thyroxine.
iii) R forms a bridge of nerve tracts from the cerebrum to the cerebellum.
iv) T makes the body movements smooth, steady and coordinated.
v) S contains centres for swallowing, sneezing, coughing and vomiting.

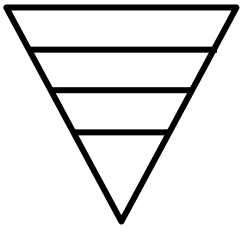
a) i) and ii)
b) ii) and iii)
c) i) and iv)
d) i), ii), iii) and iv)

26) Refer to the given food chain.
Oak tree Birds → Lice and bugs → Bacteria and fungi
What will be the shape of pyramid of number of the given food chain?

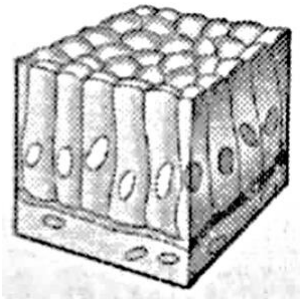
a)


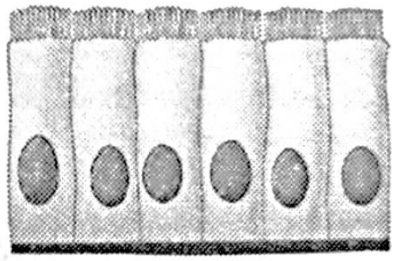
b)


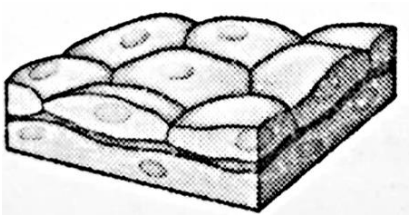
c)


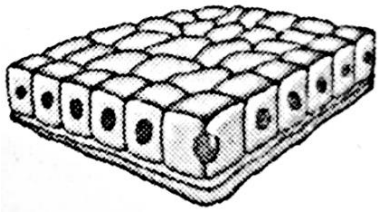
d)


27) Which of the following epithelial tissue lines the thyroid glands, small salivary ducts and pancreatic ducts?

a) 

b) 

c) 

d) 

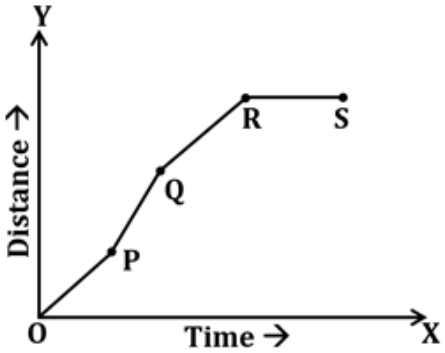
28) The distance time graph of a body is represented in the given figure. The correct statement(s) about the motion of the body is/are

a) Velocity of the body is maximum in the portion PQ

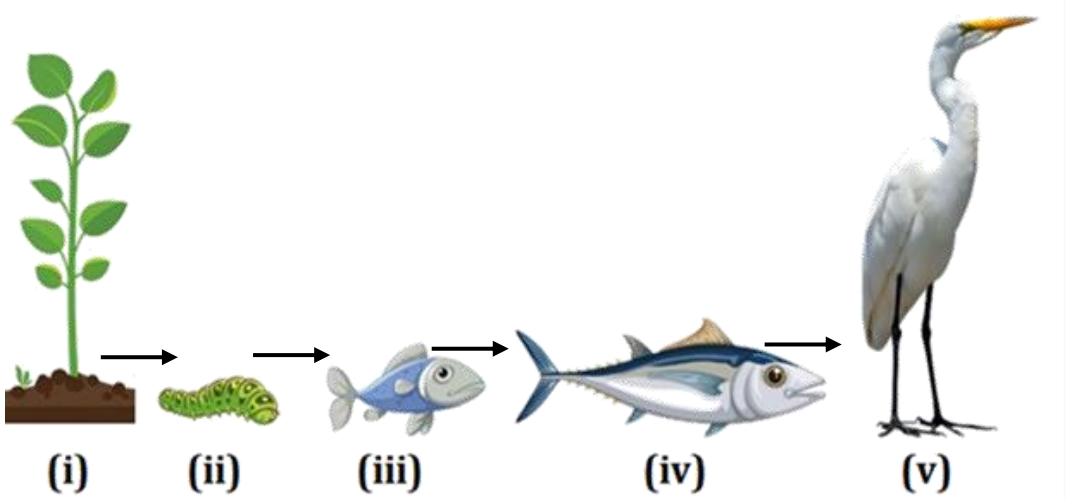
b) Velocity of the body is zero in the portion RS

