



## INDIAN SCHOOL AL WADI AL KABIR

<b>Class: XII</b>	<b>Department: SCIENCE</b>	<b>Date: 06/06/2024</b>
<b>MARKS: 30</b>	<b>UNIT TEST 1</b> <b><u>ENGINEERING GRAPHICS (046)</u></b>  <b><u>MARKING SCHEME</u></b>	<b>DURATION :1 HOUR</b>

### General Instructions:

- (i) Attempt all the questions.
- (ii) Use both sides of the drawing sheet, if necessary.
- (iii) All dimensions are in millimeters.
- (iv) Missing and mismatching dimensions, if any, may be suitably assumed.
- (v) Follow the SP: 46 – 2003 revised codes. (with first angle method of projection)
- (vi) In no view of question 12, are hidden edges or lines required.

**10 x 1 = 10**

### **SECTION – A**

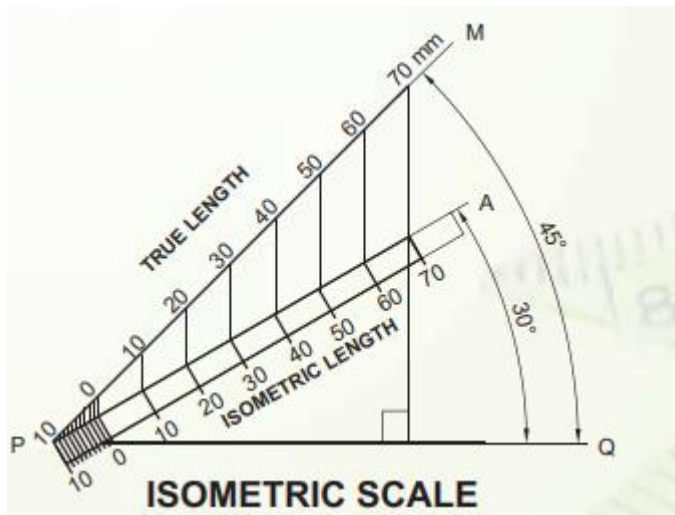
<b>Q.NO</b>	<b>ANSWERS</b>
<b>1</b>	b) axonometric
<b>2</b>	a) screw pair
<b>3</b>	b) metric thread

<b>4</b>	a) iii) only
<b>5</b>	d) iii) only
<b>6</b>	b) C, A, D, E, B
<b>7</b>	c) 1-iv, 2-iii, 3-ii, 4-i
<b>8</b>	b) Temporary
<b>9</b>	b) Pitch
<b>10</b>	a) External thread

