BTS (C)– III – 06 – 058 (H)

B.Tech. Degree III Semester Examination, December 2006

ME 303 MACHINE DRAWING

(2002 Admissions onwards)

Time: 4 Hours Maximum Marks: 100

(Any missing data may suitably be assumed)
(All dimensions are in mm)

I Draw neat dimensioned sketches of the following types of foundation bolts having a diameter of 30mm:
(i) Lewis type foundation bolt
(ii) Rag end type foundation bolt
(iii) Eye end type foundation bolt (30)

OR

II a) Draw the three views of a hexagonal headed bolt of size M_{24}. The length of the bolt is 80mm and the thread length is 54 mm. (15)

b) Sketch a knuckle joint for connecting rods of 30mm diameter. (15)

III Figure 1 shows a disassembled isometric view of a Pin type flexible coupling. Draw the following views to 1:1 scale:
(i) Top half sectional elevation
(ii) End view (30)

OR

IV An isometric view of a Foot step bearing is shown in Figure 2. Draw the following views of the bearing.
(i) Right half sectional elevation in the direction F
(ii) Top view (30)

V Disassembled isometric view of a stuffing box is shown in Figure 3. Assemble the parts and draw a right half sectional elevation and a plan of the stuffing box. (40)

OR

VI details of a Lathe tail stock are shown in Figure 4. Assemble the parts and draw the sectional elevation. (40)

(Turn Over)

