## PART I : MAT

## (Only One Option Correct Type) (+2, -1)

This section contains 5 multiple choice questions. Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE Option is correct.
1.


What will be the shape at $14^{\text {th }}$ position?
(a)

(b)

(c)

(d)

2. Weight of big banana is $\qquad$ g.
(a) 10
(b) 9
(c) 8
(d) 11
 stands for natural number and

$\square$
 $=3$ $\square$ $>5$
 $<4$
then find the value of $\square$
(a) 4
(b) 6
(c) 5
(d) 7
4.

(a) 2
(b) 6
(c) 8
(d) 64
5. A dice is thrown three times and its three different positions are given below. Find the number on the face opposite to the face showing 3.

(i)

(ii)

(iii)
(a) 1
(b) 4
(c) 5
(d) 6

## END OF MAT PORTION

## PART II : MATHEMATICS

## (Only One Option Correct Type) (+4, -1)

This section contains 5 multiple choice questions. Each question has five choices (a), (b), (c), (d) and (e) out of which ONLY ONE Option is correct.
6. If $a: b=c: d$, then $\frac{m a+n c}{m b+n d}$ is equal to
(a) $m: n$
(b) $n a: m b$
(c) $a: b$
(d) $c: d$
7. Prakash reads $\frac{3}{5}$ of a book. He finds that there are still 80 pages left to be read. Total number of pages in book is
(a) 100
(b) 200
(c) 300
(d) 400
8. The value of ' $x$ ' in given figure is -
(a) 48
(b) 32
(c) 24
(d) 28

9. Which of the following triangle is possible -
(a)

(b)

(c)


10. What must be added to the numbers, $6,10,14$ and 22 so that they are in proportion
(a) 4
(b) 12
(c) 2
(d) 10

## END OF MATHEMATICS PORTION

## PART III : PHYSICS

## (Only One Option Correct Type) (+4, -1)

This section contains 5 multiple choice questions. Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE Option is correct.
11. Open circuit is called
(a) Switched off
(b) Switched on
(c) Both of these
(d) None of these
12. Four students $A, B, C$ and $D$ looked through pipes of different shapes to see a candle flame as shown in figure.


Who will be able to see the candle flame clearly?
(a) A
(b) $B$
(c) C
(d) D
13. What constitutes current in a metal wire?
(a) Free electrons
(b) Protons
(c) Atoms
(d) Molecules
14. Which type of motion is represented by the plastic ruler shown below?

(a) Circular
(b) Translatory
(c) Rotatory
(d) Vibratory
15. Observe the figure of an animal with its shadow.


Which of the following is the position of the sun with respect to the given shadow?
(a) $P$
(b) S
(c) $R$
(d) $Q$

## END OF PHYSICS PORTION

## PART IV : CHEMISTRY

(Only One Option Correct Type) (+2, -1)
This section contains 5 multiple choice questions. Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE option is correct.
16. When no more salt dissolves in water at a particular temperature then the solution at that temperature is called -
(a) Unsaturated
(b) Saturated
(c) Super Saturated
(d) None of above
17. If fine particle of clay doesn't settle down in water then how can we clarify water?
(a) Filtration
(b) Centrifugation
(c) Loading
(d) Sedimentation
18. Which of the following mixture can be separated using separating funnel?
(a) Water \& Milk
(b) Water \& Sugar
(c) Water \& Orange juice
(d) Water \& Petrol
19. In which of the following cases evaporation of water will be slowest?
(a) A tray of water kept in sunlight.
(b) A kettle of water kept on a burner.
(c) A glass of water kept in a room.
(d) A bucket of water kept on roof top.
20. Mountaineers carry oxygen cylinders with them because:-
(a) There is no oxygen on high mountains.
(b) There is deficiency of oxygen on mountains at higher altitude.
(c) For cooking.
(d) Oxygen keeps them warm at low temperature.

## END OF CHEMISTRY PORTION

Space for Rough Work

## PART V : BIOLOGY

(Only One Option Correct Type) (+2, -1)
This section contains 5 multiple choice questions. Each question has four choices (a), (b), (c) and (d) out of which ONLY ONE option is correct.
21. Given below are the names of some animals:
(i) Goat
(ii) Human beings
(iii) Cockroach
(iv) Eagle

Which of the above animals form a pair of omnivores?
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (iii) and (iv)
(d) (ii) only
22. Which of the following sources of protein is different from others?
(a) Peas
(b) Gram
(c) Soyabeans
(d) Cottage cheese (paneer)
23. Read the following statements about deficiency diseases.
(i) They are caused by germ attack.
(ii) They are caused due to lack of nutrients in our diet.
(iii) They cannot be passed one to another person through contact.
(iv) They can be prevented by taking a balanced diet.

Which pair of statements best describe a deficiency disease?
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (ii) and (iv)
(d) (ii), (iii) \& (iv)
24. Which of the following combination of features would you observe in grass?
(a) Parallel venation and fibrous root
(b) Parallel venation and tap root
(c) Reticulate venation and fibrous root
(d) Reticulate venation and tap root
25. Which of the following is not the primary function of stem?
(a) Conduction of water
(b) Photosynthesis
(c) Formation of branches
(d) Bears flowers and fruits

Space for Rough Work

## END OF TEST PAPER

