Time: 3 hours   **Maximum Marks: 80**

General Instructions:-
1. **All questions are compulsory.**
2. **The question paper consists of 25 questions, divided into four Sections A, B, C and D.**
3. **Section A contains 6 very short-answer type questions of 1 mark each.**
   Section B contains 6 short-answer type questions of 2 marks each.
   Section C contains 10 long-answer-1 type questions of 3 marks each.
   Section D contains 8 long-answer-2 type questions of 4 marks each.
4. **Write the serial number of the question before attempting it.**
5. **There is no overall choice although internal choice is given in given Section B, C and D.**

SECTION – A
(Each question carries 1 mark)

Q1. Choose the correct option of the following:-

a) Write 26 in roman numerals.

   i)   IIVI   ii) XXVI   iii)XXXVI   iv) XIXVI

b) How many sides an octagon has?

   i)   8   ii) 6   iii) 18   iv) None of these

c)   Find the H.C.F of 4 and 9.

i) 36   ii) 9   iii) 4   iv) 1

d)   Express 36 as sum of two odd prime numbers

i)   35 and 1   ii) 23 and 13   iii) 27 and 9   iv) 30 and 6

e) Write the face value of 9 in 19,652

i) 9000   ii) 19   iii) 9   iv) 90

f) Write the predecessor of smallest five digit number.

i) 9999   ii) 99999   iii) 999   iv) None of these

SECTION – B
(Each question carries 2 marks)

Q2. Find the largest number which can divide 300 and 450 both.

Q3. A dealer purchased 99 L.C.D TV sets. If the cost of each set is Rs. 33750, find the total money the dealer paid.

OR

A motor pumps 950 liters of water in a minute. How much time will it take to pump out 1396500 liters of water?

Q4. Find the H.C.F of 20, 56 and 78 using division method.

Q5. Gorang purchased 2 kg 280 g Apples, 3 kg 375 g Pineapples, 225 g Grapes and 5 kg 85 g Oranges. Find the total weight of the fruits purchased by Gorang in kg.

Q6. Write the greatest 4-digit number and express it as a product of it's primes.

OR

Write the smallest 5-digit number and express it as a product of it's primes.

Q7. Evaluate 106×5 by using brackets.

SECTION – C
(Each question carries 3 marks)

Q8. Draw rough sketches of
    (a) a scalene acute angled triangle.
    (b) Six sided polygon
    (c) reflex angle.

Q9. Urmila's school is at a distance of 5 km 35 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?

Q10. In the given figure, O is the centre of the circle. Answer the following questions:

   i) Name all radii of the given circle.
   ii) Name all points on the circumference.
  iii) Write the name of the polygon in the centre.
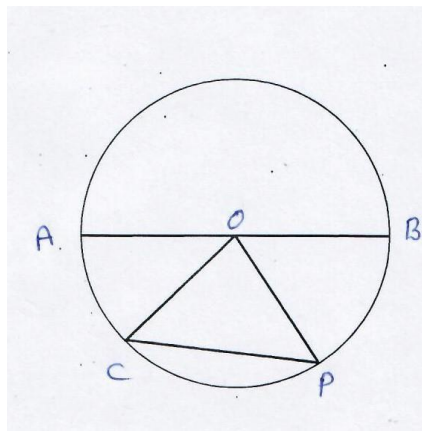
OR

In the given figure, O is the centre of the circle. Answer the following questions:

(i) Write the name of a sector of the circle.
(ii) Name the segment of the circle formed by the chord CP.
(iii) Write the name of the diameter of the circle.
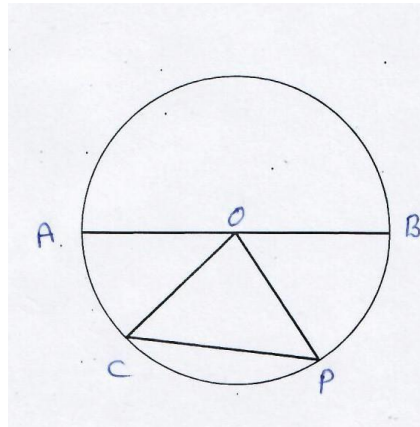
Q11. If Nikhil's age is x years, then determine

   i) Age of Nikhil's father who is 5 years more than 3times Nikhil's age.
   ii) Nikhil's grandfather's age who is 5 times more than Nikhil's age?
   iii) His grandmother's age who is 8 years younger to his grandfather?

OR

Sunita is half the age of her mother Geeta. Find their ages?
  i) After 4 years
  ii) Before 3 years

Q12. Following figures relate the weekly wages (in □) of 15 workers in a factory:
      300, 250, 200, 250, 200, 150, 350, 200, 250, 200, 150, 300, 150, 200, 250
      Prepare a frequency table.
      a) How many workers are getting □ 300?
      b) What is the minimum wage and how many workers are getting minimum wages?

Q13. Three lights flicker at an interval of 8, 18 and 24 minutes respectively. If they flickered
      together at 1 p.m., when will they flicker together again?