c) Velocity of the body is uniform in the portion OP

d) All of these



29) Refer to the given food chain operating in a water body.



If a nearby factory starts discharging its chemical waste, that is rich in mercury into the water body, then the highest concentration of mercury will be found in

a) (iv) only

b) (v) only

c) (i) only

d) (ii) and (iii) only

30) Which part of neuron is primarily responsible for receiving signals from other neurons?

a) Cell body

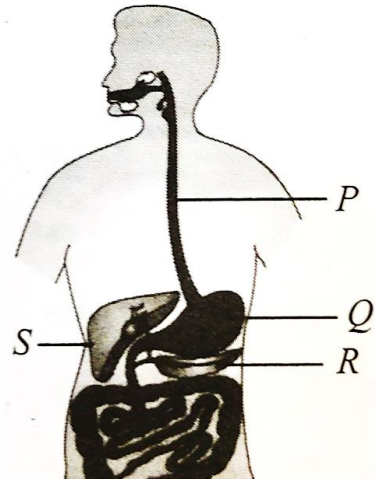
b) Axon

c) Dendrites

d) Axon hillock

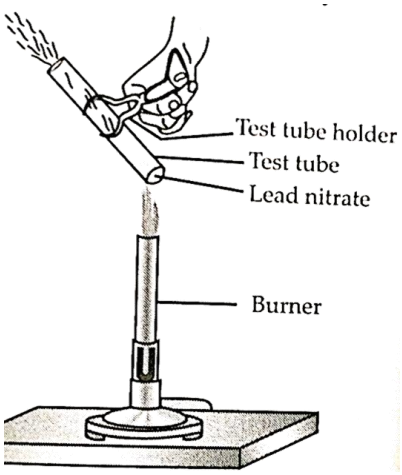
31) Refer to the given figure and select the incorrect statement regarding P, Q, R and S.

a) P exhibits peristaltic movement to push partially digested food towards stomach.
b) Digestion of only fats takes place in Q
c) Digestive juice secreted by R contains enzymes like trypsin, amylase and lipase.
d) Digestive juice produced by S gets stored in gall bladder and helps in digestion of fats.



32) Observe the following figure carefully. Now, select the option that correctly identifies the given statements as true (T) and false (F) ones.

i) The given experimental set-up depicts a combination reaction.
ii) Heating of lead nitrate results in the formation of lead oxide, nitrous oxide and hydrogen.
iii) Brown fumes are evolved during the given reaction.

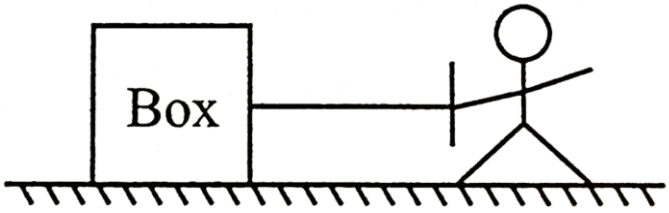


	i)	**ii)**	**iii)**
a)	T	F	T
b)	T	T	F
c)	F	T	F
d)	F	F	T

33) A light ray falls at an angle of 45° with the surface of transparent slab of thickness 1.5 m. Angle of refraction of light into the slab is 30°. If speed of light in air is $3x10^8$ m/s then find the time taken by the light rays to cross the slab.

a) 4.08 ns
b) 8.16 ns
c) 7.07 ns
d) 12.1 ns

34) The given figure shows a man pulling a light string attached to a box kept on a rough surface. The force Box of friction is greater for man. Subscripts S, B and M denote string, box and man respectively. (F_A/B denotes force on A due to B.)

