Educating for better tomorrow


## Practice, Persistence and Performance

## 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.

| S.No. | Reso NET |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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-VII_ Reso NET

## MATHEMATICS :

| $*$ | Integer |
| :--- | :--- |
| $*$ | Rational numbers |
| $*$ | Triangle |
| $*$ | Exponent |

## PHYSICS :

* Measurement
* Heat


## CHEMISTRY:

* General chemistry
* Acids, bases \& salts


## BIOLOGY:

* Nutrition in plant
* Weather climate and adaptation
* Transportation
* Motion \& time
* Sound
* Fibre to fabric
* Nutrition in animals
* Respiration
* Alphabet series
* Missing term in figure
* Codiing-decoding
* Ranking ordering test
* Mathematical operations

1. In the given $\triangle A B C$ if $A B=A C$ and $B D=D C$, then $\angle \mathrm{ADC}=$

(A) $60^{\circ}$
(B) $120^{\circ}$
(C) $90^{\circ}$
(D) $45^{\circ}$
2. In $\triangle A B C, A B \perp A C$ and $A D \perp B C$. If $\angle B A D=$ $50^{\circ}$, then $\angle A C D$ is

(A) $40^{\circ}$
(B) $50^{\circ}$
(C) $140^{\circ}$
(D) $60^{\circ}$
3. If $\left(\frac{1}{5}\right)^{3 y}=0.008$, then $(0.25)^{y}$ will be $\qquad$ -
(A) 1
(B) 0.25
(C) 0.0625
(D) 0.125
4. In given figure if $\mathrm{AB}||\mathrm{DF}, \mathrm{AD}|| \mathrm{FG}, \angle \mathrm{BAC}=$ $65^{\circ}, \angle \mathrm{ACB}=55^{\circ}$, then $\angle \mathrm{FGH}$ is :

(A) $120^{\circ}$
(B) $125^{\circ}$
(C) $115^{\circ}$
(D) $140^{\circ}$
5. The measure of that angle which is four times its supplement is :
(A) $36^{\circ}$
(B) $144^{\circ}$
(C) $155^{\circ}$
(D) $180^{\circ}$
6. Descending order of fractions, $\frac{1}{5}, \frac{3}{7}, \frac{7}{10}$, $\frac{13}{28}$.
(A) $\frac{13}{28}>\frac{7}{10}>\frac{3}{7}>\frac{1}{5}$
(B) $\frac{13}{8}<\frac{7}{10}<\frac{3}{7}<\frac{1}{5}$
(C) $\frac{7}{10}>\frac{13}{28}>\frac{3}{7}>\frac{1}{5}$
(D) None of these
7. If $x=2$, then find the value of $x+\frac{2}{1-\frac{1}{1-\frac{1}{x}}}$
(A) -3
(B) $\frac{3}{4}$
(C) $\frac{4}{3}$
(D) 0
8. If $\frac{-9}{5}=\frac{a}{20}=\frac{27}{b}=\frac{-45}{c}$, then values of $a$, band care
(A) $-15,25,-36$
(B) $-36-15,25$
(C) $25,-36,-15$
(D) $-15,-36,25$
9. The number of rational numbers between two numbers is
(A) zero.
(B) one.
(C) two.
(D) infinite.
10. A tin of oil was $\frac{4}{5}$ full. When six bottle of oil were taken out and four bottles of oil were poured in, it was $\frac{3}{4}$ full. How many bottles of oil did the tin contain initially ?
(A) 16
(B) 40
(C) 32
(D) None of these
(Space For Rough Work)
11. How many one sixth are there in $3 \frac{1}{3}$ ?
(A) 20
(B) 19
(C) 10
(D) 5
12. Find the continued product:
$(x+2)(x-2)\left(x^{2}+4\right)$
(A) $x^{4}-8$
(B) $x^{2}-16$
(C) $x^{4}-16$
(D) $x^{4}-4$
13. What should be subtracted from 0.1 to get 0.03 ?
(A) 0.7
(B) .07
(C) .007
(D) None of these
14. Solve for $x$ : $3^{2 x} \times 3^{x+3} \times 3^{4-x}=(\sqrt{3})^{10}$
(A) -1
(B) 1
(C) 3
(D) -3
15. The product of two integers is 12 , if one integer is -3 then the other one is :
(A) +4
(B) -4
(C) 3
(D) -3
16. If $(a+b)^{2}=a^{2}+b^{2}+2 a b$ and $a b=6 ; a+b=$ 5 , find value of $a^{2}+b^{2}$.
(A) 11
(B) 12
(C) 13
(D) 16
17. The full form of MKS is :
(A) Metre, kilogram, second.
(B) Mole, kilogram, second.
(C) Mole, kelvin, second.
(D) Metre, kilobyte, second.
18. Oscillatory motion is also known as :
(A) Rectilinear motion.
(B) Circular motion.
(C) Nonuniform motion.
(D) Periodic motion.
19. An object undergoes an acceleration of $10 \mathrm{~m} /$ $\mathrm{s}^{2}$ starting from rest, find velocity after 5 seconds:
(A) $100 \mathrm{~m} / \mathrm{s}$
(B) $125 \mathrm{~m} / \mathrm{s}$
(C) $50 \mathrm{~m} / \mathrm{s}$
(D) $150 \mathrm{~m} / \mathrm{s}$
20. In the given figure find displacement between A and $B$ of circular path of radius 2 metre :

