## IMPORTANT INSTRUCTIONS

## GENERAL INSTRUCTIONS

1. This booklet is your Question Paper.
2. Blank papers, clip boards, log tables, slide rule, calculators, mobile or any other electronic gadgets in any form are not allowed to be used.
3. Write your Name \& Application Form Number in the space provided in the first page of this booklet.
4. No rough sheets will be provided by the invigilators. All the rough work is to be done in the blank space provided in the question paper.
5. No query related to question paper of any type is to be put to the invigilator.

## INSTRUCTIONS FOR OPTICAL RESPONSE SHEET (ORS)

> Darken the appropriate bubbles on the original by applying sufficient pressure.
> The original is machine-gradable and will be collected by the invigilator at the end of the examination.
> Do not tamper with or mutilate the ORS.
$>$ Write your name, Application form number and the name of the examination centre and sign with pen in the space provided for this purpose on the original. Do not write any of these details anywhere else. Darken the appropriate bubble under each digit of your roll number.
$>$ Before answering the paper, fill up the required details in the blank space provided in the Objective Response Sheet (ORS).
$>$ Do not forget to mention your paper code and Application Form Number neatly and clearly in the blank space provided in the Objective Response Sheet (ORS) / Answer Sheet.
> Use a BLACK BALL POINT to darken the bubbles in the upper sheet.
> Darken the bubble COMPLETELY.
> Darken the bubble ONLY if you are sure of the answer.
> The correct way of darkening a bubble is as shown here
> There is NO way to erase or "un-darkened bubble.
> The marking scheme given at the beginning of each section gives details of how darkened and not darkened bubbles are evaluated.
Marks distribution of questions is as follows.

## Reso NET 2023-24

| S.No. | Subject | Nature of Questions | Marks to be awarded |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No. of Questions | Correct | Wrong | Total |
| 1 to 25 | PART-I <br> (Maths) | Single Choice Questions (SCQ) | 25 | 3 | 0 | 75 |
| 26 to 35 | PART-II <br> (Physics) | Single Choice Questions (SCQ) | 10 | 3 | 0 | 30 |
| 36 to 45 | PART-III (Chemistry) | Single Choice Questions (SCQ) | 10 | 3 | 0 | 30 |
| 46 to 55 | PART-IV <br> (Biology) | Single Choice Questions (SCQ) | 10 | 3 | 0 | 30 |
| 56 to 70 | PART-V <br> (Mental Ability) | Single Choice Questions (SCQ) | 15 | 3 | 0 | 45 |
|  |  | Total | 70 |  |  | 210 |

Zero marks ' 0 ' If none of the options is chosen (i.e. the question is unanswered).

## Syllabus of class-VI_ Reso NET

## MATHEMATICS :

* Knowing our number
* Playing with numbers
* Fraction
* Introduction to algebra
* Whole Number
* Integers
* Decimal


## PHYSICS :

* Motion and measurement of distances
* Force, Work, Energy
* Simple Machine


## CHEMISTRY :

* Matter \& Its segregation
* Classification \& diversity in matter


## BIOLOGY :

* Getting to know plants
* Living organisms \& surroundings


## MENTAL ABILITY :

* Number series
* Missing term in figures
* Coding-decoding
* Seating arrangement
* Materials of daily uses clothes
* Food
* Alphabet series
* Alphabet test
* Direction sense test
* Mathematical operations

1. Roman numerals for 498 is:
(A) CDCXVIII
(B) CDCXIV
(C) CDXCVIII
(D) CDXCVII
2. According to International System, the number 648340021 would be written with commas as:
(A) $648,340,021$
(B) $6,4,8,3,0,0,2,1$
(C) $64,83,40,02,1$
(D) none
3. In the product of 37 and 23 , what is the place value of the digit which is prime?
(A) 500
(B) 700
(C) 800
(D) 50
4. Using the digits $1,4,6$ and 8 each only once, how many four digit odd numbers can be formed?
(A) 4
(B) 5
(C) 3
(D) 6
5. $3 \times 1000+5 \times 10+2 \times 1$ Given in the expanded Form. The number is
(A) 0352.
(B) 3002.
(C) 3052 .
(D) 3573 .
6. The product of two odd numbers is
(A) an even number
(B) an odd number
(C) Either even or odd
(D) Multiple of 7 or 2
7. The difference between the largest 5-digit number with distinct digits and the smallest 5 -digit number with distinct digits is
(A) 88,531
(B) $89,999$.
(C) 86,420
(D) 119,999.
8. $38+83=83+38$ is an example of
(A) commutative property.
(B) associative property.
(C) closure property.
(D) distributive property.
9. The multiplicative identity element of whole numbers is
(A) 2
(B) 1
(C) 0
(D) -1
10. The number divisible by 11 is
(A) 1,116,365.
(B) $1,802,701$.
(C) 8,790,322.
(D) 901,351 .
11. The smallest number of 4 - digits exactly divisible by $12,15,20$ and 35 is
(A) 1000
(B) 1160
(C) 1260
(D) 1360
12. The number which is neither prime nor composite is
(A) 4
(B) 1
(C) 2
(D) 5
13. All the factors of 25 are
(A) 1, 5, 25
(B) $1,5,15$
(C) 1, 5, 20
(D) 1, 2, 4
14. The number that is equal to its additive inverse is
(A) -1
(B) 0
(C) +1
(D) 100
15. The correct sequence of the numbers in ascending order is $\qquad$
(A) $0<-1<-2$
(B) $1<-1<0$
(C) $-1<0<1$
(D) $-2<-3<-4$
16. Find. (-7)-8-(-20)
(A) -5
(B) +25
(C) +5
(D) -8
17. On moving 8 steps to the right of -5 , Rita will get
(A) +3
(B) +5
(C) +8
(D) +13
18. Which of the following is correct definition of Like Fractions?
(A) Fractions which do not have the same denominator
(B) Fractions which have the same denominator
(C) Fractions which have the same numerator
(D) Fractions which do not have the same numerator
19. Figure represents the fraction $3 / 9$ is
(A)