OR

There are three containers containing 24litre, 60 liter and 96 liters of paint respectively. The paint has to be filled into cans. Find the maximum capacity of the can used such that the paint from each containers.

Q14. 50 chairs and 30 blackboards were purchased for a school. If each chair costs ☐1065 and each blackboard costs ☐1645, find the total amount paid by the school.

Q15. Test whether 87053 is divisible by 4 and 8 or not. (Using divisibility rule)
Test whether 34128 is divisible by 9 or not. (Using divisibility rule)

Q16. Write the smallest and the greatest digit in place of ___ so that the number

(i) ___ 6724 is divisible by 3   (ii) 8___711 is divisible by 11.

OR

The H.C.F of two numbers is 23 and their L.C.M is 1449. If one of the number is 161, find the other.

Q17. In a class test, the number of students passed in various subjects is given below:

Subjects	English	Hindi	Math	Science	Social science	Arts
No. of students passed	20	25	15	30	20	35

Select a suitable scale and draw a pictograph.

SECTION – D
(Each question carries 4 marks)

Q18. Write the number of faces and number of vertices of the following:

(i) Cuboid   (ii) Square pyramid   (iii) Cube   (iv) Cone

Q19. The HCF and LCM of two numbers are 44 and 264 respectively. The first number is completely divisible by 2 and gives 44 as quotient. Find the second number.

OR

A student multiplied 7236 by 65 instead of multiplying by 56. By how much was his answer greater than the correct answer?

Q20. With respect to the given figure, answer the following questions given below:

(i) What are the angles adjacent to ∠ ADC of quadrilateral ABCD?
(ii) Which is the side opposite to side AB of quadrilateral ABCD?
(iii) Name the points in the interior of quadrilateral ABCD.
(iv) How many triangles are formed in this figure?
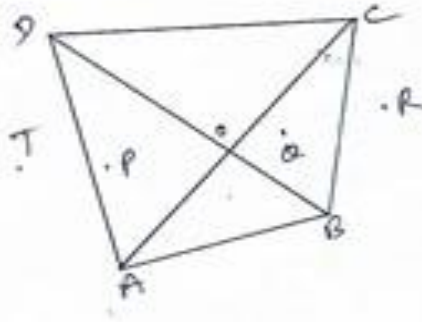
OR

With respect to the given figure, answer the following questions given below:

(i) Name the point on triangle ABC.
(ii) Name the points on quadrilateral ABCD.
(iii) Name the points in the exterior of quadrilateral ABCD.
(iv) Name the diagonals of quadrilateral ABCD and their point of intersection.
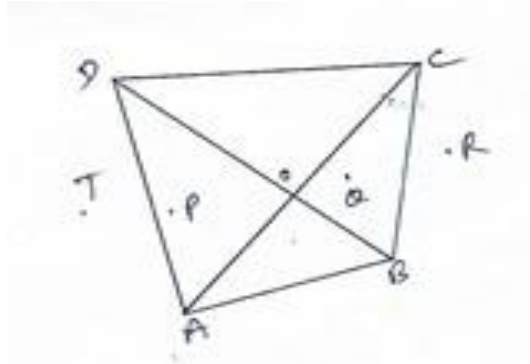
Q21. a) Determine the sum by suitable re-arrangement.
    2062+ 353 + 1438 +547
    15409 +178 +591 +322

    b) Find each of the following product using suitable properties.
       $250 \times 60 \times 50 \times 8$
       475×999

Q22. Give an expression for each of the following:
  a) 13 subtracted from thrice of a number.
  b) 4 times a number is equal to 100.
  c) Half of p added to product of 8 and q.
  d) Multiply the sum of x and y by 3 and divide the product by z.

Q23. The air distance of four cities from Delhi (in km) is as follows:

City	Mumbai	Kolkata	Chennai	Hyderabad
Distance from Delhi (in km)	1100	1350	1700	1220

 Draw a bar graph to represent the above information choosing the scale of your choice.

Q24. What fraction of revolution does the hour hand of a clock turn through when it goes from

   i) 2 to 8
   ii) 7 to 10
   iii) 11 to 5
   iv) 4 to 8

OR

Draw and state which kind of angle is formed in clockwise direction.

i) North east and South west
ii) 8:00
iii) 6:30
iv) East and North

Q25. Which of the given value in the bracket makes the equation correct?

i) 2x + 4 =16   (2, 4, 6, 16)
ii) n + 5 =11   (12,10,6,11)
iii) 5y +20 = 40   (1, 4, 8, 2)
iv) 17 = x+7   (3.9, 10, 12)

OR

A car is going from Patel Nagar to Gandhi Nagar at a uniform speed of x km/hour. It took one hour for the car to reach Indra Nagar from Patel Nagar and 4 hours to reach Nehru Nagar from Patel Nagar. The distance between Nehru Nagar and Gandhi Nagar is 25km. Find the following distances in terms of x.

a) The distance between Patel Nagar and Indra Nagar.
b) The distance between Indra Nagar and Nehru Nagar.
c) The distance between Patel Nagar and Nehru Nagar.
d) The distance between Patel Nagar and Gandhi Nagar.