

**INDIAN SCHOOL MUSCAT**  
**HALF YEARLY EXAMINATION**

**SET B**

**SEPTEMBER 2019**

**CLASS X**

**Marking Scheme – MATHEMATICS**

Q.NO.	Answers	Marks (with split up)
1.	d) $\cos A$	1
2.	c) 4	1
3.	b) 4cm	1
4.	c) $a=3$ , $b=1$	1
5.	d) 4 m	1
6.	a )5 units	1
7.	b) Median	1
8.	d) $70^\circ$	1
9.	c) $25/4$	1
10.	b) $-3$	1
11.	Same as Q No. 16 Set A	1
12.	Same as Q No. 12 Set A	1
13.	Same as Q No. 20 Set A	1
14.	Same as Q No. 14 Set A	1
15.	Same as Q No. 15 Set A	1
16.	Same as Q No. 11 Set A	1
17.	Same as Q No. 17 Set A	1
18.	Same as Q No. 18 Set A	1
19.	Same as Q No. 19 Set A	1
20.	Same as Q No. 13 Set A	1
21.	Same as Q No. 24 Set A	1+1
22.	Same as Q No. 21 Set A	$\frac{1}{2}+1/2+1/2+1/2$
23.	Same as Q No. 22 Set A	$\frac{1}{2}+1/2+1/2+1/2$
24.	$X= 3$ , $x =-1/2$	$\frac{1}{2}+1/2+1/2+1/2$
25.	Same as Q No. 25 Set A	$\frac{1}{2}+1/2+1/2+1/2$
26.	$A=299$ $d=-4$ ; $a_{10}= 263$	$\frac{1}{2}+1/2+1/2+1/2$
27.	Same as Q No.34 Set A	2+1
28.	Same as Q No. 28 Set A	2+1
29.	Same as Q No. 29Set A	2+1

30.	$\begin{aligned} \text{LHS} &= \frac{1+\sec A}{\sec A} \\ &= \frac{1+\frac{1}{\cos A}}{\frac{1}{\cos A}} \quad \left[ \because \sec A = \frac{1}{\cos A} \right] \\ &= \frac{\cos A + 1}{\cos A} \\ &= \frac{1}{\cos A} \\ &= \frac{1 + \cos A}{1} \\ &= \frac{1 + \cos A}{1} \times \frac{1 - \cos A}{1 - \cos A} \\ &= \frac{1 - \cos^2 A}{1 - \cos A} \\ &= \frac{\sin^2 A}{1 - \cos A} \quad \left[ \because 1 - \cos^2 A = \sin^2 A \right] \\ &= \text{RHS} \end{aligned}$	1x3=3
31.	Same as Q No. 31 Set A	1+1+1
32.	Ratio= 5:1, y=-13/3	1+1+1
33.	Same as Q No. 33 Set A	1+1+1
34.	Same as Q No. 27 Set A	1+1+1
35.	Same as Q No. 40 Set A	1+1+1+1
36.	Same as Q No. 36 Set A	1+1+1+1
37.	Same as Q No. 37 Set A	1+1+1+1
38.	Same as Q No. 38 Set A	1+1+1+1
39.	$N^2 + 2n - 168 = 0$ Even no's are 12 and 14 or -12 and -14	1+1+1+1
40.	Same as Q No. 35 Set A	1+1+1+1