

**KENDRIYA VIDYALAYA GACHIBOWLI, HYDERABAD**  
**SAMPLE PAPER 03 : PERIODIC TEST – 1 (2019 – 20)**  
**CLASS – VIII**  
**MATHEMATICS**

**T.T. 1:30**

**M.M. 40**

**General Instructions:**

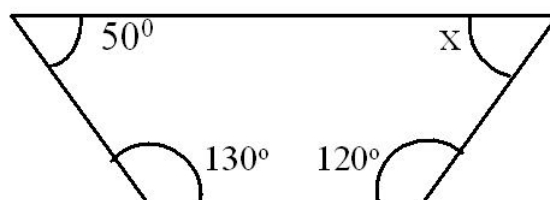
- All questions are compulsory.
- Question paper is divided into four sections: Section A contains 10 Objective type questions each carry 1 mark, Section B contains 3 questions each carry 2 marks, Section C contains 4 questions each carry 3 marks and Section D contains 3 questions each carry 4 marks.

**SECTION – A(1 marks each)**

Frequency Distribution of Daily Income of 550 workers of a factory is given below. Study the following frequency distribution table and answer the questions from Q1 – Q2.

| Class Interval<br>(Daily Income in Rupees) | Frequency<br>(Number of workers) |
|--|----------------------------------|
| 100-125                                    | 45                               |
| 125-150                                    | 25                               |
| 150-175                                    | 55                               |
| 175-200                                    | 125                              |
| 200-225                                    | 140                              |
| 225-250                                    | 55                               |
| 250-275                                    | 35                               |
| 275-300                                    | 50                               |
| 300-325                                    | 20                               |
| <b>Total</b>                               | <b>550</b>                       |

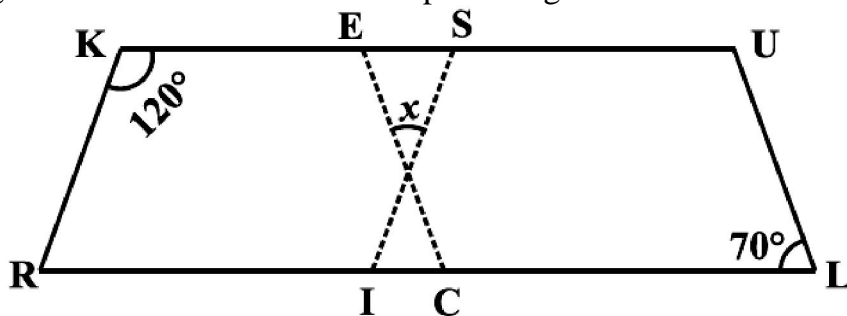
- What is the size of class intervals ?  
(a) 24                      (b) 25                      (c) 26                      (d) 15
- Which class has the highest frequency ?  
(a) 200-225              (b) 300-325              (c) 175-200              (d) 150-175
- The diagonals of a rhombus bisect each other at \_\_\_\_\_ angles.  
(a) acute                  (b) right                      (c) obtuse                      (d) reflex
- The value of (x) in the following figure is  
(a)  $120^\circ$                   (b)  $80^\circ$                       (c)  $100^\circ$                       (d)  $60^\circ$



5. The measure of each interior angle of a regular polygon is  $140^\circ$ , then number of sides that regular polygon has \_\_\_\_\_  
 (a) 15 (b) 12 (c) 9 (d) 10
6. The difference between two whole numbers is 66. The ratio of the two numbers is 2 : 5. What are the two numbers?  
 (a) 110, 44 (b) 120, 54 (c) 140, 74 (d) none of these
7. Solve:  $3x = 2x + 18$   
 (a) 18 (b) -18 (c) 14 (d) none of these
8. Solve:  $\frac{2x}{3} = 18$   
 (a) 9 (b) 27 (c) -9 (d) none of these
9. The additive inverse of  $\frac{7}{5}$  is  
 (a) 1 (b) 0 (c)  $-\frac{7}{5}$  (d)  $\frac{7}{5}$
10. Simplify:  $\frac{-4}{5} \times \frac{3}{7} \times \frac{15}{16} \times \left(\frac{-14}{9}\right)$   
 (a) 1 (b) 0 (c) 2 (d)  $\frac{1}{2}$