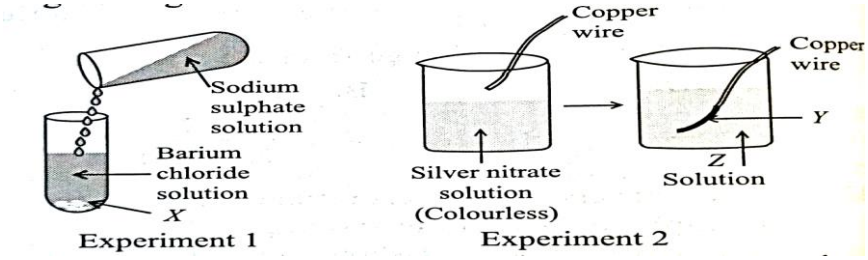


i) Box begins to move earlier than man if man continues to increase his pull from zero.
ii) F_S/B and F_M/S are action-reaction pairs.
iii) Box can remain static if man walks with constant speed while letting string to pass through his hand.

Which of the given statement(s) is/are correct?

a) i) and ii) only
b) ii) only
c) i) and iii) only
d) i), ii) and iii)

35) Samarth and Abhinav conducted two experiments to study the types of chemical reactions as shown in the given figures.

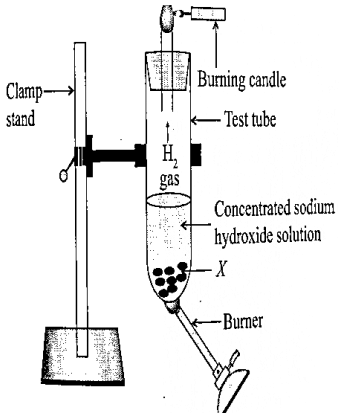


i) X is white precipitate while Z is blue coloured solution.
ii) Reaction between lead nitrate and potassium iodide is of the same type as the reaction occurring in experiment 2.
iii) The metal Y which gets deposited on copper wire is the same metal which is formed by decomposition of silver chloride in sunlight.
iv) In experiment 2, no reaction takes place as Cu is less reactive than Ag.

a) i) and ii) only
b) i) and iii) only
c) ii) and iv) only
d) i) and iv) only

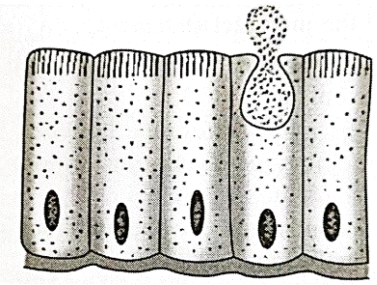
36) Observe the given experimental set-up and identify X.

a) Zn
b) Na
c) Ca
d) Mg



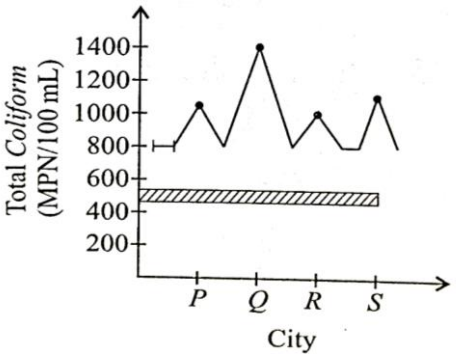
37) Refer to the given figure of a type of epithelium X. Epithelium X lines

