GRAND TEST

GENERAL INSTRUCTIONS :

- All questions compulsory.
- The question paper consists of **36 questions** divided into three sections A, B, C and D.
  - Section A comprises of **2 questions** of **1 mark** each.
  - Section B comprises of **5 questions** of **2 marks** each.
  - Section C comprises of **8 questions** of **3 marks** each.
  - Section D comprises of **6 questions** of **4 marks** each.
- Time allotted is **2 hours.** The **Maximum Marks** are **60**.
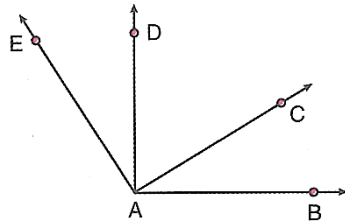
SECTION – A : (1 × 2 = 2)

1. Arrange the following angles according to their measure in ascending order. Obtuse angle, Straight angle, Zero angle, Right angle, Reflex angle, complete angle, acute angle.
2. Draw the following angles using ruler and compasses. Also label them.
   (a) 60º   (b) 120º   (c) 90º

SECTION – B : (2 × 5 = 10)

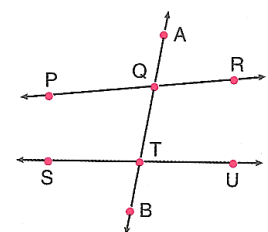3. Write down three pairs of adjacent angles in the following figure.

4. Draw an ∠XYZ equal to 90º. Using the compasses and ruler, draw YO the bisector of ∠XYZ Measure ∠XYO and ∠ZYO. Are they equal?

5. Find the simple interest on Rs.2,000 for six months at the rate of $4\frac{1}{2}$ % per annum.

6. There are 700 students in a school out of which 420 are girls. Find the percentage of boys in the school.

7. Mr. Gupta purchases a house for Rs. 2,50,000 and spends Rs. 50,000 on repairs. If he sells it for Rs. 4,00,000, find his gain per cent.

SECTION – C : (3 × 8 = 24)

8. What amount will Reena get by investing Rs. 4500 at $4\frac{1}{2}$% per annum for the period from September 8 to November 20 of the year 2015.

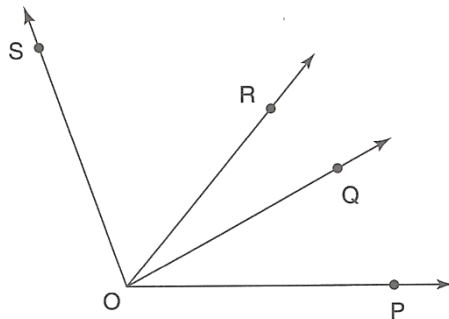9. In the given figure, lines p and q are intersected by a transversal s. Find the pairs of

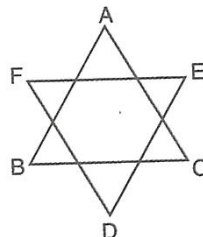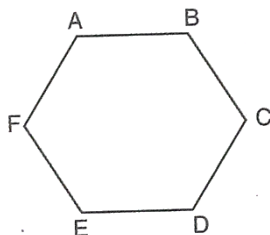   (a) corresponding angles. (b) alternate interior angles.

10. Write 'True' or False' for the following statements.

(a) Supplement of a right angle is a right angle.

(b) Adjacent supplementary angles form a linear pair.

(c) Complementary angles are always adjacent.

11. The monthly consumption of milk in a family is 120 litres. If due to festival the consumption of milk increased by 20%, find the present consumption of milk.

12. What is the percentage of prime numbers from 1 to 10?

13. Find the amount 5% more than 600.

14. Find gain or loss per cent.

(a) CP = Rs. 900   SP = Rs. 1,080

(b) CP = Rs. 750   SP = Rs. 8,50

(c) CP = Rs. 10,200   SP = Rs. 8,670

15. Draw a line segment PQ equal to 7 cm. Using ruler and compasses, obtain a line segment of length $\frac{1}{2}$ PQ. Measure each part.

SECTION – D : (4 × 6 = 24)

16. Look at the figure and answer the following questions.

(a) Is the point P in the exterior of ∠ROS?

(b) Is the point R in the interior of ∠SOR?

(c) Is the point Q in the interior of ∠ROP?

(d) Is the point S in the exterior of ∠POQ?

(e) Name the point which is in the interior of ∠POR but in the exterior of ∠SOR.

17. Rohan deposited Rs. 5,000 at 8% per annum for $3\frac{1}{2}$ year and Sunil deposited Rs. 5,000 at 6% per annum for years. Who will get more interest? What amount will each get?

18. What per cent is –

(a) Rs. 63 of Rs. 90   (b) 80 | of 240 | (c) 16 of 250   (d) 200 cm of one score

19. Identify parallel line segments in the figures given below.

20. Fill in the following blanks.

(a) A reflex angle measures more than _____ and less than _____.

(b) One complete angle = _____ night angles.

(c) The minute hand turns through _____ degrees from the digit 2 to 11 on a clock.

(d) An angle of measure $345.5°$ is a _____ angle.

21. Write the complement of the following angles.

(a) $20°$ (b) $55°$ (c) $71°$ (d) $6°$