(A) $\sqrt{8}$
(B) $\sqrt{3}$
(C) $\sqrt{4}$
(D) $\sqrt{5}$
21. Name the mode of heat transfer in which the particles actually move to the source of heat :
(A) Conduction
(B) Convection
(C) Radiation
(D) None of these
22. When the temperature of a substance is increased:
(A) Kinetic energy of the molecules of the substance increases.
(B) Kinetic energy of the molecules of the substance decreases.
(C) The amplitude of vibrations of molecules of the substance about their mean position decreases.
(D) Kinetic energy of the molecules of the substance remains same.
23. The use of sound waves to determine distance or find objects is called :
(A) Ultrasound
(B) Infrasound
(C) Acoustics
(D) None of these
24. Velocity of sound in fresh water is :
(A) More than that in sea water
(B) Less than that in air
(C) Less than that in sea water
(D) More than that in alcohol
25. The noise becomes painful above
(A) 80 dB .
(B) 70 dB .
(C) 60 dB .
(D) 50 dB .
26. SONAR is used to detect objects in sea beds by the phenomenon of
(A) vibrations.
(B) waves.
(C) echo.
(D) light.
27. Atomic number of an element represents -
(A) number of neutrons in the nucleus.
(B) atomic mass of an element.
(C) valency of an element
(D) number of protons in the nucleus.
28. The substance that shows different colours in acidic and basic solutions is
(A) indicators.
(B) lacto metre
(C) lux metre.
(D) ammetre
29. Silk is obtained from
(A) banana tree.
(B) jute stem.
(C) silk worm.
(D) mango tree
30. The difference between ions and atoms is of -
(A) relative size
(B) electronic configuration
(C) presence of charge
(D) all of these
31. Which fibres are used to make clothes ?
(A) Natural
(B) Synthetic
(C) Both
(D) None of these
32. A protein substance, which is the chief component of wool fibres, is
(A) elastin.
(B) keratin.
(C) collagen.
(D) casein.
33. The wool which breaks during the combing process in manufacturing is a
(A) virgin wool.
(B) worst wool.
(C) tender wool.
(D) merino wool
34. Which of the following is not an indicator?
(A) Methyl orange
(B) Litmus
(C) China rose
(D) Sunflower
35. The strongest variety of silk is
(A) mulberry silk.
(B) mooga silk.
(C) tasar silk.
(D) oak tasar silk
36. When a drop of phenolphthalein is introduced in lime water, the solution turns.
(A) Blue
(B) Red
(C) Milky
(D) Pink
37. Photosynthesis is a
(A) physical process.
(B) chemical process.
(C) manmade process.
(D) None of these
38. Lactic acid is formed in
(A) Muscles
(B) Bacteria
(C) Yeast
(D) None of these
39. Humans develop
(A) two sets of teeth during their lifetime.
(B) one set of teeth which lasts for a lifetime.
(C) a total of twenty four teeth.
(D) a total of sixteen teeth.
40. Food moves in the alimentary canal from one region to another by a process called
(A) locomotion.
(B) pumping.
(C) peristalsis.
(D) diastole.
41. Most of the photosynthesis ( $80 \%$ ) which takes place on this earth is carried on by
(A) green plants on land
(B) algae present in fresh water
(C) algae found in ocean
(D) algae present in ocean and fresh water sources
42. Weather at a place is the day to day condition of atmosphere with respect to
(A) wind, humidity, rainfall and temperature.
(B) sun, daylength, moisture and heat.
(C) rainfall, temperature, sunlight and moonlight.
(D) sunlight, moonlight, wind and temperature.
43. On an average, at rest an adult human being breathes
(A) 5-10 times in a minute.
(B) 10-13 times in a minute.
(C) 15-18 times in a minute.
(D) 22-25 times in a minute.
44. Valves that direct the flow of blood only in one direction are present in
(A) arteries.
(B) veins.
(C) capillaries.
(D) arteries, veins and capillaries.
45. From which of the four chambers of ruminant stomach, semi-digested food is moved back to mouth ?
(A) Rumen
(B) Abomasum
(C) Omasum
(D) All of these
46. In plants, gas exchange takes place through
(A) wood.
(B) stomata.
(C) root.
(D) fruit.

