AMRITA VIDYALAYAM

HALF YEARLY EXAMINATION 2018 - '19

Class : VI **Marks : 80**

Time : 2½ hrs

MATHEMATICS

General Instructions:

1. All questions are compulsory.
2. This question paper consists of 30 questions divided into four sections A, B, C and D.
3. Section A comprises of 6 questions of 1 mark each.
   Section B comprises of 6 questions of 2 marks each.
   Section C comprises of 10 questions of 3 marks each.
   Section D comprises of 8 questions of 4 marks each.
4. Use of calculator is not permitted

SECTION - A

1. Which is the smallest prime number?
2. Give two examples from your environment of
   a) intersecting lines. b) parallel lines.
3. Write down all the factors of 15.
4. Write the 2-digit number whose successor is a 3-digit number.
5. Name the line segment that connects the centre of a circle to the point on the circle.
6. How many whole numbers are there between 53 and 72?

SECTION - B

7. Find 4 pairs of co - prime numbers.
8. Draw a polygon having 5 sides. Name it as polygon PQRST. Draw it's all possible diagonals.
9. Find the H.C.F of 105,135,180.
10. Find the sum and difference of the place value and face value of 8 in 67,823.

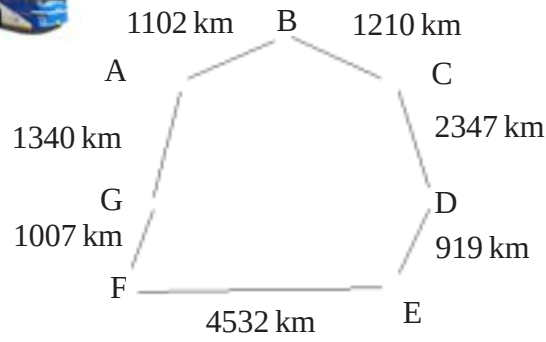
11. Simplify using distributive property.
    a) $325 \times 52 + 327 \times 8 + 327 \times 40$
    b) $405 \times 29 - 29 \times 205$
12. Find the sum of 1 less than the biggest 5 digit number and 2 more than the smallest 6 digit number.

SECTION - C

13. Draw a circle, using a compass, mark its center as point C; draw
    a) Radius CD.
    b) Diameter BCD.
    c) Chord DE.
    d) Sector BC.
14. The length of 2 rods is 6m75cm and 15m 50cm. Find the longest tape which can measure these lengths exactly.
15. Using divisibility test find whether 297144 is divisible by 6.
16. Draw a rough sketch of a quadrilateral KLMN, state
    a) 2 pairs of opposite sides.
    b) 2 pairs of adjacent sides.
    c) 2 pairs of adjacent angles.
17. A student wrote 2386 by 78 instead of 87 by mistake. By how much was his answer less than the correct answer?
18. Find the sum: (1547 + 373) + 905.
    Also find the sum 1547 + (373 + 905). Are the two answers same? State the property involved.
19. Write the smallest 4- digit number formed of the digits 3, 5, 0 and 4. Also write its prime factorization.
20. A vendor supplies 32 litres of milk to a hotel in the morning and 68 litres of milk in the evening. If the milk costs `15 per litre, how much money is due to the vendor per day?
21. A country exported goods worth rupees 24, 85,600 each day. Find the amount of exports in 3 weeks.
22. Four bells toll at intervals of 4,7,12 and 84 seconds. The bell toll together at 5 O'clock, when will they again toll together?

SECTION - D

23. The given diagram shows the route taken by a bus starting from point A. Observe it carefully and answer the question that follows.



a) Which two consecutive stages of the route are farthest from each other?

b) How much distance did the bus travel from point D to Point G?

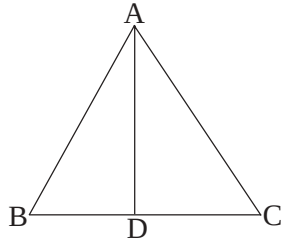
c) Amit travelled from point B to point C and Aman travelled from point E to point? What is the difference in the distance travelled by Amit and Aman?

24. Two tankers contain 850 litres and 680 litres of petrol, respectively. Find the maximum capacity of a container which can measure the petrol of either tanker in exact number of times.

25. Estimate.

a) 28,292 - 21,496 b) 12,904 + 2,888

26. Identify three triangles in the figure. Which two triangles have ∠B as common?



27. A taxi driver filled his car petrol tank with 40 litre of petrol on Monday and with 50 litre of petrol on Tuesday. If the petrol costs rupees 55 per litre, how much did he spend in all on petrol?

28. Find the prime factors of 231. Arrange them in descending order. Find a relation between two consecutive prime factors.

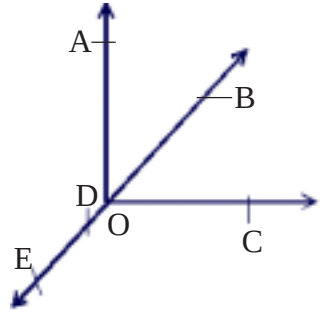
29. Use the figure to name

a) 5 points.

b) a line.

c) 4 rays.

d) 5 line segments



30. Find the sum by suitable re - arrangement.

a) 837 + 208 + 363

b) 1962 + 453 + 1538 + 647