a) Pancreatic lobules
b) Blood vessels
c) Ovaries
d) Alveoli of the lungs

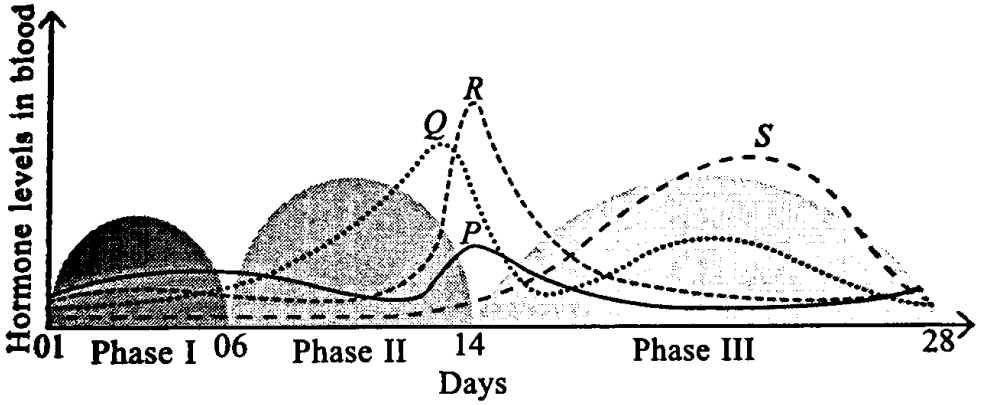


38) In a study, water samples from Ganga River were collected from four different cities (P, Q, R and S) to check the presence of Coliform bacteria. The result obtained was plotted in the given graph. Select the correct option regarding this

a) People living in city Q are more prone to water-borne diseases like typhoid, cholera, etc.
b) The river water of city P is most suitable for agriculture.
c) The biological oxygen demand in river of city R is more than that found in city S.
d) Dissolved oxygen content of river Q will be more than that of river R.



39) Refer to the given graph showing hormone levels in the blood of an adult female during different phases of menstrual cycle.



Identify hormones P, Q, R and S and select the correct statement regarding them.

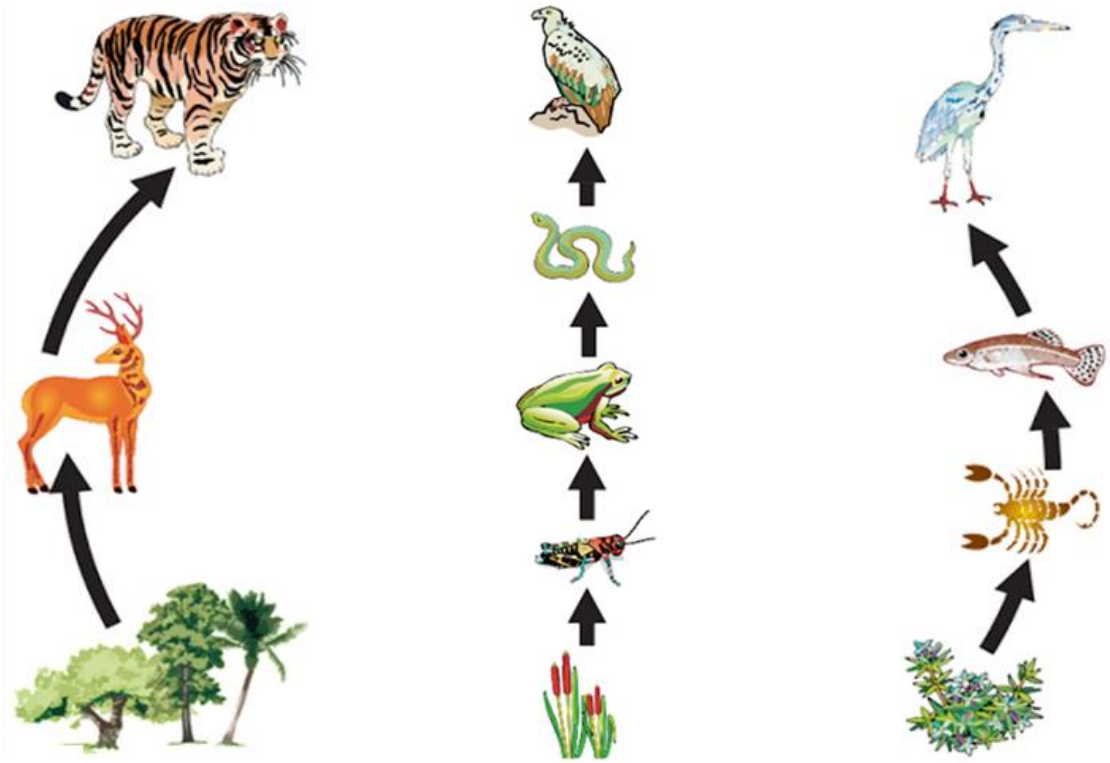
a) Hormone P that peaks during phase II of the cycle causes ovulation.

b) Hormone Q that peaks during phase II of the cycle causes repair of endometrium.

c) Hormone S that peaks during phase lll of the cycle stimulates secretion of estrogen from the ovary.

d) Hormone R is LH and hormone P is progesterone.

