## SAMPLE PAPER FINAL TERM EXAMINATION 2023-24 SUBJECT: MATHEMATICS CLASS: VI

Time: 2.5Hrs
M.M: 60

IMPORTANT INSTRUCTIONS:

1) All questions are compulsory.
2) Q. 1 to Q .15 carry 1 mark each (MCQ).
3) Q. 16 to Q. 22 carry 2 marks each.
4) Q. 23 to Q. 27 carry 3 marks each.
5) Q. 28 to Q. 31 carry 4 marks each.

## SECTION-A (Q1 to Q15-1 mark each-MCQ)

Q1. Choose the correct answer for -24-(-44).
(a) -11
(b) -20
(c) -68
(d) +20

Q2. What fraction of an hour is 40 g ?
(a) $\frac{4}{80}$
(b) $\frac{2}{5}$
(c) $\frac{4}{8}$
(d) $\frac{2}{50}$

Q3. Which of the following statements is true?
" Squares, rectangles, parallelograms are all quadrilaterals"
(a) All sides are equal.
(b) All angles are of measure $90^{\circ}$.
(c) All have opposite sides equal.
(d) All have four sides.

Q4. What is the HCF of 8 and 12 ?
(a) 3
(b) 6
(c) 8
(d) 4

Q5. What is the number of positive integers between -11 and 11 ?
(a) 10
(b) 11
(c) 0
(d) 22

Q6. What is the expression for: 5 times $p$ divided by 7 ?
(a) $\frac{7}{5 p}$
(b) $7(5 p)$
(c) $\frac{5 p}{7}$
(d) $\frac{5}{7 p}$

Q7. Choose the correct option: 53467.996 $\qquad$ 53476.966
(a) <
(b) $>$
(c) $=$
(d) none

Q8. Area of a rectangle is 100 cm . If its length is 25 cm , find its breadth.
(a) 5 cm
(b) 6 cm
(c) 4 cm
(d) 3 cm

Q9. Cost of 105 envelopes is ₹350. How many envelopes can be purchased for ₹ 100 ?
(a) 10
(b) 20
(c) 30
(d) 40

Q10. How many triangles are there in a quadrilateral ?
(a) 1
(b) 2
(c) 3
(d) 4

Q11. Which is the greatest of the given angles?
(a) Obtuse angle
(b) Straight angle
(c) Reflex angle
(d) Acute angle

Q12. Which of the following statements is correct?
(a) $-6+(-7)=-13$
(b) $-5+1=4$
(c) $6+(-2)=3$
(d) $-8+(-7)=-1$

Q13. Divisibility by 11 can be checked by
(a) sum of last 2 digits
(b) sum of last 3 digits
(c) sum of alternate digits
(d) sum of all digits

Q14. Give an integer value of $y$ if: $-5<y<-3$
(a) -5
(b) 0
(c) -4
(d) -2

Q15. Find the no. of right angles turned through from going to South to East clockwise.
(a) 2
(b) 1
(c) 4
(d) 3

## SECTION-B (Q16 to Q22-2 marks each)

Q16. In the given diagram, name the points(s)
(a) In the interior of $\angle \mathrm{DOE}$
(b) In the exterior of $\angle E O F$
(c) On $\angle E O F$


Q17. Where will the hour hand of a clock stop if it starts: (draw figures)
a) from 8 and turns through 2 right angles?
b) from 10 and turns through 3 right angles?

Q18. Ramesh had 20 pencils, Sheelu had 50 pencils and Jamaal had 80 pencils. After 4 months, Ramesh used up 10 pencils, Sheelu used up 25 pencils and Jamaal used up 40 pencils. What fraction did each use up? Check if each has used up an equal fraction of his/her pencils?

Q19. Urmila's school is at a distance of 5 km 350 m from her house. She travels 1 km 70 m on foot and the rest by bus. How much distance does she travel by bus? (use decimals)

Q20. Determine if the following ratios form a proportion. Also write the middle terms and extreme terms if the ratios are in proportion.
$25 \mathrm{~g}: 30 \mathrm{~g}$ and $40 \mathrm{Kg}: 48 \mathrm{Kg}$
Q21. Oranges are to be transferred from larger boxes into smaller boxes. When a large box is emptied, the oranges from it fill two smaller boxes and still 10 oranges remain outside. If the number of oranges in a small box are taken to be $x$, what is the number of oranges in the larger box?

Q22. Draw the following:
a) line $m$ contains $E$ and $F$ but not $D$.
b) a polygon and shade its interior

## SECTION-C (Q23 to Q27-3 marks each)

Q23. A rectangular piece of land measures 0.7 km by 0.5 km . Each side is to be fenced with 4 rows of wires. What is the length of the wire needed?

Q24. Asha and Samuel have bookshelves of the same size partly filled with books. Asha's shelf is $\frac{5}{6}$ th full and Samuel's shelf is $\frac{2}{5}$ th full. Whose bookshelf is more full? By what fraction?

Q25. Name the types of following triangles:
a) $\triangle D E F$ with $m \angle D=90^{\circ}$.
b) $\triangle A B C$ such that $A B=B C=A C=20 \mathrm{~m}$.
c) $\triangle \mathrm{LMN}$ with $\mathrm{m} \angle \mathrm{L}=30^{\circ}, \mathrm{m} \angle \mathrm{M}=70^{\circ}$ and $\mathrm{m} \angle \mathrm{N}=80^{\circ}$.

Q26. A floor is 9 m long and 5 m wide. A square carpet of sides 7 m is laid on the floor. What is the area of the floor that is not carpeted?

Q27. Mother wants to divide ₹ 36 between her daughters Shreya and Bhoomika in the ratio of their ages. If age of Shreya is 15 years and age of Bhoomika is 12 years, find how much Shreya and Bhoomika will get.

## SECTION-D (Q28 to Q31 - 4 marks each)

Q28. Ten years old Rahul can carry a maximum weight of 15 kg . If he bought 4 kg 900 g of apples, 2 kg 600 g of grapes and 5 kg 300 g of mangoes. Can he carry the total weight that he bought. If yes, then how much more weight he can carry with him?

Q29. Three boys step off together from the same spot. Their steps measure $63 \mathrm{~cm}, 70 \mathrm{~cm}$ and 77 cm respectively. What is the minimum distance each should cover so that all can cover the distance in complete steps?

Q30. Anish made 42 runs in 6 overs and Anup made 63 in 7 overs. Who made more runs per over and by how much?

Q31. a) Solve: $50-(-40)+(-2)$
b) Subtract the sum of $(-2330)$ and (-988) from the sum (-2100) and $(-2001)$

