Roll No. | | | | | | | | | | | | | Total No. of Pages : 03

Total No. of Questions : 09

B.Tech.(ME) (2018 Batch) (Sem.–3)

MACHINE DRAWING

Subject Code : BTME-303-18

M.Code : 76419

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. There are three sections in this question paper. Attempt ALL the questions from SECTION-A.
2. Attempt any TWO questions from SECTION-B and any ONE question from SECTION-C.
3. First angle projection to be used. You may assume any missing dimension.

SECTION-A

Q1. Write briefly :

a) Explain clearance fit, transition fit and interference fit. 2

b) Draw a machining symbol to represent a surface roughness (R_a) value of 1.5 µm to be obtained by using milling process for machining? 2

c) How internal threads are shown in sections? Explain with drawings. 2

d) What is function of clearance in cotter joint? 2

e) What is a lock nut? Where is it used? 2

f) What is expansion joint? 2

g) What is application and function of a feed check valve? 2

h) What is a T-Bolt and where is it used? 2

i) What is a revolved section? Explain with the help of a drawing. 2

j) What is application of foot step bearing? 2

SECTION-B (FREEHAND SKETCHING)

Q2. Draw freehand sketch of top half sectioned front view of pin type flexible coupling. 5

Q3. Draw freehand sketches of front view and top view of a cotter joint. 5

Q4. Draw a freehand sketch of flanged pipe joint. 5

SECTION-C

Q5. Assemble the parts of **Connecting rod** given in Fig.1 and draw the following views (with bill of materials) :

