MATHEMATICS

[5]

All working , including rough work , must be clearly shown and must be done on the same sheet as the rest of the answer . Omission of essential working will result in the loss of marks. The intended marks for questions are given in brackets[]

Question 1

CHOOSE THE CORRECT OPTION:

(i)	Hari and Kiran want to share some candies in a ratio of 3 : 5. If they have 24 pieces of candy, how many pieces will Hari get?		
	(a) 3 pieces (b) 4 pieces (c) 6 pieces (d) 9 pieces		
(ii)	Deepak is 5 years older than Yogesh. If Deepak is x years old, then the age of Yogesh is		
/•••	(a) $(x + 5)$ years (b) $(x - 5)$ years (c) $(5 - x)$ years (d) 5x years		
(111)	Power of variable in a simple linear equation is		
	(a) 0 (b) 1 (c) 2 (d) 3		
(iv)	An angle whose measure is exactly 90° is		
	(a) Acute angle (b) Right angle (c) Obtuse angle (d) Straight angle		
(v)	A bicycle wheel has 24 spokes. The angle between a pair of adjacent spokes is		
	(a) 10° (b) 24° (c) 15° (d) 25°		
(vi)	If two angles of a triangle are complementary then the third angle is		
()			
<i>.</i>	(a) 36° (b) 45° (c) 60° (d) 90°		
(vii)	To draw an angle of 30° , draw the of an angle of measure 60° .		
	(a) perpendicular (b) bisector (c) parallel line (d) line segment		
(viii)	Number of lines of symmetry of a rectangle is		
	(a) 1 (b) 0 (c) 4 (d) 2		
(ix)	An isosceles trapezium has		

(a) parallel sides equal (b) non parallel sides equal (c) all sides equal (d) all sides parallel

(x) The word that is made of letters that have only horizontal line of symmetry is -----

(a) MAT (b) TEN (c) HOW (d) BED

Question 2

FILL IN THE BLANKS:

(i)	Area of a rectangle whose length 10cm and breadth 1.2cm is	
(ii)	The angle formed by the hands of a clock at 4.00 am is	[1]
(iii)	The line of symmetry of an angle is its	[1]
(iv)	Area of a square whose side is 1.1cm is	[1]
(v)	If $a = 2$ and $b = -3$, then $a + b =$	[1]
(vi)	The ratio of 3 weeks to 6 days is	[1]

Question 3

ANSWER ANY SEVEN QUESTIONS:

(i)	Three friends Ram, Rahim and Raja save ₹130, ₹150 and ₹120 every month from their pocket money. Find their ratio:	[2]
	(a) Ram's savings : Raja's savings (b) Rahim's savings : Raja's savings	
(ii)	Rearrange the four numbers 12,16,28,21 so that they form a proportion.	
(iii)	A number is multiplied by 7 and then subtracting 10, its value became 130. What is the number?	
(iv)	Use the adjoining figure to name:	[2]



- (a) parallel lines (b) any two intersecting lines
- (c) lines whose point of intersection is point S
- (v) Construct an angle of 75° using protractor.



(vii) Identify the following Quadrilateral and name the pair of equal sides.





- (viii) A table top measures 3m 15cm by 90cm. Find the perimeter of the top of the table. [2]
- (ix) Given below is a bar graph showing the number of students who used the [2] different transportation:



- (a) Number of students travelled by bus.
- (b) Number of students travelled by cycle and car.
- (c) Which transporation is used maximum?
- (d) Which transporation is used minimum?

Question 4

ANSWER ANY FIVE QUESTIONS:

(i) The result of a science test is as follows:

	70, 80, 90, 80, 80, 60, 80, 70, 90, 65, 100, 60, 70, 60, 70, 85, 65, 70, 70, 85, 90, 60, 65, 80, 60	[3]		
	Make a frequency table for the above data and answer the following questions:			
	(a) What is the maximum marks obtained?			
	(b) How many students scored less than 75 marks?(c) How many students scored 80 marks or above?			
	(d) How many students appeared in the test?			
(ii)	Let the time taken (in minutes) by a group of 10 students to complete a Mathematics quiz be 50, 45, 50, 35, 55, 45, 35, 30, 60, 55. Find the mean and median of the given data.	[3]		
(iii)) Using compasses, construct the following angles:			
	(a) 60° (b) 120°			
(iv)	A square field has each side 90m, whereas a rectangular field has length 130m and breadth 70 m. Which of these two fields has greater perimeter and by how much?	[3]		
(v)	A rectangular field is 100m long and 60m wide. Find:	[3]		
(vi)	(a) the ratio of length to breadth (b) the ratio of length to perimeter Solve the following:	[2]		
(VI)	(a) $2x + 3 = 11$ (b) $-2x - 3 = 9$ (c) $y - 8 = 17$	[ວ]		
(vii)	A survey of 120 school students was done to find which activity they prefer to do	[3]		

in their free time.

Preferred Activity	Number of students
Playing	45
Reading story books	30
Watching TV	20
Listening to music	10
Painting	15

Draw a bar graph to illustrate the above data.