KOTHARI INTERNATIONAL SCHOOL, NOIDA
TERM END ASSESSMENT, SESSION: 2024-25
GRADE: 7   SUBJECT: MATHEMATICS
SET A   SECTION B (SUBJECTIVE)

DAY & DATE: FRIDAY, 28 FEBRUARY 2025
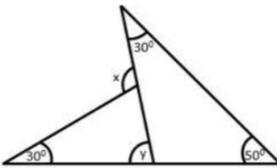**MAXIMUM MARKS: 60**   **TIME ALLOTTED: 2 HOURS 30 MINUTES**
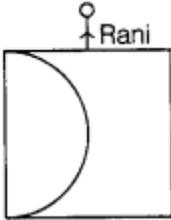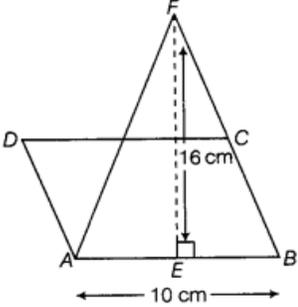**NAME: _____**   **ROLL NO: _____**

GENERAL INSTRUCTIONS:
- i).   *This question paper contains 22 questions. All questions are compulsory.*
- ii).   *Question Nos.21 to 31 carries 2 mark each.*
- iii). *Questions Nos. 32 to 37 carries 3 marks each.*
- iv).   *Questions Nos. 38 to 42 carries 4 marks each.*
- v).   *Read the question paper carefully and then attempt it.*

	SECTION B	
Q21	Find x so that $\left(\frac{5}{3}\right)^5 \times \left(\frac{5}{3}\right)^{11} = \left(\frac{5}{3}\right)^{8x}$	(2)
Q22	The diameter of a wheel is 84 cm. It takes 500 rotations to move over a playground. Find the area of the playground.	(2)
Q23	Express the following numbers in standard form: a. 24 million b. 5,83,00,00,00,000	(2)
Q24	Two numbers are in the ratio 5 : 3. If they differ by 18, what are the numbers?	(2)
Q25	Which number should be subtracted from $\frac{11}{12}$ so that we obtain $-\frac{3}{4}$?	(2)
Q26	Name the solid which has: a. 5 faces out of which 4 are triangles b. 5 faces out of which 3 are rectangles	(2)
Q27	Find the value of '*x*' and '*y*' in the given figure: 	(2)
Q28	If three cubes of dimensions 2cm x 2cm x 2cm are placed end to end, what would be the dimension of the resulting cuboid?	(2)
Q29	Represent $-5\frac{3}{5}$ on number line.	(2)

Q30	On a certain sum the interest paid after 3 years is Rs. 450 at 5% rate of interest per annum. Find the sum.	(2)

Q31	Match the following:	(2)

Column A	Column B
a. A rectangle has a rotational symmetry of order ….	i. 6
b. An equilateral triangle has …. lines of symmetry	ii. 1
c. Number of lines of symmetry of a regular hexagon is ….	iii. 3
d. The letter "A" has rotational symmetry of order ….	iv. 2

Q32	Solve: $2y + \frac{5}{3} = \frac{26}{3} - y$	(3)

Q33	Rani bought a new field that is next to one she already owns in the given figure. This field is in the shape of a square of side 70 m. She makes a semi-circular lawn of maximum area in this field. (i) Find the perimeter of the lawn. (ii) Find the area of the square field excluding the lawn. 	(3)

Q34	The sum of three consecutive multiples of 8 is 888. Find the multiples.	(3)

Q35	Simplify: $\dfrac{12^4 \times 9^3 \times 4}{6^3 \times 8^2 \times 27}$	(3)

Q36	Wahida bought two fans for Rs. 1200 each. She sold one at a loss of 5% and the other at a profit of 10%. Find the selling price of each. Also, find the total profit or loss.	(3)

Q37	Meera writes "W" on a tracing paper and draws a line vertically on it at the centre as shown in the following diagram. She then folds the folds the paper along the line and gets two parts of alphabet W. a. Does W have horizontal line of symmetry? b. Does W have vertical line of symmetry? c. Write two letters having vertical line of symmetry and two letters having horizontal line of symmetry.	(3)

Q38	Two poles of heights 6 m and 11 m stand on a plane ground. If the distance between their feet is 12 m. Find/ the distance between their tops.	(4)
Q39	The organisers of a competition decide that a winner gets a prize of Rs. 100 and a participant who does not win gets a prize of Rs. 25. The total prize money distributed is Rs. 3,000. Find the number of winners, if the total number of participants is 63.	(4)
Q40	In the given figure, area of ΔAFB is equal to the area of parallelogram ABCD. If altitude EF is 16 cm long, find the altitude of the parallelogram to the base AB of length 10 cm. What is the area of ΔDAO, where O is the mid-point of DC. 	(4)

Q41	In an examination, a student secured 30% marks and failed by 12 marks. In the same examination, another student secured 40% marks and got 28 more bare minimum marks to pass. Find:
	
	   a. The maximum marks
	   b. The pass percentage
		(4)

Q42	A teacher shows 4 articles of different lengths in a classroom. The length of different articles are as following:
	
	  i. $3 \times 16^{3/4}$ ii. $4^{1/2} \times 27^{2/3}$ iii. $7^0 \times 81^{3/4}$ iv. $6 \times 9^{3/2} \times 3^{-2}$
	
	   a. Find the length of the ball.
	   b. Find the product of length of ball and basket.
	   c. Find the ratio of the length of ball and book.
		(4)