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Serial No. of  
G. 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 : 02. 04. 2011]

[ Date : 02. 04. 2011

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>      |       |        |                  |        |       |                               |             |                                   |       |
| Total Marks in words    |       |        |                  |        |       |                               | Grand Total |                                   |       |
| 1. ✓                    |       |        |                  |        |       |                               | ✓           |                                   |       |
| 2. ✓                    |       |        |                  |        |       |                               |             |                                   |       |
| Signature of Evaluators |       |        | Registration No. |        |       | Signature of the Deputy Chief |             | Signature of the Room Invigilator |       |

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*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 have 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 :  $5 \times 1 = 5$

- i) In first angle projection method the top view is always below the ..... . ( *profile view, side view, front view* )

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

- ii) The section lines are continuous thin lines which are drawn at an angle of ..... degrees to the main outline of the section.

(  $60^\circ$  ,  $45^\circ$  ,  $90^\circ$  )

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

iii) In automobile and aircraft work ..... threads are generally used.

( *B.A, B.S.F, B.S.P* )

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

iv) Head lamps of motor vehicles are in the shape of a .....

( *ellipse, parabola, hyperbola* )

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

v) Eccentricity of parabola is ..... one.

( *less than, more than, equal to* )

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

b) Match the following :

5 × 1 = 5

***Group A***

***Group B***

- |                          |                                     |
|--------------------------|-------------------------------------|
| i) Permanent fastenings  | a) right hand and left hand threads |
| ii) Temporary fastenings | b) acme thread                      |
| iii) Turn buckle         | c) bolt and nuts                    |
| iv) Crest                | d) innermost part of a thread       |
| v) Root                  | e) riveted joints                   |
|                          | f) outermost part of a thread.      |

*Ans :*

- i) \_\_\_\_\_
- ii) \_\_\_\_\_
- iii) \_\_\_\_\_
- iv) \_\_\_\_\_
- v) \_\_\_\_\_

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

FULL MOON

- b) Copy the sketch as shown in figure No. 1 to 2 : 1 scale (Enlarged scale) and mark the dimensions in aligned system of dimensioning. 5

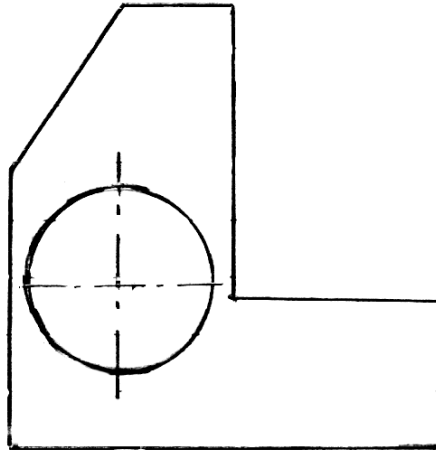


Figure No. 1

3. a) Inscribe an ellipse in a rectangle of 130 mm  $\times$  80 mm.

- b) Sketch neatly the symbols used for indicating first angle projection method and third angle projection method in a drawing. 4

4. Draw a rectangular hyperbola given a point 'P' on it at distances of 20 mm, 15 mm from the two asymptotes.

OR

The pictorial view of an object is shown in figure No. 2. 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'.

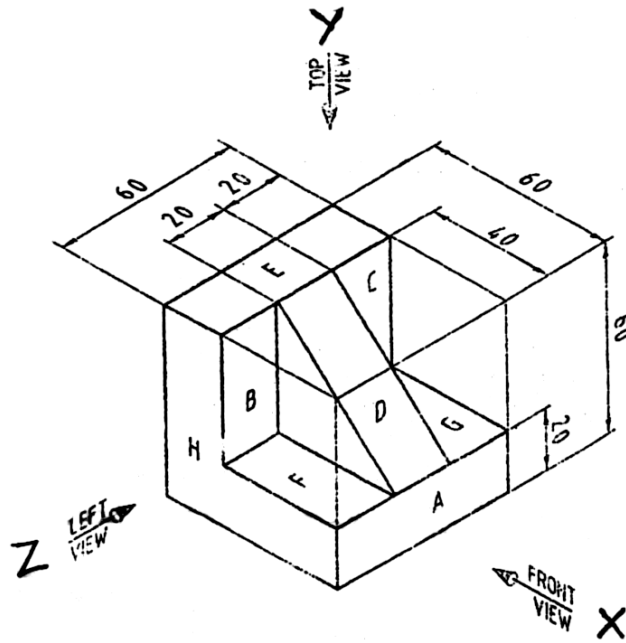
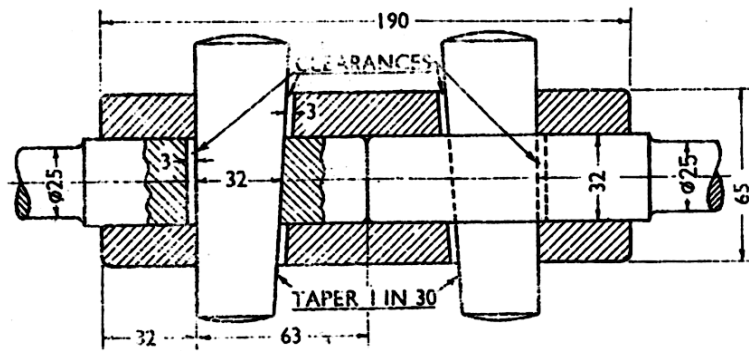


Figure No. 2





5. Figure No. 3 shows the sectional evaluation of a cotter joint with sleeve. Draw the same in half full size (1 : 2 size) : 10



COTTER JOINT WITH SLEEVE

Figure No. 3



