## MODEL TEST PAPER SUMMATIVE ASSESSMENT-I (Unsolved- 2)

Time: 3hr.
Max Marks: $\mathbf{8 0}$
GENERAL INSTRUCTIONS.
> Attempt all the questions neatly, showing the necessary working wherever required.
$>$ Section-A (Q1-Q10): Each question carries 1 mark.
> Section-B (Q11-Q20): Each question carries 2 marks.
> Section-C (Q 21-Q 30): Each question carries 3 marks.
> Section-D (Q31- Q 35): Each question carries 4 marks.


## SECTION A

Q.1. The product of $\frac{5}{7}$ and the additive inverse of $\frac{-14}{10}$ is $\qquad$ .
Q.2. How many natural numbers lie between squares of 25 and 26 ?
Q.3. The value of $\sqrt[3]{\frac{-64}{125}}$ is $\qquad$ .
Q.4. Find the value of $x+y+z$ in the give $n$ figure :

Q.5. Simplify $(x+4)(x-4)$.
Q.6. If $5(x-3)=-5$ then $x=$ $\qquad$ .
Q.7. The class mark of the class interval $40-50$ is $\qquad$ .
Q.8. If $x=-1$ then find the value of $x^{3}+2 x^{6}$ is $\qquad$ .
Q.9. Three angles of a quadrilateral are $70^{\circ}$ each. What is the measure of the fourth angle ?
Q.10. In the given pie chart find the fraction of the circle representing Bus or Car as mode to transport.


## SECTION B

Q.11. What should be added to $\frac{-9}{5}$ to get $\frac{-1}{3}$.
Q.12. A number multiplied by itself gives 676 . Find the number.
Q.13. Evaluate: $\left\{\sqrt{4^{2}+3^{2}}\right\}^{3}$
Q.14. The exterior angle of a regular polygon is $24^{\circ}$. Find the number of sides of the polygon.
Q.15. By what least number should we multiply 240 to make it a perfect square?
Q.16. Find $x$ if $6 x=23^{2}-17^{2}$.
Q.17. Solve for $\mathrm{x}: 9+5 \mathrm{x}=2(7 \mathrm{x}-9)$
Q.18. ABCD is a trapezium in which $\mathrm{AB} \| \mathrm{CD}$. If $\angle \mathrm{A}=\angle \mathrm{B}=40^{\circ}$, then what is the measure of other two angles?
Q.19. Simplify: $17 a^{2}+3 a-5 a(a-2)$
Q.20. Following frequency distribution table show marks (out of 50) obtained in Math Test by 45 students of class VIII.

| Class Interval | Frequency |
| :---: | :---: |
| $0-10$ | 1 |
| $10-20$ | 6 |
| $20-30$ | 12 |
| $30-40$ | 20 |
| $40-50$ | 6 |
| Total | 45 |

(i) What is the size of the class interval?
(ii) Which class has the highest frequency?

## SECTION C

Q.21. Find six rational numbers between $\frac{-5}{3}$ and $\frac{-17}{6}$ ?
Q.22. Find the smallest number of 4 digits which is a perfect square.
Q.23. Solve for x : $\frac{x}{2}-\frac{1}{5}=\frac{x}{3}+\frac{1}{4}$
Q.24. Stating the property simplify the expression: $\left(\frac{9}{16} \times \frac{4}{12}\right)+\left(\frac{9}{16} \times \frac{-3}{9}\right)$
Q.25. Find the value of $\left(x^{2}-2 y\right)(x+y)$ when $x=1$ and $y=2$.
Q.26. The ratio between the interior angle and the exterior angle of a regular polygon is 7:2. Find the number of sides in the polygon.
Q.27. Solve: $\frac{3 x+5}{2 x+7}=4$.
Q.28. The volume of a cubical box is 32.768 cubic metre. Find the length of a side of the box.
Q.29. RENT is a rectangle with its dimensions in metres. It's diagonals meet at O . If $\mathrm{OR}=2 \mathrm{x}+4, \mathrm{OT}=3 \mathrm{x}+1$. Find
(i) x
(ii) RN
(iii) TE

Q.30. The following table gives the marks scored by students in an entrance examination.

| Marks | $\mathbf{0 - 1 0}$ | $\mathbf{1 0 - 2 0}$ | $\mathbf{2 0 - 3 0}$ | $\mathbf{3 0 - 4 0}$ | $40-\mathbf{5 0}$ | $50-\mathbf{6 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of students | 4 | 10 | 16 | 22 | 20 | 18 |

Represent this data in the form of a histogram.

## SECTION D

Q.31. On a particular day the sales (in rupees) of different items of a Baker's shop are given below:

| Ordinary bread | Fruit bread | Cakes | Biscuits | Others |
| :---: | :---: | :---: | :---: | :---: |
| 320 | 80 | 40 | 120 | 160 |

## Draw a pie chart (Show all the calculations)

Q.32. An army general wishes to arrange his 10406 men in the form of a square. On doing so he found that 2 men were left. How many men were there in each row?
Q.33. (i) If $y-\frac{1}{y}=9$, find $y^{2}+\frac{1}{y^{2}}$.
(ii)Show that $(9 a-5 b)^{2}+180 a b=(9 a+5 b)^{2}$.
Q.34. ABCD is a parallelogram in which $\angle \mathrm{DAO}=40^{\circ}, \angle \mathrm{BAO}=35^{\circ}$ and $\angle \mathrm{COD}=75^{\circ}$.

Find
(i) $\angle \mathrm{ACB}$
(ii) $\angle \mathrm{ODC}$
(iii) $\angle \mathrm{ABO}$

(iv) $\angle \mathrm{ABC}$
Q.35. Solve for x :

$$
\begin{aligned}
& 5 x-2(2 x-7)=2(3 x-1)+\frac{7}{2}
\end{aligned}
$$

## MODEL TEST PAPER SUMMATIVE ASSESSMENT-I (Unsolved-3)

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> Section-C (Q 21-Q 30): Each question carries 3 marks.
> Section-D (Q31- Q 35): Each question carries 4 marks.

SECTION A
Q.1. The product of $\frac{5}{7}$ and the additive inverse of $\frac{21}{15}$ is $\qquad$ .
Q.2. How many natural numbers lie between squares of 30 and 31 ?
Q.3. The value of $\sqrt[3]{\frac{-125}{64}}$ is $\qquad$ .
Q.4. Find the value of $x+y+z$ in the figure below:

Q.5. In the given pie chart find the fraction of the circle representing cycle as mode to transport.

Q.6. Three angles of a quadrilateral are $80^{\circ}$ each so the fourth angle will be $\qquad$ .

