Roll No. Total No. of Pages: 03

Total No. of Questions: 06

B.Tech. (AE) (2018 Batch) (Sem.-3)

MACHINE DRAWING

Subject Code: BTAE-304-18 M.Code: 76402

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains THREE questions carrying FIVE marks each and students have to attempt any TWO questions.
- SECTION-C contains TWO questions carrying THIRTY marks each and students have to attempt any ONE questions.
- 4. Assume any missing data suitably.

SECTION-A

1. Write briefly:

- a) Draw the symbol of third angle projection system.
- b) What is fullering in the context of rivets?
- c) What is the difference between allowance and clearance?
- d) Draw free hand any two head forms of rivets.
- e) What is the function of connecting rod in IC engine?
- f) What is the necessity of conventional representation of screw threads?
- g) What is a flexible coupling? What are its advantages?
- h) Differentiate between pitch and lead of a screw thread.
- i) Explain the unidirectional system of dimensioning.
- j) Sketch the basic symbols of Single and Double-U butt welds.

SECTION-B

- 2. Draw free hand the two views of a hexagonal nut of size M30. Mark the various proportions in terms of its diameter "d"?
- 3. Draw free hand the sectional front view and top view of a knuckle joint on proportionate scale.
- 4. Draw free hand the plan and sectional elevation of a double riveted butt joint (zig-zag type) on proportionate scale.

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5. Figure 1 shows the details of a crane hook. Assemble the parts and draw (a) front view full in section (b) right side view. Also prepare bill of materials.

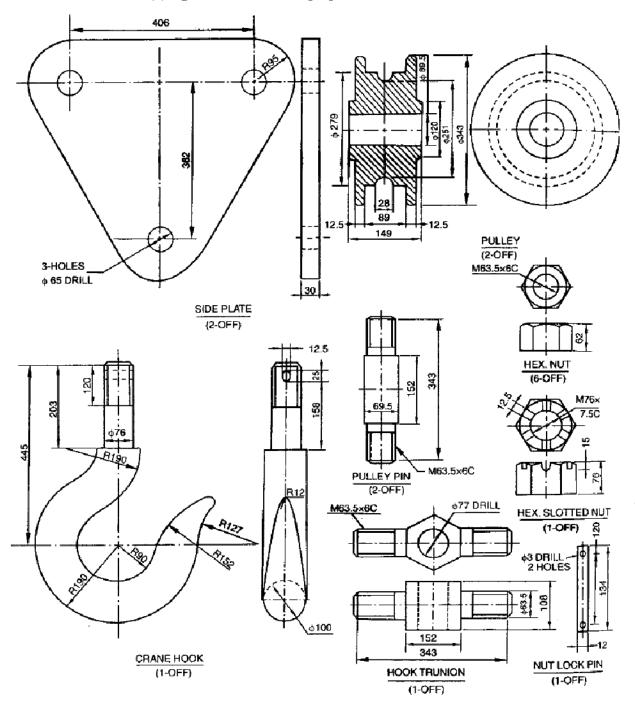


Fig. 1

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6. Figure 2 shows the details of a tool post. Assemble the parts and draw (a) front view full in section (b) top view. Also prepare bill of materials.

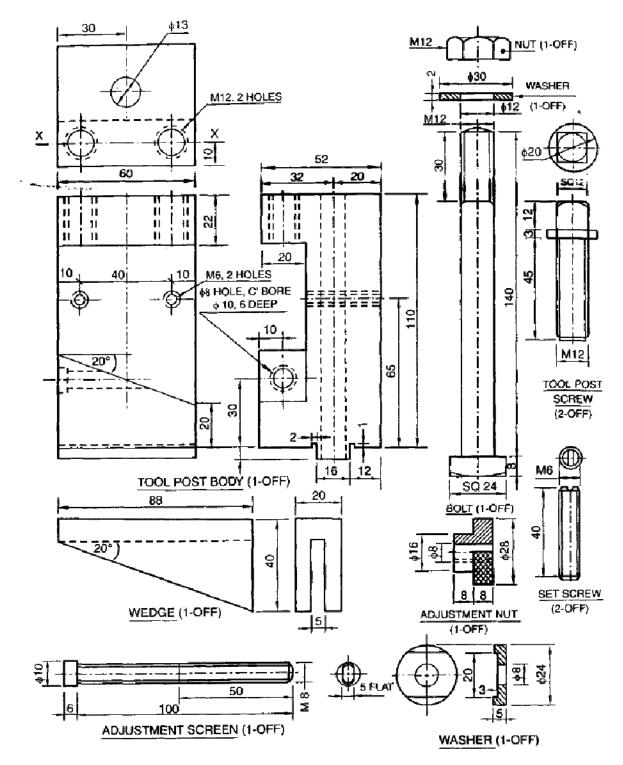


Fig. 2

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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