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No.

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Serial No. of  
Q. C. A. B.

ಒಟ್ಟು ಪ್ರಶ್ನೆಗಳ ಸಂಖ್ಯೆ : 5 ]  
Total No. of Questions : 5 ]

[ ಒಟ್ಟು ಮುದ್ರಿತ ಪುಟಗಳ ಸಂಖ್ಯೆ : 12  
[ Total No. of Printed Pages : 12

ಸಂಕೇತ ಸಂಖ್ಯೆ : **72**

ವಿಷಯ : ಇಂಜಿನಿಯರಿಂಗ್ ಡ್ರಾಯಿಂಗ್

Code No. : **72**

Subject : **ENGINEERING DRAWING**

ದಿನಾಂಕ : 03. 04. 2012]

[ Date : 03. 04. 2012

ಸಮಯ : ಮಧ್ಯಾಹ್ನ-2-30 ರಿಂದ 5-45 ರವರೆಗೆ ]

[ Time : 2-30 P.M. to 5-45 P.M.

ಪರಮಾವಧಿ ಅಂಕಗಳು : 50 ]

[ Max. Marks : 50

**FOR OFFICE USE ONLY**

Q. No.	Marks	Q. No.	Marks	Q. No.	Marks	Q. No.	Marks	Q. No.	Marks
1.		×		×		×		×	
2.		×		×		×		×	
3.		×		×		×		×	
4.		×		×		×		×	
5.		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
×		×		×		×		×	
<b>Total Marks</b>									
<b>Total Marks in words</b>							<b>Grand Total</b>		
1. ✓									
2. ✓						✓		✓	
Signature of Evaluators			Registration No.			Signature of the Deputy Chief		Signature of the Room Invigilator	

[ Turn over

*General Instructions :*

- i) The Question-cum-Answer Booklet consists of objective and subjective types of questions having 5 questions.
- ii) Space has been provided against each objective type question. You have to choose the correct choice and write the complete answer in the space provided.
- iii) For subjective type questions enough space for each question has been provided. You have to answer the questions in the space.
- iv) Follow the instructions given against both the objective and subjective types of questions.
- v) Candidate should not write the answer with pencil. Answers written in pencil will not be evaluated. ( Except Graphs, Diagrams & Maps )
- vi) In case of Multiple Choice, Fill in the blanks and Matching questions, scratching / rewriting / marking is not permitted, thereby rendering to disqualification for evaluation.
- vii) For reading the questions 15 minutes of extra time has been provided.

*Instructions :*

- i) Answer *all* the questions.
- ii) Retain the constructional details.
- iii) All dimensions are in mm.
- iv) Use first angle projection only.
- v) Missing dimensions may be assumed.
- vi) All drawings should be drawn in drawing sheet only.

1. a) Fill in the blanks with the correct figure/word(s) by selecting from the choices given in the brackets : 5 × 1 = 5

- i) The shorter axis of an ellipse is called ..... axis.

( *minor, major, irregular* )

Ans : \_\_\_\_\_

- ii) Interior or hidden edges and surfaces are shown by ..... lines.

( *thick, thin, dotted* )

Ans : \_\_\_\_\_

iii) Diagonal scale is constructed to measure ..... of dimensions.

( one unit, three units, two units )

Ans : \_\_\_\_\_  
\_\_\_\_\_

iv) ..... is the outermost part of a thread.

( Crest , Root, Flank )

Ans : \_\_\_\_\_  
\_\_\_\_\_

v) When a cone is cut by a plane parallel to one of the end generators of the cone the conic section will be ..... .

( hyperbola, parabola, circle )

Ans : \_\_\_\_\_  
\_\_\_\_\_

b) Match the following :

5 × 1 = 5

**Group A**

**Group B**

- |                         |                                   |
|-------------------------|-----------------------------------|
| i) Temporary fastening  | a) gear tooth profile             |
| ii) Permanent fastening | b) thick lines                    |
| iii) Involute           | c) cotter joints                  |
| iv) Square thread       | d) thin lines                     |
| v) Boundary lines       | e) riveted joints                 |
|                         | f) general transmission of power. |

Ans :  
i) \_\_\_\_\_  
ii) \_\_\_\_\_  
iii) \_\_\_\_\_  
iv) \_\_\_\_\_  
v) \_\_\_\_\_

[ Turn over

2. a) Print the given word in single stroke vertical capital letters of height 18 mm with ratio 6 : 5. 5

'HYPOCYCLOID'

