

16096(D) 15 DEC 2016

B. Tech 3rd Semester Examination

Machine Drawing (CBS)

ME-304

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt all five questions. Question 1 to 4 are of 10 marks each and Question 5 is of 20 marks.

1. Define the following terms:

- (i) interference fit (ii) international tolerance grade (iii) Allowance & clearance (10)

OR

What are the BIS specified methods for indicating tolerance? (10)

2. Draw the front view and side view of a hexagonal headed bolt of 24 mm diameter and 96 mm Long with a square nut. (10)

OR

Draw the profile of tooth used in a spur gear. (10)

3. Draw the sectional front view and top view of a single riveted butt joint, with single cover plate. (10)

OR

Draw the neat sketches showing various welded symbols. (10)

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4. Fig. on the next page shows the details of a screw jack. Assemble the parts and draw the following views (i) Front view right half in section (ii) Top view out side. (10)

OR

From the part details given in the Fig. draw the views of assembly drawing of a tool post (i) Front view at section XX (ii) Top view. (10)

5. Answer the following in brief: (Compulsory)

- (i) What do you mean by a sectional view?
- (ii) What are aligned system & unilateral system of dimensioning?
- (iii) What is a revolved section? Show by sketch.
- (iv) What are the methods of projections used in drawing views?
- (v) Define a reduced scale. When it is used?
- (vi) Draw any two types of locking devices.
- (vii) What is a left hand and right hand thread?
- (viii) Show by sketch the pitch on a metric thread.
- (ix) What is the application of square threads?
- (x) Draw some types of keys used on shaft. (2×10=20)

