NAME		ROLL NO.	

INDIAN SCHOOL MUSCAT
MIDDLE SECTION
ANNUAL EXAMINATION 2019–20
SUBJECT – MATHEMATICS
SET - A

CLASS 7
08.03.2020

Code:MXM11
Time Allotted: 2 ½ hrs
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 **SECTION 'A'–('1' MARK EACH) – TOTAL – 20 MARKS** **Marks**

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

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

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

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

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

(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) 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

(h) If an exterior angle of a triangle is 108° and one of the interior opposite angle is 38°, 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 : $\frac{3}{5}x = 6$ 1

(n) Find the area of a isosceles right triangle of equal sides 40 cm each. 1

(o) Find the quotient : 183.6 ÷ 6 1

(p) Find the mode of the given data: 1, 6, 4, 7, 6, 9, 2, 3, 6, 5, 6 1

(q) Find the simple interest on Rs 3500 for 2 years at the rate of 15 %. 1

(r) Multiply ($\frac{-8}{9}$) x $\frac{3}{4}$ 1

(s) Find the radius of the circle whose area is 154 cm^2 1

(t) The angles of a triangle are in the ratio of 2:3:4.Find the measure of the smallest angle. 1

Q.NO **Marks**

SECTION 'B'–('2' MARKS EACH) – TOTAL – 12 MARKS

(2) The sum of two rational numbers is – 4.If one of them is $\frac{-9}{7}$ find the other. 2

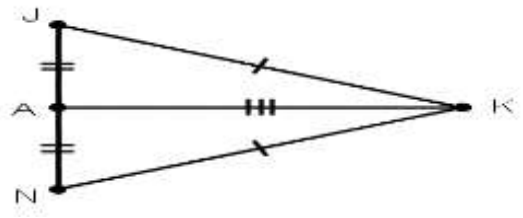
(3) The area of the parallelogram is 620 cm^2 and one of its side is 20 cm. Find the corresponding altitude. 2

(4) After 15 years, sona will be four times as old as she is now. Determine her present age. 2

(5) Whether 3.4 cm, 2.1 cm and 5.3 cm be the length of the sides of a triangle? 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 **Marks**

SECTION 'C'–('3' MARKS EACH) – TOTAL – 24 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) Draw a Δ PQR, in which QR= 5.8 cm ,∠Q= 40° and ∠R = 60° 3

(11) A number is multiplied by 3 and 7 is taken away from the product to get the answer 17. What is the number? 3

(12) Geeta bought $3\frac{1}{2}$ kg potatoes, $2\frac{1}{4}$ kg tomatoes and $1\frac{1}{2}$ 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: 54, 73, 85, 6, 108, 0, 47, 26, 33 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) Two towers of height 28m and 36m are built at a distance of 15m. Find the distance between the tops of the towers. 4

(17) 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

(18) Write the rational numbers in ascending order. $\frac{-4}{9}$, $\frac{2}{-3}$, $\frac{5}{-12}$, $\frac{-7}{18}$ 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 5cm.Construct a line XY parallel PQ at a distance of 6.5cm 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.