**SECTION – B(2 marks each)**

11. Find two rational numbers between  $\frac{-2}{5}$  and  $\frac{1}{2}$
12. The perimeter of a rectangular swimming pool is 154 m. Its length is 2 m more than twice its breadth. What are the length and the breadth of the pool?
13. In the below figure both RISK and CLUE are parallelograms. Find the value of  $x$ .

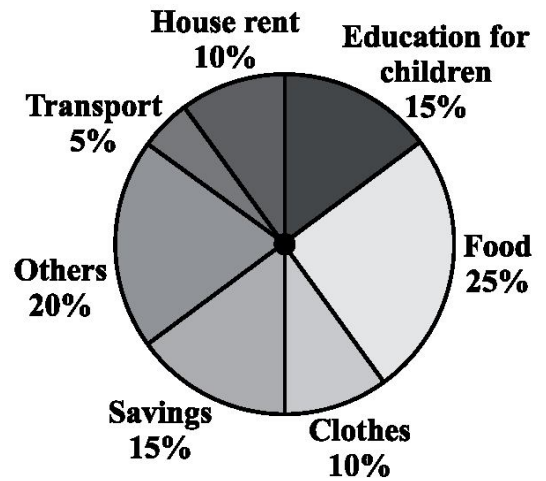


**SECTION – C(3 marks each)**

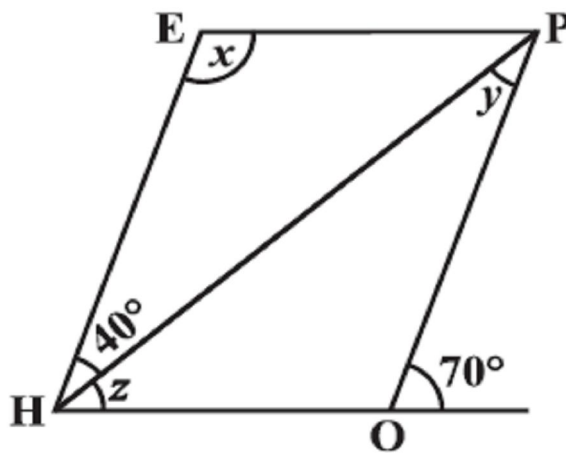
14. Represent these numbers on the number line. (i)  $\frac{5}{4}$  (ii)  $\frac{-7}{6}$  (iii)  $\frac{4}{7}$
15. Construct Rhombus BEST where  $BE = 4.5$  cm and  $ET = 6$  cm

16. The given pie chart gives the expenditure (in percentage) on various items and savings of a family during a month.

- (i) On which item, the expenditure was maximum?
- (ii) Expenditure on which item is equal to the total savings of the family?
- (iii) If the monthly savings of the family is Rs 3000, what is the monthly expenditure on clothes?



17. Sanjay donates his one part of the land HOPE in the form of parallelogram to the village children for Hospital. Find  $x$ ,  $y$  and  $z$ . Which value is depicted from this?



**SECTION – D(4 marks each)**

18. Rahul donated money which is a two digit number such that the sum of the digits of a two-digit number is 9. When we interchange the digits, it is found that the resulting new number is greater than the original number by 27. What is the two-digit number? What values is depicted from this?

19. Construct Quadrilateral PLAN where  $PL = 4\text{ cm}$ ,  $LA = 6.5\text{ cm}$ ,  $\angle P = 90^\circ$ ,  $\angle A = 110^\circ$  and  $\angle N = 85^\circ$

20. Draw a pie chart of the data given below. The time spent by a child during a day.

|           |   |         |
|-----------|---|---------|
| Sleep     | — | 8 hours |
| School    | — | 6 hours |
| Home work | — | 4 hours |
| Play      | — | 4 hours |
| Others    | — | 2 hours |