INDIAN SCHOOL MUSCAT
MIDDLE SECTION
ANNUAL EXAMINATION 2019–20
<u>SUBJECT – MATHEMATICS</u>
SET - B

Code:MXM11

CLASS 7

Time Allotted: 2 ½ hrs

08.03.2020

Max .Marks: 80

General Instructions.

1. The question paper comprises of four sections **A, B, C** and **D**. You have to **attempt all** the sections.
2. All the questions are **compulsory.**
3. All the answers should be written in the **answer sheet** provided.

Q.NO1

<u>SECTION 'A'–('1' MARK EACH) – TOTAL – 20 MARKS</u>

Marks

MULTIPLE CHOICE QUESTIONS–('1' MARKS EACH) – TOTAL – 10 MARKS

(a) If 'n' is divided by 6 equals 4 then 'n' = _____   1
a) 14   b) 24   c) 10   d) 2

(b) When a dice is tossed, the probability of an prime number showing up is :_____   1
a) $\frac{1}{6}$ b) $\frac{1}{3}$ c) $\frac{1}{2}$ d) $\frac{1}{4}$

(c) The altitude and median be same for a which triangle _____   1
a) Obtuse   b) Isosceles   c) Acute   d) Right

(d) If the perimeter of a square field is 80 meters, then its area is_____ m^2 1
a) 400   b) 160   c) 6400   d) 1600

(e) The standard form of $\frac{-7}{-35}$ = -----------   1

a) $-\frac{1}{5}$ b) 5   c) $\frac{1}{5}$ d) – 5

(f) If PQ=CB, PR =CA, /P= /C then ΔQRP ≅ ΔCBA. State the criterion of congruence.   1
a) ASA   b) RHS   c) SAS   d) SAS

(g) 20% of 155 is_____   1
a)155   b)31   c) 55   d) 20

(h) If an exterior angle of a triangle is 108° and one of the interior opposite angle is 48°, the other interior opposite angle is _____   1
a) 60°   b) 70°   c) 80°   d) 100°

(i) If PQ=LM, QR = MN and ΔPQR ≅ ΔLMN, then LN = _____   1

a) PR   b) MN   c) QR   d) LM

(j) The product of $\frac{9}{16}$ and $\frac{8}{27}$ is _____   1

a) $\frac{1}{3}$ b) 3   c) 6   d) $\frac{1}{6}$

('1' MARK QUESTION) – TOTAL – 10 MARKS

(k) A machine is purchased for Rs 1700 and sold for Rs 1870. Find its profit percentage?   1

(l)	What is the side included between the angles M and N of Δ MNP?	1
(m)	Solve : $\dfrac{5}{9}x = 5$	1
(n)	Find the area of a isosceles right triangle of equal sides 40 cm each.	1
(o)	Find the mode of the given data: 1, 6, 4, 7, 6, 9, 2, 3, 6, 5, 6	1
(p)	Find the quotient : $183.6 \div 9$	1
(q)	Find the simple interest on Rs 3500 for 2 years at the rate of 15 %.	1
(r)	Multiply $(\dfrac{-8}{9})$ x $\dfrac{3}{4}$	1
(s)	The angles of a triangle are in the ratio of 2:3:4. Find the measure of the smallest angle.	1
(t)	Find the radius of the circle whose area is 154 cm^2	1

Q.NO	SECTION 'B'–('2' MARKS EACH) – TOTAL – 12 MARKS	Marks
(2)	The sum of two rational numbers is – 4.If one of them is $\dfrac{-9}{7}$ find the other.	2
(3)	The area of the parallelogram is 620 cm^2 and one of its side is 20 cm. Find the corresponding altitude.	2
(4)	Whether 5.4 cm, 2.8 cm and 3.7 cm be the length of the sides of a triangle?	2
(5)	After 15 years, sona will be four times as old as she is now. Determine her present age.	2
(6)	There are 2500 students in a school out of them 1200 are girls and rest are boys. Find the ratio of numbers boys to number of girls.	2
(7)	In the diagram given below, prove that ΔJAK ≅ ΔNAK	2
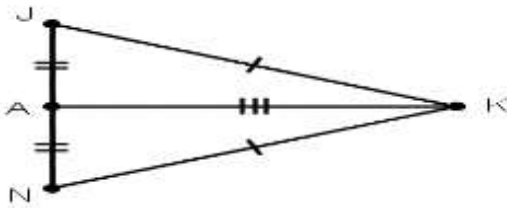
Q.NO	SECTION 'C'–('3' MARKS EACH) – TOTAL – 24 MARKS	Marks
(8)	One of the acute angles of a right triangle is 48°.Find the other acute angle.	3
(9)	A wheel has a radius of 14cm. How many revolutions will it make to travel 704 m?	3
(10)	A number is multiplied by 3 and 7 is taken away from the product to get the answer 17. What is the number?	3
(11)	Draw a Δ PQR, in which QR= 5.8 cm ,∠Q= 70° and ∠R = 60°	3

(12) Geeta bought $5\frac{1}{2}$ kg potatoes, $1\frac{1}{4}$ kg tomatoes and $3\frac{1}{2}$ kg onions .Find the total weight of vegetables purchased by Geeta. **3**

(13) A basket contains 350 eggs. If 12% of the eggs are rotten, find the number of eggs, good enough to be sold. **3**

(14) The runs scored by 10 players in a cricket match are: 52, 78, 80, 8, 106, 0, 49, 23, 36 and 18. Find the mean and the median of the following data. **3**

(15) If Δ ABC ≅ Δ PQR under the correspondence ABC ⟷ PQR, write all the corresponding congruent parts of triangles **3**

Q.NO	**SECTION 'D'–('4' MARKS EACH) – TOTAL – 24 MARKS**	Marks

(16) A rectangular park is 45m long and 30m wide. A path of 2.5m is constructed outside the park. Find the area of the path. **4**

(17) Two towers of height 28m and 36m are built at a distance of 15m. Find the distance between the tops of the towers. **4**

(18) Write the rational numbers in ascending order. $\dfrac{-4}{9}$, $\dfrac{2}{-3}$, $\dfrac{-5}{18}$, $\dfrac{7}{-12}$ **4**

(19) Rohan the toy shop owner sold two tricycles at the same price. Each one was sold for Rs 2200. On one he made a profit of 10%. And on the other he lost 12%. What was the cost of each of the cycle? **4**

(20) Draw a line segment PQ of 5.5cm.Construct a line XY parallel PQ at a distance of 7cm **4**

(21) The income and expenditure of a family for 4 years are given below:
Represent the data with help of a double bar graph. **4**

Year	2014-2015	2015-2016	2016-2017	2017-2018
Income (in thousands)	100	130	145	120
Expenditure (in thousands)	80	125	130	90

End of the question paper.