- b) The R.F. of a scale is  $1/50$ . Construct a scale to measure metre and decimetre.  
Mark a distance of 4·6 m. 5

3. a) Plot an ellipse having major axis 130 mm and the focal points 100 mm apart (Intersecting arc method ). 5

- b) Inscribe six equal circles, each touching one side and two other circles in a regular hexagon of 50 mm side. 5

4. Draw three views of a hexagonal nut for a 24 mm diameter bolt according to approximately standard dimensions. 10

OR

The pictorial view of an object is shown in figure No. 1. Draw the following orthographic views and mark the dimensions : 10

- (i) Front view — Looking in the direction of arrow 'X'  
 (ii) Top view — Looking in the direction of arrow 'Y'  
 (iii) Side view — Looking in the direction of arrow 'Z'.

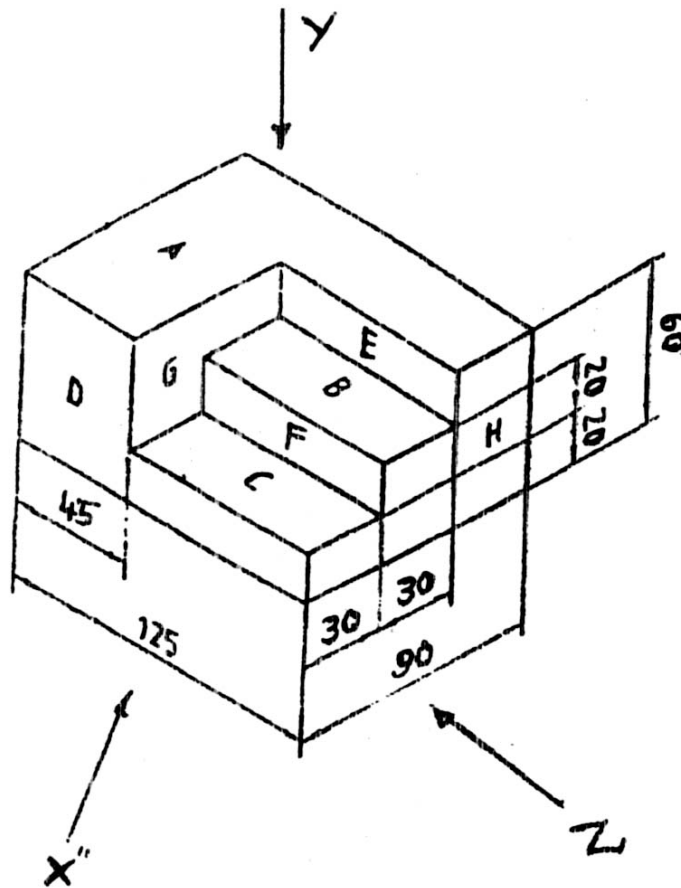


Figure No. 1

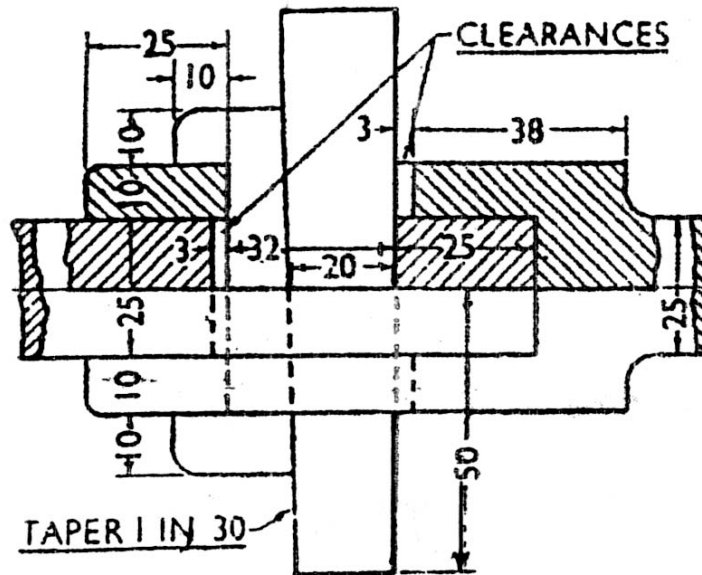




5. Figure No. 2 shows the front view of a strap joint with gib and cotter. Draw the same in full size ( 1 : 1 size)

10

Sectional elevation top half in section



**STRAP JOINT WITH GIB AND COTTER**

**Figure No. 2**