(B)

(C)

(D) all of them.
20. If $3-\frac{12}{5}=x$, then the value of $x$ will be.
(A) $\frac{4}{5}$
(B) $\frac{3}{5}$
(C) $\frac{2}{5}$
(D) $\frac{1}{5}$
21. Two tens and 9 tenth can be written as
(A) 200.9
(B) 20.9
(C) 20.09
(D) 02.09
22. The value of 360 mm in metre is
(A) 36 m .
(B) 3.06 m .
(C) 3.6 m .
(D) 0.36 m .
23. An algebraic expression of three distinct terms is known as
(A) monomial.
(B) binomial.
(C) trinomial.
(D) quadrinomial.
24. Simplified form of $3 y^{3}+\mid 2 y^{3}-4 y^{2}-\left\{-y^{2}+\right.$ $\left.\left.\left(3 y^{2}-4 y^{2}\right)+y-2\right\}-7\right]$ is
(A) $5 y^{3}-2 y^{2}-y-5$
(B) $5 y^{3}-2 y^{2}-y+5$
(C) $5 y^{3}-2 y^{2}+y-5$
(D) $-5 y^{3}-2 y^{2}+y-5$
25. 3 times $x$ added to 7 times $y$ gives
(A) $3 x+7 y$
(B) $3 x-7 y$
(C) $7 y-3 x$
(D) $3 x / 7 y$
26. Foot, Stride, Fathom are the units of :
(A) Time
(B) Length
(C) Mass
(D) Weight
27. 1 dam is equal to :
(A) 10 m
(B) 1000 cm
(C) Both (A) and (B)
(D) None of these
28. Length of curved line is measured by using :
(A) Scale
(B) String
(C) Ruler
(D) Can`t be measured
29. Lifting a bucket of water is an example of :
(A) Frictional force.
(B) Muscular force.
(C) Gravitational force.
(D) Magnetic force.
30. To pick out iron pieces from garbage, the garbage pickers often use the :
(A) Muscular force.
(B) Magnetic force.
(C) Frictional force.
(D) Electrostatic force.
31. Choose the source of energy which is different from others:
(A) Gobar gas
(B) Vegetable refuse
(C) Plants
(D) Crude oil
32. A machine can
(A) Divide force
(B) Decrease speed
(C) Change the direction of the force applied
(D) All of these
33. A first order lever always has ......... in the middle.
(A) fulcrum
(B) effort force
(C) resistance force
(D) mechanical advantage
34. Which is an example of lever of first order?
(A) Scissor
(B) See-saw
(C) Pliers
(D) All of these
35. Which is an example of lever of third order?
(A) Scissor
(B) See-saw
(C) Claw hammer
(D) Sugar tongs
36. Two examples of animal fibres are
(A) cotton and wool.
(B) cotton and flax.
(C) silk and jute.
(D) wool and silk.
37. The instrument that measures the density of liquids is
(A) hydrometer.
(B) hygrometer.
(C) density meter.
(D) ammeter
38. Pure water is
(A) good conductor of electricity.
(B) poor conductor of electricity.
(C) semiconductor.
(D) superconductor
39. The following groups of non-living objects that can be classified as man-made is
(A) aerated drinks, ice cream and pizza.
(B) milk, biscuits and bread.
(C) Mango, orange and tomato.
(D) tomato, sandwich and chocolate
40. The object which is made from coconut fibers is
(A) sweaters.
(B) brushes.
(C) mattresses.
(D) clothes.
41. The best conductor of electricity is
(A) zinc.
(B) silver.
(C) copper.
(D) gold.
42. Pebbles and stones are removed from sand by
(A) hand picking.
(B) winnowing.
(C) threshing.
(D) sieving.
43. Sugar is obtained from sugar solution by
(A) magnetic separation. (B) decantation.
(C) evaporation.
(D) loading.
44. Filtration is used for separating
(A) salt from sea water.
(B) vegetables from soup.
(C) cream from milk.
(D) iron nails from sand
45. The part of the cotton plant that yields cotton boll is
(A) leaf.
(B) fruit.
(C) seed.
(D) stem.
46. Rat is
(A) carnivorous.
(B) herbivorous.
(C) omnivorous.
(D) insectivorous.
47. An animal that eats fruits of trees is
(A) cat.
(B) monkey.
(C) eagle.
(D) snake.
48. All of the given are milk product except
(A) cream.
(B) cheese.
(C) chapati.
(D) ghee.
49. All of the given can feed on insects except
(A) crocodile.
(B) frog.
(C) lizard.
(D) snake.
50. An edible root is
(A) ginger.
(B) potato.
(C) carrot.
(D) onion.
51. Conduction of water is the function of:
(A) leaf.
(B) stem.
(C) root.
(D) flower.
52. On a hot summer day, the leaves of a plant droop down because
(A) the plant becomes weak.
(B) excessive transpiration takes place.
(C) excessive photosynthesis takes place.
(D) no transpiration occurs.
53. When the venation appears as a net-like design on both sides of the midrib it is called:
(A) parallel venation.
(B) simple venation.
(C) reticulate venation.
(D) random venation.
54. Femal e reproductive part of Plant -
(A) Stamen
(B) Pistil
(C) Flower
(D) None of these
55. Transpiration occurs mainly through the
(A) roots.
(B) stem.
(C) bud.
(D) leaves