40) Refer to the given food chains a, b and c and select the correct statement regarding them.



(a) (b) (c)

a) Food chains a and b are predator food chains whereas food chain c is a saprophytic food chain.

b) There are two tertiary consumers and three secondary consumers in the food chains a, b and c.

c) Energy present in tiger and crane of food chains a and c respectively will be much less than present in eagle of food chain b.

d) There are two producers and three scavengers in the food chains a, b and c

SECTION – C
ENGLISH

Read the text and answer the questions that follow.

In the western history of human existence, the event, idea, and act of war stand totemic in the landscape. Borders both physical and mental have been defined by its threat and execution, and its aura hangs heavily over the last century as the bloodiest in the entire narrative of humanity. During a period widely considered to be the most perfect example of the efficient, mechanised destruction of life—the Holocaust-David Rousset gave a name to the experience he saw inside the internment camps in "L'Univers Concentrationnaire" , a world apart, succinct explanation is at once informative and delimiting, setting up the challenge for all writers that aspire to communicate trauma: how can one communicate when the signifier no longer has a meaningful relationship to what is signified? This crisis of representation is a problem that plagues all that seek to authentically relate the experience of trauma and war in writing.

Jameson's famous indictment, "The first terrible postmodern war cannot be told in the traditional paradigms of the war novel or movie," implying the inherent inability of the classic techniques to accurately describe the ambiguities of the Vietnam experience, acts as the starting point for Tim O'Brien's The Things They Carried. By virtue of its form and its overarching aim of portraying 'truth', The Things They Carried can also be linked, somewhat more nefariously, to Jerzy Kosinski's The Painted Bird. Kosinski's novel was purported to be an autobiographical account of his brutal, formative experiences as a Jew during World War II, but a media investigation later revealed that the author had "conjured up almost all the pathological episodes he narrates." The consternation and outrage that the investigation provoked on both sides of the debate evoked this response from the author: "I aim at truth, not facts." In addition to the more obvious terror and jingoism that we previously mentioned, the war story genre is one that is linked to myriad preconceived ideas and aspirations, and through these we can detect “an array of typical motifs: the noble example, the test of courage, the battle as initiation”.

O’ Brien's analysis of a true war story goes further than just rejecting the cultural assumptions, but gets inside the hierarchical binary oppositions and exposes truth and fiction for what they are: assumed absolutes based purely on relative perspective. In How to tell a True War Story, 'O'Brien' (the character) sets out his belief of what constitutes a true war story: "True war stories do not generalize. They do not indulge in abstraction or analysis...It comes down to gut instinct. A true war story, if truly told, makes the stomach believe." This act of belief is not predicated upon the indoctrinated system of truth as fact but relies on a fictive framework to embellish and communicate the central truth, the success of which O'Brien gauges over the course of the chapter. Closure is an ending, a full-stop on the proceedings that marks the end of the narrative. The issues of narrative and closure are something that O'Brien consistently tussles with in the text, and its existence (or lack of) is tightly wound up with the other conventions of war. To write of war is to do battle with the convolutions of memory under the stress of exceptional trauma. To write of the postmodern war is to do battle with the cultural edifice of the genre of war too. So often billed as a crisis of representation, Tim O'Brien has achieved a triumph of representation with The Things They Carried.

41) Jameson opines that traditional paradigms of (A) con war novels or movies cannot be used to narrate (C) agit postmodern war. Why?
   a) Because classic techniques cannot accurately answer describe all the ambiguities of war.
   b) Because no one truly understands the level of using trauma one experiences in a modern war.
   c) Because writers cannot present a perfect way of communicating war traumas
   d) Because works of fiction can never be the same as works of experience.

42) Choose the incorrect statements.
   a) Writing about war is the same as battling the convolutions of memory under the stress of exceptional trauma.
   b) Closure gives one a stop or cessation of things, marking the end of everything.
   c) Writing about postmodern war is to represent the cultural edifice of the genre of war.
   d) True war stories refrain from generalizations, abstractions, or analysis.