Directions ( 56 to 68 ) : Find the missing numbers :
56. $16,19,22,25$, ?
(A) 27
(B) 28
(C) 29
(D) 25
57. $2,5,10,17$, ?
(A) 25
(B) 26
(C) 22
(D) 24
58. $8,11,15,22,33,51, ?, 127,203$
(A) 80
(B) 53
(C) 58
(D) 69
59. If the following words are arranged as found in the dictionary, then what will be the fourth letter from the left in the last word?
INTIMATION, INFORMATION, INTEREST, INTERROGATION , INSTIGATION
(A) R
(B) O
(C) $T$
(D) I
60. Which letter is midway between 22nd letter from the left and 21st letter from the right ?
(A) L
(B) M
(C) O
(D) None of these
61. Arrange the following group such that when arranged in a specific order, meaningful word is formed.
R TA O U H
$\begin{array}{llllll}1 & 2 & 3 & 4 & 5 & 6\end{array}$
(A) $1,3,4,5,6,2$
(B) $2,3,6,4,5,1$
(C) $6,3,2,4,5,1$
(D) $3,5,2,6,4,1$
62. Find which one word can be made from the letters of the given word.
MEASUREMENT
(A) MASTER
(B) MANTLE
(C) SUMMIT
(D)ASSURE
63.

(A) 96
(B) 81
(C) 100
(D) 169
64.

| 1 | 5 | 9 |
| :---: | :---: | :---: |
| 4 | 8 | 12 |
| 7 | $(?)$ | 15 |

(A) 12
(B) 11
(C) 13
(D) 16
65. If PINK is written as N G L I how will IRON be written?
(A) G P M L
(B) K M P L
(C) G M P L
(D) K P M L
66. If in any code language NATIONAL is written as MZGRLMZO than how is JAIPUR written in that language
(A) QRZKFI
(B) QZRKFI
(C) QZRFKI
(D) QZRIFK
67. If light is called dark, dark is called green, green is called blue, blue is called red, red is called white and white is called yellow, what is the colour of blood?
(A) Red
(B) Dark
(C) White
(D) Yellow
68. At my house I am facing West, then I turn left and go 10 m , then I turn $90^{\circ}$ anticlockwise and go 5 m , and then I go 5 m to the South and from there 5 m to the West. In which direction am I from my house?
(A) East
(B) West
(C) North
(D) South
69. A man walked 3 metre towards North, turned West and walked 2 metre then turned North and walked 1 metre and finally turned East and walked 5 metre. How far is he from the starting point?
(A) 12 metre
(B) 8 metre
(C) 10 metre
(D) 5 metre
70. BDF, HKN, QUY, ?, RXD
(A) CHM
(B) BGL
(C) ClO
(D) BHN

## ANSWER KEY

| Ques. | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ | $\mathbf{1 1}$ | 12 | 13 | 14 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ans. | C | B | B | B | B | C | D | A | D | A | C | D | B | D | C |
| Ques. | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| Ans. | A | A | A | C | A | C | B | A | B | C | A | D | C | A | B |
| Ques. | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| Ans. | A | A | C | A | C | D | A | C | D | C | B | C | D | B | D |
| Ques. | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| Ans. | B | A | A | C | D | A | C | B | A | B | B | B | A | D | D |
| Ques. | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |  |  |  |  |  |
| Ans. | D | A | C | B | A | B | C | D | D | A |  |  |  |  |  |




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- School Integrated Program (ICCPs) : 7

ResoBASE Network
R ResBASE Head Office : 1
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+ BASE Integrated Program (ICCPs): 11
The map is only indicative and not to scale.
Above information is updated till 09.08.2023.


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