Direction: (56) Find the missing number:
56. $1,3,7,13$, ?
(A) 19
(B) 23
(C) 21
(D) 25

Direction ：（57 to 58）Find the wrong term（s）：
57． $2,6,11,17,23,32,41$
（A） 6
（B） 17
（C） 23
（D） 32

58．CDF，DEG，EFH，FHI
（A）CDF
（B）DEG
（C） FH
（D）EFH

59．If the following names are arranged alphabetically，which of them will occupy the third position？
（A）Surendra
（B）Sindhu
（C）Shurendra
（D）Sadhana

60．If BOX is coded as CDPQYZ，what will be the last two letters of word in the same code for HERO？
（A）N，M
（B）M，N
（C）P，Q
（D）$Q, P$

Direction（61 to 62）Find the missing terms in the figure．
61.

（A） 47
（B） 45
（C） 37
（D） 35
62.

| 7 | 9 | 11 |
| :---: | :---: | :---: |
| 2 | 3 | 2 |
| 51 | 84 | $?$ |

（A） 125
（B） 100
（C） 123
（D） 64

Directions ：（63）Arrange the following group such that when arranged in a specific order，meaningful word is formed．
63．TRIFU
12345
（A） $3,1,2,4,5$
（B） $4,2,5,3,1$
（C） $4,3,2,1,5$
（D） $5,3,2,1,4$

64．If air is called water，water is called green， green is called dust，dust is called yellow and yellow is called cloud，which of the following does fish live in？
（A）Air
（B）Water
（C）Green
（D）Dust

65．If KLM is written $\mathbf{1 8}$ then how would SQR be written in that code？
（A） 30
（B） 54
（C） 26
（D） 27

66．Reena walks Eastwards after a while she turns to her left and then turn to her right．Finally she turn to her left．In which direction is she moving now？
（A）West
（B）East
（C）South
（D）North

67．Rahul travels 8 km East，then 6 km north， How far is Amar from the starting point？
（A） 16 kms ．
（B） 10 kms ．
（C） 6 kms ．
（D） 5 kms ．

Directions ：（68 to 69）Read the following information carefully and answer the questions given below it ：
（A）There are five friends．
（B）They are standing in a row facing South．
（C）$J$ is to the immediate right of $A$ ．
（D）$P$ is between $B$ and $S$ ．
（E）$S$ is between $J$ and $P$ ．
68．Who is at the extreme left end ？
（A） A
（B）B
（C） S
（D）Data inadequate

69．Who is in the middle ？
（A）$B$
（B）J
（C）$P$
（D） S

70．What is the value of $10 \times 10 \div 10=$ ？
（A） 10
（B） 1000
（C） 10000
（D）None of these

## ANSWER KEY

| Ques． | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ans． | C | A | D | D | C | B | A | A | B | D | C | B | A | B | C |
| Ques． | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| Ans． | C | A | B | A | B | B | D | C | A | A | B | C | B | B | B |
| Ques． | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| Ans． | D | C | A | D | D | D | A | B | A | C | B | D | C | B | B |
| Ques． | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Ans． | C | B | C | A | C | B | B | C | B | D | C | C | C | B | C |
| Ques． | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |  |  |  |  |  |
| Ans． | C | C | B | C | D | D | B | A | D | A |  |  |  |  |  |

