

01545

**B.Tech. MECHANICAL ENGINEERING
(BTMEVI)**

Term-End Examination

June, 2012

BIME-003 : MACHINE DRAWING

Time : 3 Hours

Maximum Marks : 70

Note : All questions carry equal marks.

Attempt any five questions.

1. (a) Draw two views of a Woodruff Key . 4
(b) Draw two views of a cotter joint to join two shafts of diameter 25 mm. 10

2. Draw two views of a solid flanged coupling with shaft diameter as 50 mm. 14

3. (a) Draw 4
(i) Cup headed rivet
(ii) Pan headed rivet
Take Shank Diameter $D = 20$ mm.
(b) Draw a double riveted, single strap, Zig - Zag butt joint to join two plates of 10 mm dia. thickness. 10

4. Draw the following threads for pitch $P = 15$ mm. 14
- (a) Whitworth Thread
 - (b) British Standard Thread
 - (c) Square Thread
 - (d) Acme Thread
5. Write short notes on : 14
- (a) Graphic Output Devices
 - (b) Auto Cad
 - (c) Drafting Aids
 - (d) Method of Constructing a Polygon.
6. Draw the three views of the assembly of 14
Hexagonal bolt with Hexagonal nut and washer.
Take the shank dia as 20 mm for bolt.
7. Draw *any three* of the following : 14
- (a) Lifting Eye Bolt
 - (b) Stud - Bolt
 - (c) Slotted Nut
 - (d) Castle Nut
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