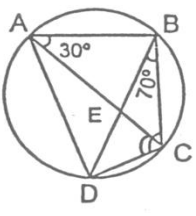


CHOITHRAM SCHOOL MANIKBAGH INDORE

CLASS: IX Session: 2016-17

Subject: Mathematics
Allotment Date: 19/01/2017

Assignment No: 4
Submission Date: 23/01/2017

S.No	QUESTION	MARKS	LEVEL												
	OBJECTIVE TYPE														
1	Find the area of a rhombus, the lengths of whose diagonals are 16 cm and 24 cm.	1	Knowledge												
2	If the mean of 6, 4, 7, p and 10 is 8 find p.	1	Understanding												
3	Find the mode of the array of an individual series of scores: 7, 7, 10, 11, 12, 12, 12, 13, 13, 17.	1	H.O.T.S.												
	SHORT ANSWER TYPE I														
4	Show that a median of a triangle divides it into two triangles of equal area.	2	Knowledge												
5	Prove that the angle in the semicircle is a right angle.	2	Understanding												
6	Find the area of a right triangle, the radius of whose circumcircle is 3 cm and the length of the altitude drawn from the opposite vertex to the hypotenuse is 2 cm.	2	Logic												
7	The mid values of a distribution are 64, 74, 84 and 94. Find the class interval and class limits.	2	H.O.T.S.												
	SHORT ANSWER TYPE II														
8	The diagonals of a parallelogram ABCD intersect in O. A line through O meets AB in X and the opposite side CD in Y. Show that ar (quadrilateral AX YD) = $\frac{1}{2}$ ar (parallelogram ABCD).	3	Understanding												
9	ABCD is a cyclic quadrilateral whose diagonals intersect at a point E. If $\angle DBC = 70^\circ$, $\angle BAC$ is 30° , find $\angle BCD$. Further, if $AB = BC$, find $\angle ECD$.	3	Multi-Conceptual												
															
10	The number of gifts donated by different families of a housing group to an orphanage on the auspicious occasion of Diwali are as follows: 17, 2, 7, 27, 15, 5, 14, 8, 10, 24, 48, 10, 8, 7, 18, 28 (a) Find the median of number of gifts donated by a family. (b) What values are depicted by the families through this gesture?	3	Value Based												
11	Prove that the angle bisectors of the angles formed by producing opposite sides of a cyclic quadrilateral (Provided they are not parallel) intersect a right angle.	5	H.O.T.S.												
12	The weekly wages of workers of a factory are given in the following table. Draw histogram for it.	5	Logic												
	<table border="1"> <thead> <tr> <th>Weekly wages</th> <th>1000 - 2000</th> <th>2000 - 2500</th> <th>2500 - 3000</th> <th>3000 - 5000</th> <th>5000 - 5500</th> </tr> </thead> <tbody> <tr> <td>No. of workers</td> <td>26</td> <td>30</td> <td>20</td> <td>16</td> <td>1</td> </tr> </tbody> </table>	Weekly wages	1000 - 2000	2000 - 2500	2500 - 3000	3000 - 5000	5000 - 5500	No. of workers	26	30	20	16	1		
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