a) Elevation

b) Top view (full section) 30

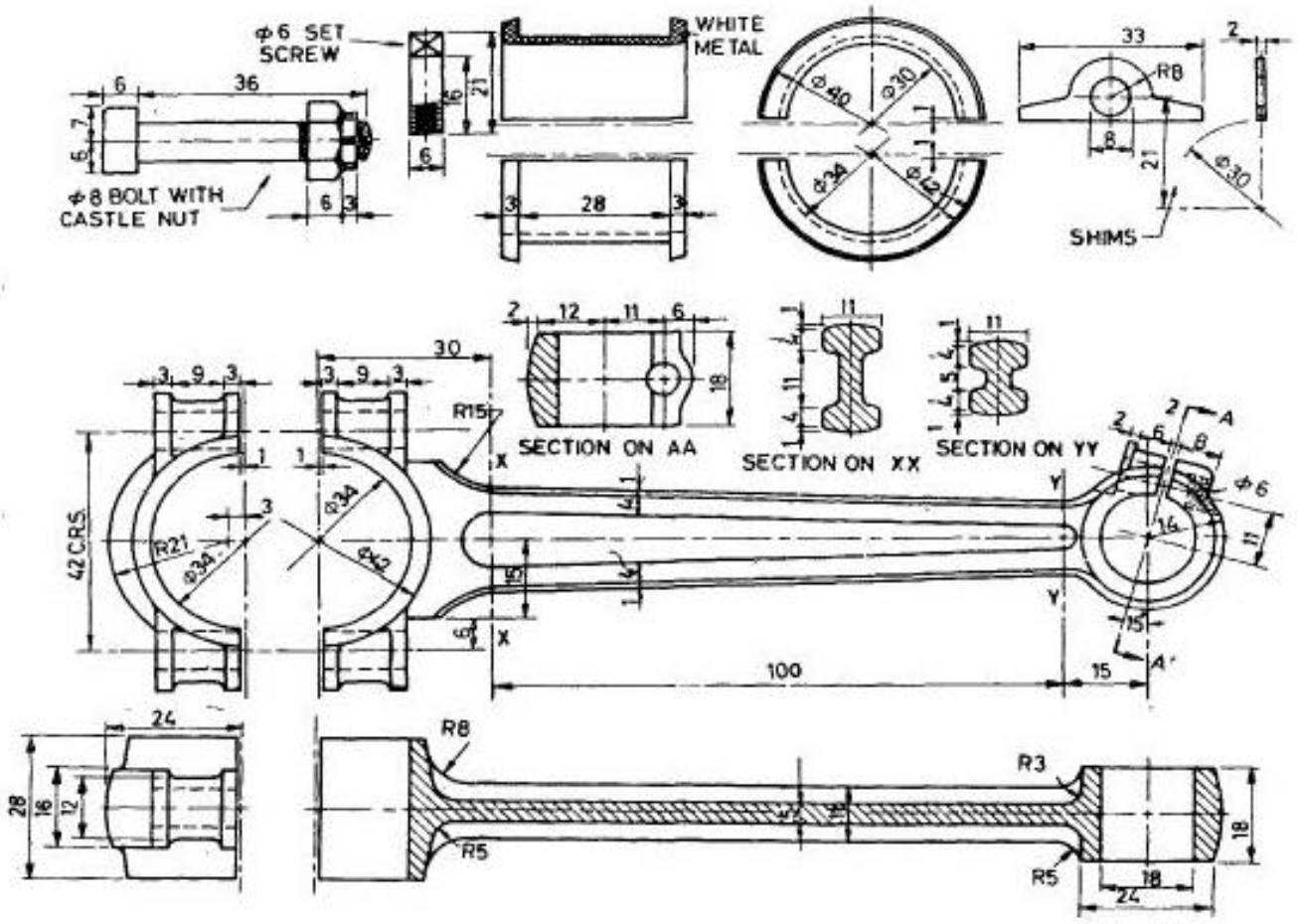
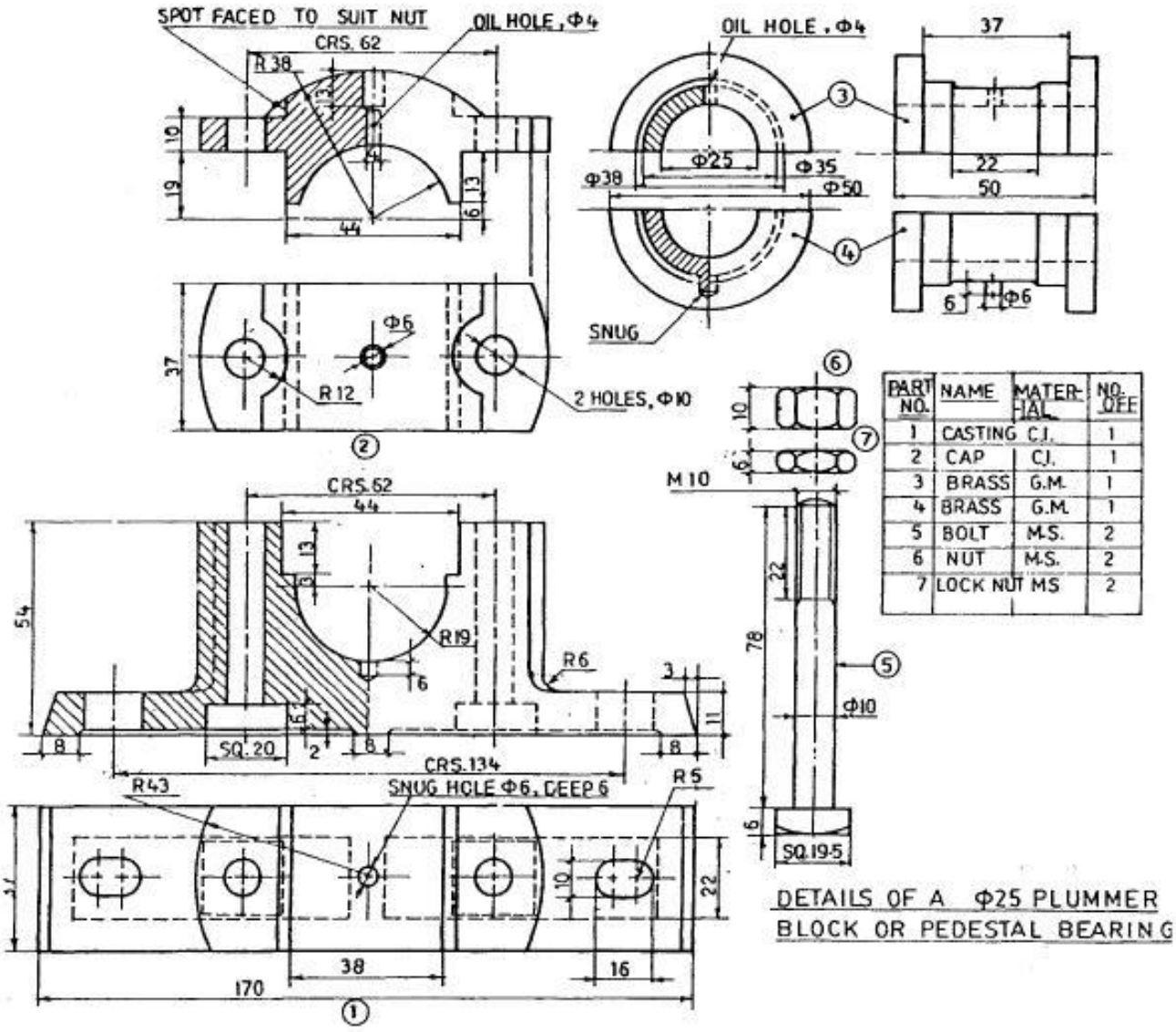


Fig. 1

Q6. Assemble the parts of a **Plummer block** given in Fig.2 and draw the following views (with bill of materials):

a) Elevation left half in section

b) Plan 30



PART NO.	NAME	MATERIAL	NO. OFF
1	CASTING	C.I.	1
2	CAP	C.I.	1
3	BRASS	G.M.	1
4	BRASS	G.M.	1
5	BOLT	M.S.	2
6	NUT	M.S.	2
7	LOCK NUT	MS	2

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.