

ENGINEERING DRAWING-II

2nd Exam/Mechanical/Prod/Chem/PT/TT/T&DM/Aero/2454/2551/5426/Nov'17

Duration: 3Hrs.

M.Marks:100

SECTION-A

Q1. a) Fill in the blanks.

15x1=15

- i. The standard taper for a key is _____.
- ii. Washers are generally specified by _____.
- iii. The included angle in Acme Thread is _____.
- iv. The size across flats in hexagonal nut is _____.
- v. A joint mostly used for square rod ends is called a _____ joint.
- vi. In a Gib and cotter joint, the thickness of Gib is _____ to thickness of cotter.
- vii. An Old-ham coupling connects two shafts, when they are _____.
- viii. _____ is equal to pitch, in double start thread.
- ix. The cover plate in a butt joint is called _____.
- x. For transmitting power in one direction _____ thread is used

b) State True or False.

- xi. The joints which are prepared by riveting processes are known as Temporary Fastening. **(T/F)**
- xii. Foundation bolts are made of cast iron. **(T/F)**
- xiii. Set screws are used only for transmitting very light load. **(T/F)**
- xiv. The width of a rectangular key is less than its thickness. **(T/F)**
- xv. To facilitate Caulking & Fullering operation, the edges of the plates are beveled. **(T/F)**

SECTION-B

Q2. Attempt any three questions.

15x3=45

- a. Draw front view and side view of assembly of Mortice and Tenon joint of 30mmx45mm. Details as shown in **FIG-1**.
- b. Give proportionate sketch of Pan Head and Flat Counter-Sunk diameter 20mm.
- c. Make freehand pictorial sketch of a Woodruff Key, Feather Key and Gib Head Key.
- d. Draw Acme and B.S.W types of thread forms.
- e. Draw free hand sketches of Rag Bolt and Swan Nut. Give one view each.

SECTION-C

Q3. Attempt any two questions.

20x2=40

- i. Draw the top view and sectional front view of a single riveted double cover (or strap) butt joint for 16mm thick plates. Show the rivets in chain type.
- ii. Draw front view, side view and top view of hexagonal headed bolt, nut, and washer assembly, Take diameter of bolt = 20 mm and length 80 mm
- iii. Detailed drawing of a protected type flange Coupling are shown in **FIG-2**.
 Draw: -
 (a) Elevation of assembly upper half in section
 (b) side view to a suitable scale.

S.D. Roll No.....

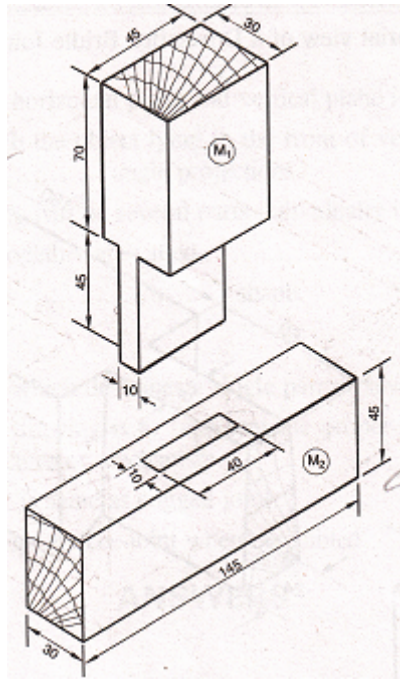


FIG 1

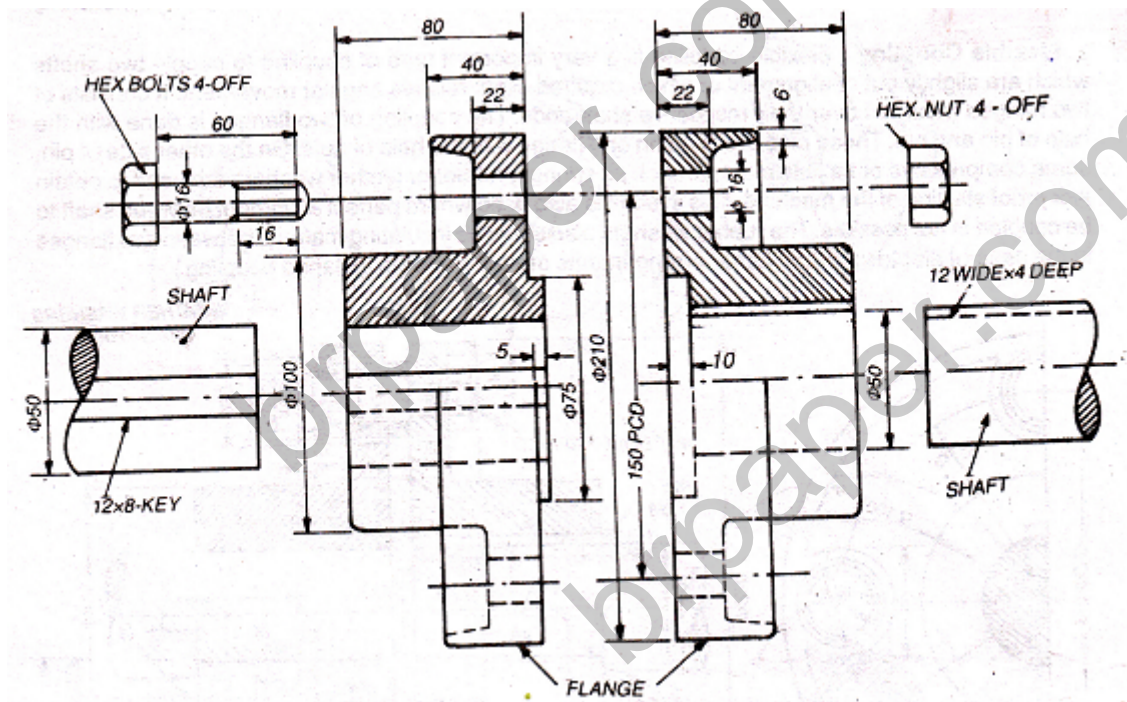


FIG 2