

Please check that this question paper contains 07 questions and 04 printed pages within first ten minutes.

[Total No. of Questions: 09]

[Total No. of Pages: 04]

Uni. Roll No.

Program/ Course: B.Tech. (Semester: 3rd)

Name of Subject: **Machine Drawing & Computer Aided Design**

Subject Code: **PCME-104**

Paper ID: **16075**

Time Allowed: 04 Hours

Max. Marks: 60

NOTE:

- 1) The **Section-A & B** are compulsory
- 2) Attempt any one question from **Section-C**
- 3) Any missing data/dimension may be assumed appropriately
- 4) All drawings must be in First Angle Projection.

Section – A

[Marks: 02 each]

Q1.

- a) Differentiate between V-thread and Square- thread.
- b) Draw the two views of hexagonal nut (diameter=20) with at least two views.
- c) Draw convention for materials; Wood and Lead.
- d) Draw symbols for Fillet, Spot, Plug and Seam weld.
- e) Classify the three general types of Fits with examples.

Section – B

[Marks: 05 each]

- Q2. Make a freehand sketch of a Protected type Flange Coupling showing at least two views.
- Q3. Make a freehand sketch of a Double Riveted Double Cover Butt Joint (Zig-Zag type) showing at least two views.
- Q4. What are the benefits of using Auto-CAD?
- Q5. What are various methods to draw a line in Auto-CAD? Give detail of anyone with an example.

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Section – C

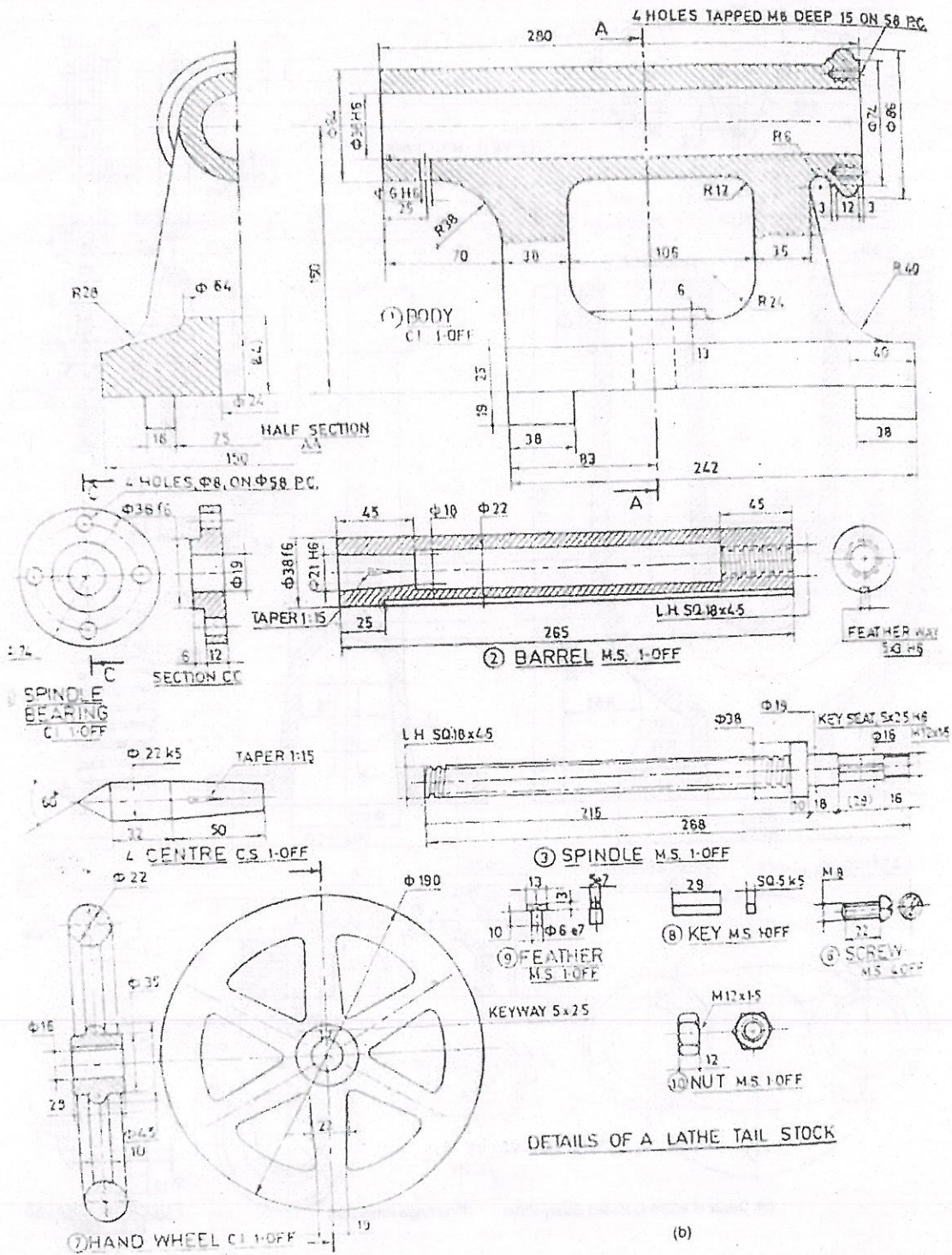
[Marks: 30 each]

- Q6. The details of a Lathe Tail-Stock are given in Fig. 1. Assemble the parts and draw the following, completely dimensioned orthographic views:
- a) Full Sectional Front view [12]
 - b) Right side view [06]
 - c) Top view [04]
 - d) Use a suitable scale. Also prepare a bill of materials and parts-list. [02]
- Q7. The details of a Spring-loaded Safety Valve are given in Fig. 2. Assemble the parts and draw the following, completely dimensioned orthographic views:
- a) Full Sectional Front view [14]
 - b) Top view [08]
 - c) Use a suitable scale. Also prepare a bill of materials and parts-list. [02]

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Fig 1

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DETAILS OF A LATHE TAIL STOCK

(b)

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Fig 2