43) How is O'Brien's The Things They Carried different from Kosinski's The Painted Bird?
   a) O'Brien's is about the ambiguities of the Vietnam experience, while Kosinski's narrates his brutal, formative experiences during World War II.
   b) O'Brien's is an autobiographical account of the author's stay in Vietnam, while Kosinski's talks about him dealing with trauma.
   c) O'Brien presents an artistic take on adult trauma, while Kosinski deals with childhood trauma.
   d) O'Brien's is about terrorism in Vietnam, while Kosinski's describes a beautiful narrative of life in the countryside

44) Read statements I and Il and select the correct option.
   Statement I: Any attempt to authentically represent and relate the experience of trauma and war in writing will only lead to crisis.
   Statement II: Rousset's succinct explanation of the concentration camps leads to challenges for writers who aspire to communicate trauma in their works.
   a) Statement I is correct but Statement II is incorrect.
   b) Statement I is incorrect but statement II is correct.
   c) Both the Statements I and II are correct.
   d) Both the Statements I and II are incorrect.

45) The term “L’Univers Concentrationnaire” coined by David Rousset is used to:
   a) Praise the efficiency of the concentration camps
   b) Present a romanticized version of war imprisonment
   c) Describe the isolated and dehumanizing world of internment
   d) Criticize Allied propaganda about the Holocaust

WORD AND STRUCTURE KNOWLEDGE

Directions (for Q. 46) Choose the option which expresses the correct direct/indirect speech

46) She said to her father, "Have you been waiting for me since morning?"
   a) She asked her father had he been waiting for her since morning.
   b) She told her father that he had been waiting for her since morning.
   c) She asked her father if he had been waiting for her since morning.
   d) She told her father if he have been waiting for her since morning.

Directions (for Q. 47) Choose the type of conjunction of the underlined words used in the following sentences.

47) She hasn't eaten anything <u>since</u> she is fasting today.

a) Co-ordinate
b) subordinate
c) compound
d) correlative

Directions (for Q. 48) Convert the following sentences from active voice to passive voice

48) Manners make a man

a) A man makes manners
b) A man is made by manners
c) A man make manners
d) A man should make manner

Directions (for Q. 49) Choose the correct option

49) How do you spell the word which means 'composure'?

a) Equannimity
b) Equanimmity
c) Equanimity
d) Eqaunimity

Directions (for Q. 50) Choose the part of the sentence that has an error

50) She has working for a few hours when her manager requested an update

a) She has working
b) for a few hours
c) when her manager
d) requested an update.

Directions (for Q. 51-53) Choose the correct option in the blanks.

51) Doctors told him that the disease _____ caused by years of working in a smoky environment.

a) will Have been
b) could have been
c) ought have been
d) might has been

52) Derek left _____university _____ explore the world and find his true self.

a) the, to
b) a, into
c) an, to
d) no article, in

53) By the time you _____ at the stadium, we _____ the decorations for the upcoming event.

a) arrived, shall be finished
b) have arrived. Have been finished
c) arrive, will have finished
d) hill be arrived, have had finished

Directions (for Q. 54-55) Choose the correct antonym of the words given below

54) **On the air** means

a) Being broadcast
b) To rise and shine
c) To get favour by someone
d) A fovourite person

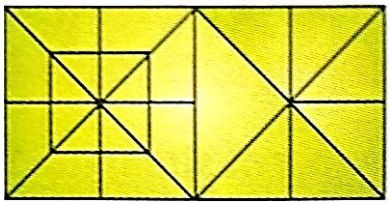
55) Sushmita's handwriting _____from the rest of her classmates.

a) make up
b) give into
c) stood out
d) bring out

SECTION – D
APTITUDE

56) How many squares are there in the given figure?

a) 12
b) 13
c) 14
d) More than 14



57) If 'A' means '×', 'B' means '÷', 'C' means '+' and 'D' means '−', then 21 C 3 D6 A 8 B 2 = ?

a) 13 b) 0

c) 8 d) 10

Direction (58 - 60) : Study the following information carefully and answer the questions given below:

Point S is 14m towards the west of point P. Point Q is 4 m towards the south of point S. Point U is 9 m towards the south of point S. Point T is 7m towards the east of point Q. Point R is 4 m towards the north of point T. Point V is 4 m towards the south to point P.

