

Roll No. ....

## 2nd Sem. / Agri., Automobile, Mechanical, Mechanical (Tool & Die Design)

Time : 3 Hrs.

M.M. : 60

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- ## SECTION-B

**Note:** Short answer type questions. Attempt any three questions out of four questions. (3x6=18)

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**Note:** Long answer type questions. Attempt any three questions out of four questions. (3x12=36)

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- FIG 1
- KNUCKLE JOINT
- EYE END ROD
- FORK END ROD
- KNUCKLE PIN
- COLLAR
- TAPER PIN
- Dimensions:
- Eye End Rod:  $\phi 20$ , 35, 26
  - Fork End Rod:  $\phi 20$ , 26,  $\phi 30$ , R15
  - Knuckle Pin:  $\phi 30$ , 91, 26
  - Collar:  $\phi 30$ , 5, 4
  - Taper Pin:  $\phi 35$ , 35
  - Side View (Left): 70, 35, R20,  $\phi 20$ , 26,  $\phi 40$
  - Side View (Right): 60, 35,  $\phi 40$ , 26, 35,  $\phi 20$

**NOTE: FIGURE NOT TO SCALE USE DIMENSIONS GIVEN**

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Q.12 The detail drawing of two parts of T halving joints is shown in Fig.2. Read the drawing carefully and draw assembled.

- i) Front elevation      ii) Side view
- iii) Top view. Follow first angle projection method.

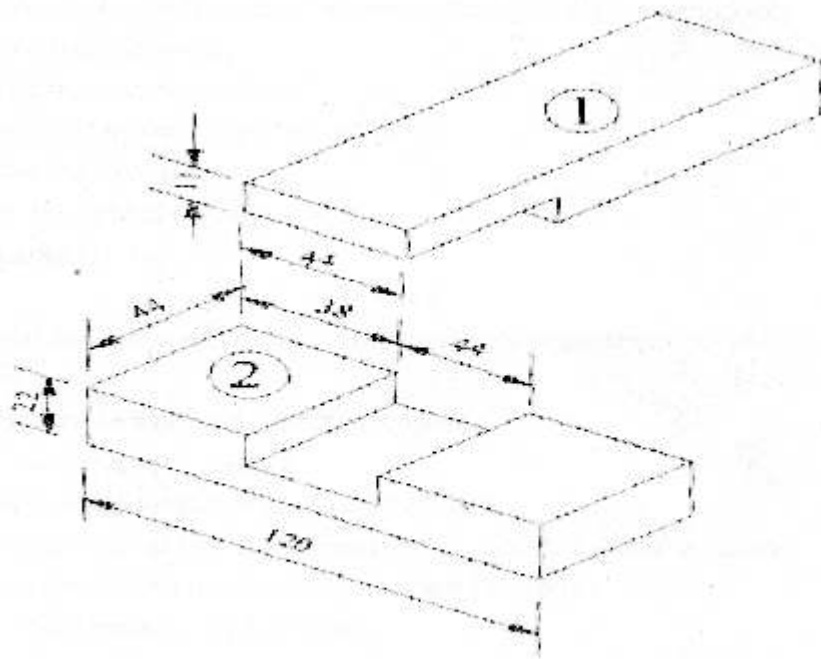


Fig. 2

Q.13 Draw the top view and sectional view of double riveted lap joint (chain type). Take diameter of rivet 21mm.

Q.14 Fig. 3 shows the detail of "shaft coupling" Assemble the parts and draw the following views to a suitable scale.

- i) Front view half in section
- ii) Top view