

D.A.V. PUBLIC SCHOOLS, BHUBANESWAR
SUMMATIVE ASSESSMENT-I (2016-17)
STD-VI

Time: $2\frac{1}{2}$ Hrs.

SUBJECT-MATHEMATICS

Full Marks-90

General Instructions :

- All questions are compulsory.
- However internal choices are given in some questions.
- Draw the figures neatly wherever required.
- There are four sections A, B, C & D.
Section A (Q No. 1 to 8) carry 1 mark each, Section B (Q No. 9 to 14) carry 2 marks each, Section C (Q No. 15 to 24) carry 3 marks each and Section D (Q No. 25 to 34) carry 4 marks each.

SECTION-A

(8 X 1 = 8)

1. A pair of words is given. Write the pair which shows a similar relationship that is shown by the given pairs.
Agenda: Meeting
a. Programme: Function b. Map: Scale
c. Performance: Ticket d. Footnote: Article
2. Arun ranks twelveth in a class of forty-six. What will be his rank from the last?
a. 34^{th} b. 38^{th} c. 35^{th} d. 40^{th}
3. If a and b are co-primes, then their LCM is
a. 1 b. $\frac{a}{b}$ c. ab d. 0
4. Number of whole numbers lying between -4 and 4
a. 8 b. 3 c. 4 d. 7
5. In a certain code EARTH is written as FBSUI, then in the same code SHIRT will be written as:
a. TRIHS b. TIJSU c. TIRSH d. RGHQS
6. Write the next number of the series: 4.41, 4.84, 5.29, 5.76, 6.25
a. 6.76 b. 7.29 c. 7.84 d. 6.56
7. An aeroplane is flying in south-east direction. The pilot turns the plane by an angle of 90° to left. In which direction is the plane flying now?
a. South-west b. north-east c. south d. east
8. $\frac{3}{2}$ times of a right angle = ?
a. 115° b. 135° c. 270° d. 230°

SECTION-B

(6 X 2 = 12)

9. Find the sum by suitable arrangement: $1962 + 453 + 1538 + 647$.

OR

Find the product by suitable arrangement: $125 \times 90 \times 60 \times 8$.

10. Find all the prime factors of 1729. Now state the relation if any, between two consecutive prime factors.

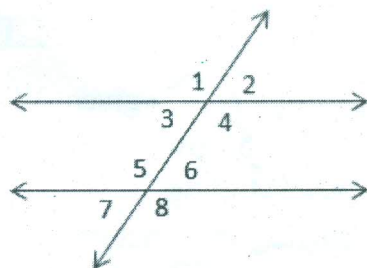
11. Find the sum on a number line: 7 more than -4

12. Express the ratio in the simplest form : 5kg 175g to 7kg 750g

13. An angle is equal to five times its complement. Determine its measure.

14. Write the following angles in the given figure

- a. Angle corresponding to $\angle 4$
- b. Angle alternate to $\angle 6$
- c. Angle alternate to $\angle 1$
- d. Angle corresponding to $\angle 5$



SECTION-C

(10 X 3 = 30)

15. Find the product of the greatest 3-digit number and greatest four-digit number using distributive property.

16. Estimate: $7,345 + 15,893 - 5,423$

OR

The school canteen charges Rs. 20 for lunch and Rs. 4 for milk for each day. How much money do you spend in 5 days on these things? (Use distributive property)

17. Reduce $\frac{2211}{5025}$ to the lowest terms by dividing the numerator and the denominator by their H.C.F

OR

In a shop, there are three clocks which chime at intervals of 15, 20 and 30 minutes respectively. They all chime together at 10 a.m. At what time will they all chime together again?

18. Find greatest 3-digit number exactly divisible by 8, 10, and 12.

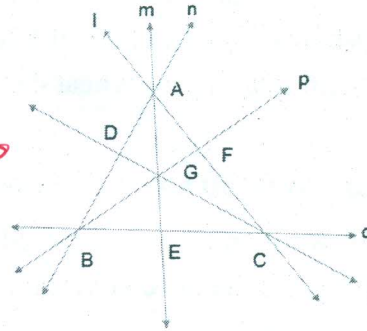
19. Simplify: $(-10)^5 + (-10)^3 + (-10)^2 + (-1)^{599}$

20. Subtract the sum of -250 and 138 from the sum of 136 and -272.
21. First, second and third terms of proportion are 20, 18 and 60 respectively. Find its fourth term?

OR

The boys and the girls in a school are in the ratio 9:5. If the total strength of the school is 448, find the number of girls.

22. In the given figure, name
- two sets of collinear points.
 - the point of intersection of the line **L** and **P**
 - the lines concurrent at point G.



23. If $PQ = 5.4$ cm and $RS = 2.7$ cm, construct a line segment whose length is the difference of the lengths of these line segments.
24. Write the measure of smaller angle formed by the hour and minute hands of a clock at 7 O' clock. Also, write the measure of the other angle and also state what types of angles these are.

SECTION-D

(10 X 4 = 40)

25. A man had ₹ 1,06,72,540 with him. He gave ₹ 48,36,980 to his wife, ₹ 29,17,780 to his son and the rest to his daughter. How much money was received by the daughter? What value is depicted here?
26. What least number must be added to 1056 to get a number exactly divisible by 23?
27. Find the greatest number that will divide 445, 572, 699, leaving remainders 4, 5, 6 respectively.
28. The traffic light at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they change simultaneously at 7 a.m., at what time will they change simultaneously again?

OR

Determine the two numbers nearest to 10000 which are exactly divisible by each of 2, 3, 4, 5, 6 and 7.

- 29.(a) The sum of two integers is -223. If one of the integers is 172, find the other.
 (b) Verify: $13^2 - 5^2 = 12^2$.
- 30.(a) Find the value of the following by using distributive property
 $1234 \times (-567) - 234 \times (-567)$.
 (b) Find the value: $1 + (-475) + (-475) + (-475) + (-475) + 1900$.
31. Cost of 5 kg of wheat is Rs.30.50.
 (a) What will be the cost of 8kg of wheat?
 (b) What quantity of wheat can be purchased in Rs.61?

OR

A car travels 90 km in $2\frac{1}{2}$ hours.

- (a) How much time is required to cover 30 km with the same speed?
 (b) Find the distance covered in 2 hours with the same speed.
32. Father's present age is 42 years and that of his son is 14 years. Find the ratio of
 (a) Present age of father to the present age of son.
 (b) Age of father to age of son, when son was 12 years old.
 (c) Age of father after 10 years to the age of son after 10 years.
 (d) Age of father to the age of son when father was 30 years old.
- 33.(a) With the help of figure, find the maximum and minimum number of points of intersection of four lines in a plane.
 (b) Draw the figure for following : Lines l, m and n are concurrent. Also lines n, p and q are concurrent. Is it always true that the lines l, m, and p will be concurrent?
 Is it also true for the lines l, m and q?
34. From the given figure , identify

- (a) Two Pairs of linear pair.
 (b) Two Pairs of alternate interior angles.
 (c) Two Pairs of alternate exterior angles.
 (d) Two Pairs of vertically opposite angles.

