

INDIAN SCHOOL MUSCAT – MIDDLE SECTION – FIRST TERM EXAMINATION – (2017 – 18)

CLASS : 8

SUBJECT: MATHEMATICS

MAX. MARKS : 80

DATE : 10.09.2017

TIME : 2 ½ HRS

INSTRUCTIONS: ANSWER ALL THE QUESTIONS

(SECTION – A) – Q.NO (1 TO 4) – ('1' MARK EACH)

| S.NO | QUESTIONS |
|------|---------------------------------------------------------------------|
| 1 | How many digits are there in the square root of 1471369? |
| 2 | What is the sum of the exterior angles of any polygon? |
| 3 | Find the product of $\frac{-2}{-7}$ and its multiplicative inverse. |
| 4 | Find the product of $4a^2 b^3$, $(- 6 a^3 b^2)$, $3 a b$ |

(SECTION – B) – Q.NO (5 TO 10) – ('2' MARKS EACH)

| S.NO | QUESTIONS |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | Find 4 rational numbers in between $\frac{-4}{5}$ and $\frac{-3}{4}$ |
| 6 | Find the sum of all the interior angles of a polygon with 11 sides. |
| 7 | Construct the quadrilateral ABCD with AB= 5.2cm, BC= 6cm, AC= 6.5cm, CD= 4.8cm & AD= 5cm.(use ruler and compass) |
| 8 | Find the square root of 1296 by prime factorization method |
| 9 | Write in which proportions do the following belong to? a) The quantity of food and its cost b) If x and y are two quantities, then $xy = K$ (constant) |
| 10 | Find the least number by which 256 should be divided to make it a perfect cube. |

(SECTION – C) – Q.NO (11 TO 18) – ('3' MARKS EACH)

| S.NO | QUESTIONS |
|------|--------------------------------------------------------------------------------------------------|
| 11 | The 2 adjacent angles of a parallelogram are in the ratio 2 : 7. Find the measure of each angle. |

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|----|-----------------------------------------------------------------------------------------|
| 12 | Find the number of sides of a regular polygon if its each interior angle is 135° |
| 13 | Construct a square PQRS ,with PQ = 4.8cm. (use ruler and compass only) |
| 14 | Find the square root of 9409 by division method. |
| 15 | Find the least number by which 5324 be multiplied to make it a perfect cube? |
| 16 | A worker is paid Rs 2000 for 8 days. How much will he be paid for 20 days? |
| 17 | Simplify: $(2a - 3c)(4a - 5b + 8c)$ |
| 18 | Subtract $3m(5m-4n)$ from $-3m^2 - 2m(4n - 3m)$ |

(SECTION – D) – Q.NO (19 TO 28) – ('4' MARKS EACH)

| S.NO | QUESTIONS |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 19 | Simplify using suitable property: $\left[\frac{3}{5} \times \frac{8}{7}\right] - \left[\frac{7}{5} \times \frac{1}{2}\right] + \left[\frac{3}{5} \times \frac{6}{7}\right]$ |
| 20 | Construct a parallelogram ABCD in which BC = 6cm, AB = 4 cm and $\angle ABC = 60^\circ$ |
| 21 | Construct a Rhombus EFGH with diagonals of length 5.8 cm and 6.2cm |
| 22 | Find the least number which must be subtracted from 17545 to make it a perfect square. |
| 23 | Find the square root of 68.89 |
| 24 | Find the cube root of 5832 by prime factorization method |
| 25 | A contractor with a workforce of 294, undertook to complete a bridge in 9 days. Due to emergency he was asked to complete the work in 7 days. How many extra workers did he employ ? |
| 26 | A car covered 18 km in 30 minutes. Find the distance covered by the car in 2hours 15minutes with the same speed. |
| 27 | Simplify $5x(2y - 4) + y(3y + 5x) - 75$ then evaluate for $x = 1$ and $y = -1$ |
| 28 | Simplify : $(3p - 4q)(3p + 4q) - 7q(p - q)$ |