58) Which of the following points are in a straight line.

a) S, T, P b) T, V, Q

c) S, Q, V d) T, V, R

59) P is in which direction with respect to R

a) North-east b) West

c) East d) South- East

60) If a person walks five metres towards the north from point U and then takes a right turn, then which the following point would he reach first?

a) V b) S

c) T d) P

61) If 'M' stands for '+' ,'N' stands for '×', 'P' stands for '÷' and 'S' stands for '−', then which of the following options become correct

a) 18 N 40 P 8 S 6 M 4 = 64 b) 18 M 40 S 8 P 6 N 4 = 15

c) 18 S 40 N 8 P 6 M 4 = 91 d) 18 M 40 P 8 N 6 S 4 = 44

62) If it is possible to form only one meaningful English word with the second, third, fifth, sixth and eighth letter of the word YOUNGSTER, then which of the following will be second letter of the word, if no such word can be formed, give 'X' as your answer and if more than one such word can be formed, then give 'Y' as you answer.

a) N b) G

c) X d) Y

Directions: (63 - 64) study the following diagram and then answer the following questions

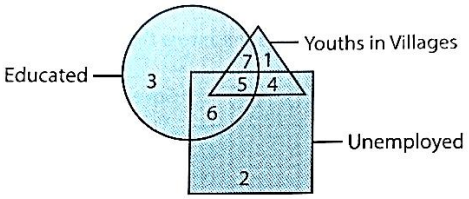
63) Which number represent unemployed youth in villages?

a) 4

b) 7

c) 5

d) 6



64) Which number represent educated and employed youth in villages?

a) 12 b) 4

c) 7 d) 8

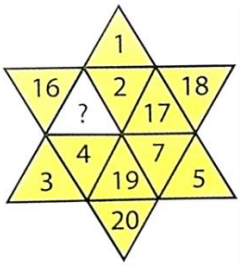
65) Find the missing number from the options which will replace the question mark(?) in the given patterns.

a) 15

b) 21

c) 14

d) 18



SECTION – E
GENERAL KNOWLEDGE

66) India reduced GST on a range of products in early September 2025 to mitigate the impact of steep U.S. tariffs. What was the tariff rate imposed by the Trump administration on Indian exports at that time?
a) 25% b) 35%
c) 50% d) 75%

67) Which country held parliamentary elections in early September 2025, with a centre-left bloc narrowly leading amid rising polarization?
a) Sweden b) Norway
c) Denmark d) Finland

68) NASA, the US space agency, recently created a new history to discover the carbon dioxide gas and hydrogen peroxide on the frozen surface of Charon, the largest moon of _____.
a) Neptune b) Pluto
c) Jupiter d) Saturn

69) Scientists at CSIR-Centre for Cellular and Molecular Biology (CCMB) have found out that an invasive species of _____ has spread to 60% of the water bodies in the Eastern Ghats using eDNA-based method.
a) Armoured sailfin catfish b) tilapia
c) goldfish d) common carp

70) What is the name of the short-range ballistic missile recently launched by India?
a) Agni-1 b) Astra-1
c) Avni-1 d) Ajwa-1

71) Which Article in the Indian Constitution empowers the President to declare a national emergency in case of external aggression or armed rebellion?
a) Article 352 b) Article 356
c) Article 360 d) Article 370

72) Tanushree Pandey has clinched which medal at the World Soft Tennis Championship at Jingshan in China?
a) Gold b) Silver
c) Bronze d) None of these

73) Which city will host the Badminton World Championships in August 2026?
a) Mumbai b) Hyderabad
c) Bengaluru d) New Delhi

74) Which strategic partnership, involving Japan, India, and the US, focuses on enhancing security in the Indo-Pacific region and countering Chinese influence?
a) ASEAN b) SAARC
c) Quad (Quadrilateral Security Dialogue) d) G20

75) Which type of plate boundary occurs when two tectonic plates move away from each other, typically forming a new oceanic crust?
a) Convergent Boundary b) Divergent Boundary
c) Transform Boundary d) Subduction Zone