

INTERNATIONAL INDIAN SCHOOL DAMMAM

SUMMATIVE ASSESSMENT-I (2015-2016)

Subject : Mathematics

Time: 3 hours

Class : 8

Max. Marks :90

SET-B

General Instructions:

- All questions are compulsory. However internal choice has been given for Section B, C and D.
- The question paper consists of 34 questions divided into 4 sections.
- Section A contains 8 questions of 1 mark each.
- Section B contains 6 questions of 2 marks each.
- Section C contains 10 questions of 3 marks each.
- Section D contains 10 questions of 4 marks each.

Section-A(1 x 8=8m)

- Multiply $\frac{6}{13}$ by the reciprocal of $-\frac{7}{16}$.
- Number of diagonals a regular hexagon has _____.
- Find the additive inverse of $-\frac{5}{6}$.
- Name the quadrilaterals that have four sides of equal length.
- A unique quadrilateral can be constructed only when _____ numbers of elements are given.
- Find the least number that should be multiplied with 9 to make it a perfect cube.
- How many natural numbers lie between 9^2 and 10^2 ?
- $x_1y_1 = x_2y_2$ is the formula for _____ proportion.

Section-B(2x6=12m)

- Find out if 729 is a perfect cube.
- Find the angle sum of convex polygon having 8 sides.
- Verify $-(-x)$ is the same as x for $x = \frac{13}{17}$.
- Represent $-\frac{2}{11}$, $-\frac{5}{11}$, $-\frac{7}{11}$, $\frac{2}{11}$ on a number line.

13. Find the square root of 729 by prime factorization.

Or

Find the square root of 256 by prime factorisation.

14. 6 pipes are required to fill a tank in 80min. How long will it take if only 5 pipes of the same type are used.

Section-C(3x10=30m)

15. Construct a square READ with RE=5 cm.

16. Find the smallest square number that is divisible by each of the numbers 4, 9, 10.

17. Find 5 rational numbers between $\frac{2}{3}$ and $\frac{4}{5}$.

Or

Find 5 rational numbers between $-\frac{3}{2}$ and $\frac{5}{3}$.

18. Construct a parallelogram MORE, where, OR=6cm, RE=4.5cm, EO=7.5cm.

19. There are 2401 students in a school. P.T teacher wants them to stand in rows and columns such that the number of rows equal to the number of column. Find the number of rows.

20. The measures of 2 adjacent angles of parallelogram are in the ratio 3:2. Find the measure of each of the angles of the parallelogram.

21. A mixture of paint is prepared by mixing 1 part of red pigment with 8 parts of base. How many parts of red pigment is required for 56 parts of base.

22. Parikshit makes a cuboid of plasticine of sides 5cm, 4cm and 5cm. How many such cuboids will be used to form a cube.

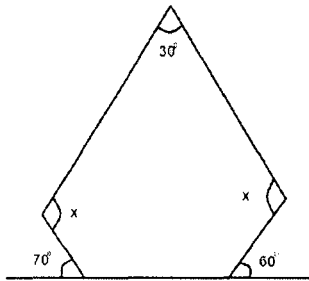
23. Find the smallest number by which 100 must be multiplied to obtain perfect cube. Also, find the cube root of the new number.

24. A car takes 2 hours to reach a destination by travelling at the speed of 60 km/hr. How long will it take when the car travels at the speed of 80 km/hr.

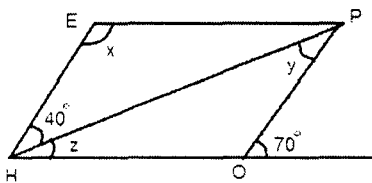
Section-D(4x10=40)

25. Find the smallest number by which 18225 to be multiplied to get a perfect cube. Also, find the cube root of the new number so obtained.

26. Find the angle measure of x in the following figure.



27. The below figure HOPE is a parallelogram. Find the angle measure x , y , and z . State the properties you use to find them.



28. Using suitable property, find

$$2/5 \times 3/7 - 1/14 - 3/7 \times 3/5$$

$$-2/3 \times 3/5 + 5/2 - 3/5 \times 1/6$$

29. Construct rhombus BEND where diagonals $BN = 5.6$ cm and $DE = 6.5$ cm. State the property.

30. Find the square root of :- (i) 7.29 (ii) 12.25

31. Find the smallest whole number by which 396 should be divided to get a perfect square. Also find square root of the new number so obtained.

32. Suppose 2 kg of sugar contains 9×10^6 crystals. How many sugar crystals are there in

(i). 5 kg of sugar

(ii). 1.2 kg of sugar

33. There are 100 students in a hotel. Food provision for them is for 20 days.

(a). How long will these provision last if 25 more students join the group.

(b). If 20 students leave the group.

34. Construct a quadrilateral PLAN where $PL = 4$ cm, $LA = 6.5$ cm, $\angle P = 90^\circ$, $\angle A = 110^\circ$, $\angle N = 85^\circ$. State the property.

*****The End*****