### **SECTION B**

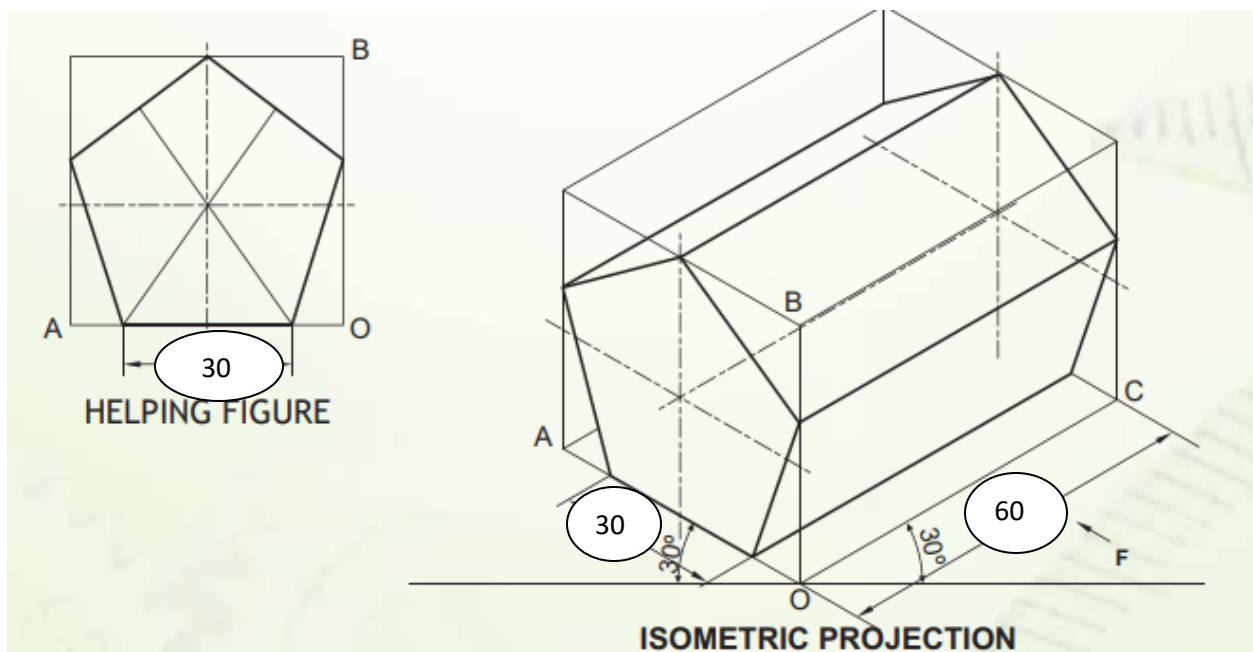
**1 x 4 = 4**

**11.** Construct an isometric scale of 80 mm.



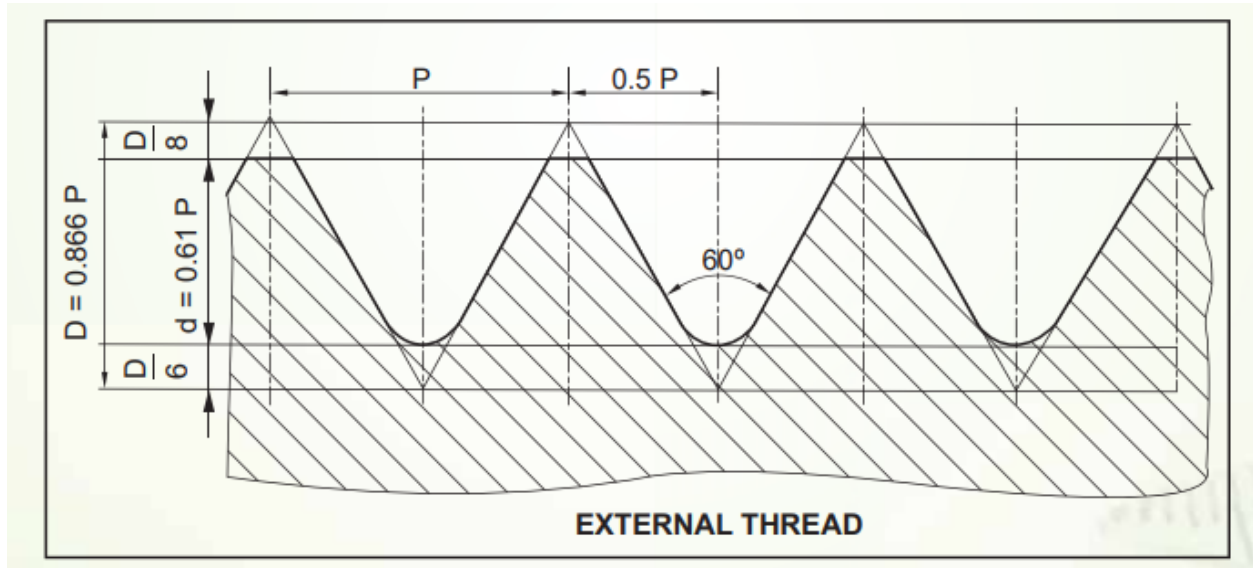
$$1 \times 10 = 10$$

12. A Pentagonal prism of base side of 30 mm and axis length of 60 mm is resting on its face with its axis parallel to both H.P and V.P. Draw its isometric projection.



$$1 \times 6 = 6$$

**13.** Draw to scale 1:1, the standard profile of Metric thread external, taking pitch = 50 mm. Give standard dimensions.



<b>P</b>	<b><math>D = 0.86P</math></b>	<b><math>d = 0.61P</math></b>	<b><math>D/8</math></b>	<b><math>D/6</math></b>
50	43	30.5	5.3	7.1

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