

ST. ARNOLD'S CENTRAL SCHOOL, PUNE
TERM -1 EXAMINATION 2018 -19
SUBJECT : MATHEMATICS

STD : VIII

MM : 80

SECTION –A

Question numbers 1 to 7 carry 1 mark each.

1. Name the property used $(-3) \times 7 = 7 \times (-3)$ (1)
2. Find the length of each side of a Rhombus whose perimeter is 80 m. (1)
3. If a bag contains 2 Red and 5 Green balls, what is the probability of drawing a Red ball from the bag ? (1)
4. What will be the one's digit in the square of 26387 ? (1)
5. In a class of 40 students if there are 18 girls, then find the percentage of girls in the class. (1)
6. How many edges are there in a cube? (1)
7. If a shirt is marked at Rs 800 and sold for Rs 600, find the percentage of discount offered. (1)

SECTION – B

Question numbers 8 to 14 carry 2 marks each.

8. Mark $\frac{2}{3}$ and $-\frac{1}{3}$ on the number line. (2)
9. Find the measure of each interior angle of a regular pentagon. (2)
10. A cubical die is thrown. Find the probability of getting (2)
 - (i) An even number
 - (ii) A number less than 6
11. Find a Pythagorean triplet whose one member is 12. (2)
12. Find the cube root of 15625 by estimation. (2)
13. Find the square root of 17.64 (2)
14. How many cuboids of dimensions 5 cm, 3 cm and 2 cm must be combined to form a cube? (2)

SECTION – C

Question numbers 15 to 23 carry 3 marks each.

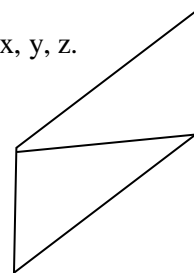
15. Find three rational numbers between $\frac{3}{7}$ and $\frac{2}{3}$ (3)
16. Solve : $\frac{x}{3} + \frac{1}{5} = \frac{x}{2} - \frac{1}{4}$ (3)
17. Verify Euler's formula for a cuboid. (3)
18. Find the greatest 4 digit square number. (3)
19. Is 297 a perfect cube ? If not, find the smallest natural number by which it should be divided so that the quotient is a perfect cube. (3)
20. A T.V. was bought for Rs 20000. After one year its value depreciated by 5%. Find the value of T.V after one year. (3)

21. A shopkeeper purchased 200 bulbs for Rs.10 each. However 5 bulbs were broken and had to be thrown away. The remaining were sold for Rs.12 each. Find the gain or loss % . (3)
22. A sum of Rs 22000 is borrowed by Reema for 2 years at an interest of 10% compounded annually. Find the compound Interest and amount to be paid at the end of 2 years. (3)
23. The number of students admitted in different faculties of a college are given below
- | Faculty | Commerce | Arts | Science | Total |
|--------------------|----------|------|---------|-------|
| Number of students | 300 | 300 | 1200 | 1800 |
- Represent the above information by a pie chart. (3)

SECTION – D

Question numbers 24 to 31 carry 4 marks each.

24. Present ages of Asha and Rekha are in the ratio 4 : 5. Eight years from now, the ratio of their ages will be 5 : 6 . Find their present ages. (4)
25. Find the least number that must be added to 1300 to make it a perfect square. Also find the square root of that perfect square number. (4)
26. Obtain the cube root of 21952 by prime factorization method. (4)
27. What amount is to be repaid on a loan of Rs 12000 for $1\frac{1}{2}$ years at 10% per annum compounded half yearly ? (4)
28. Meenu bought two fans for Rs 1200 each. She sold one at a loss of 5 % and another at a profit of 10 % . Find the selling price of each fan. (4)
29. In the given figure FIVE is a parallelogram. Find the values of w, x, y, z. (4)



30. Heights of 20 students in the class are given in the following table :

Height (cms)	Number of students
120 – 125	2
125 – 130	4
130 – 135	10
135 – 140	4

Draw a histogram to represent the above data. How many students have height more than or equal to 130 cms? (4)

31. A group of students were asked for their favourite subject. The results were listed as under :
 Art, Mathematics, Science, English, Mathematics, Art, English, Mathematics, English, Art, Science, Art, Science, Science, Mathematics, Art, English, Art, Science, Mathematics.
 Make a frequency distribution table using tally marks for the above data. Which is the most liked subject according to the above data? (4)