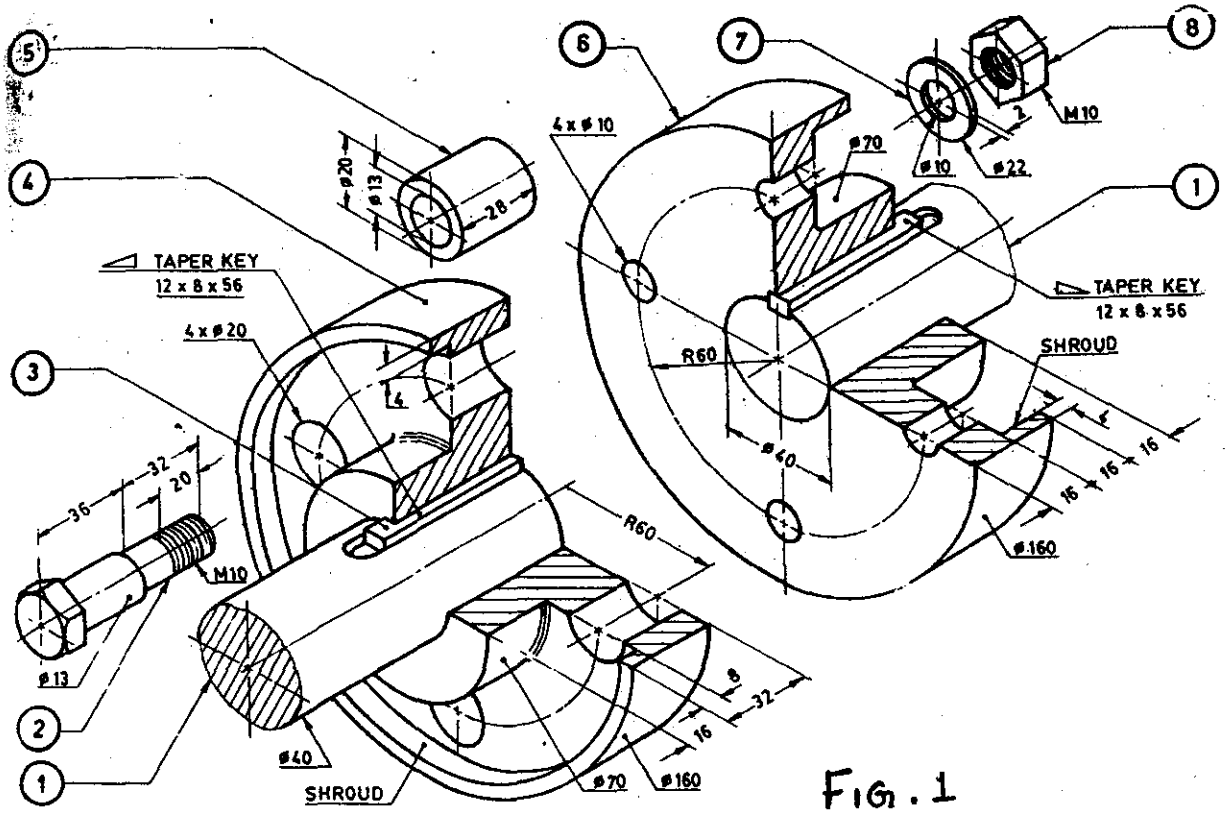

FIG. 1

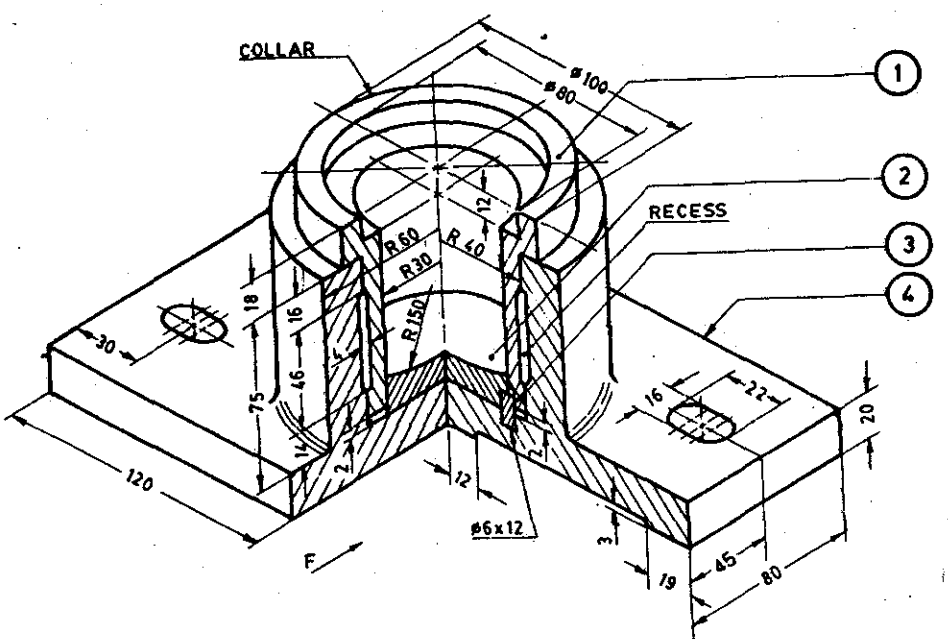

FIG. 2

Contd.....3

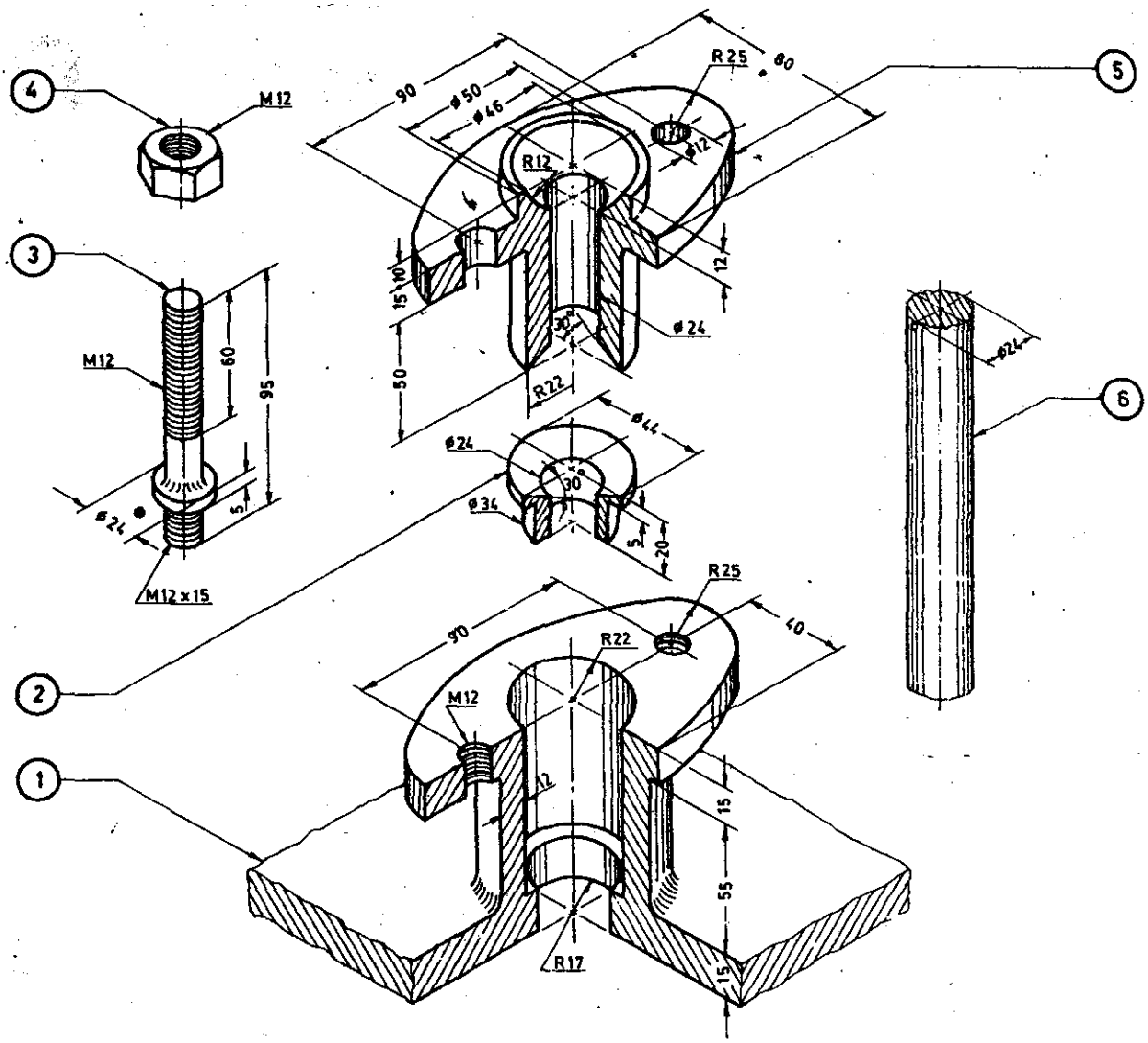
4
M12
3
M12
60
95
5
ø24
M12 x 15
2
1
90
ø50
ø46
R25
80
R12
ø12
12
15
10
30°
ø24
50
R22
ø44
ø24
ø34
30°
5
20
R25
90
40
R22
M12
12
15
55
15
R17
5
ø24
6

FIG. 3

Contd.....4

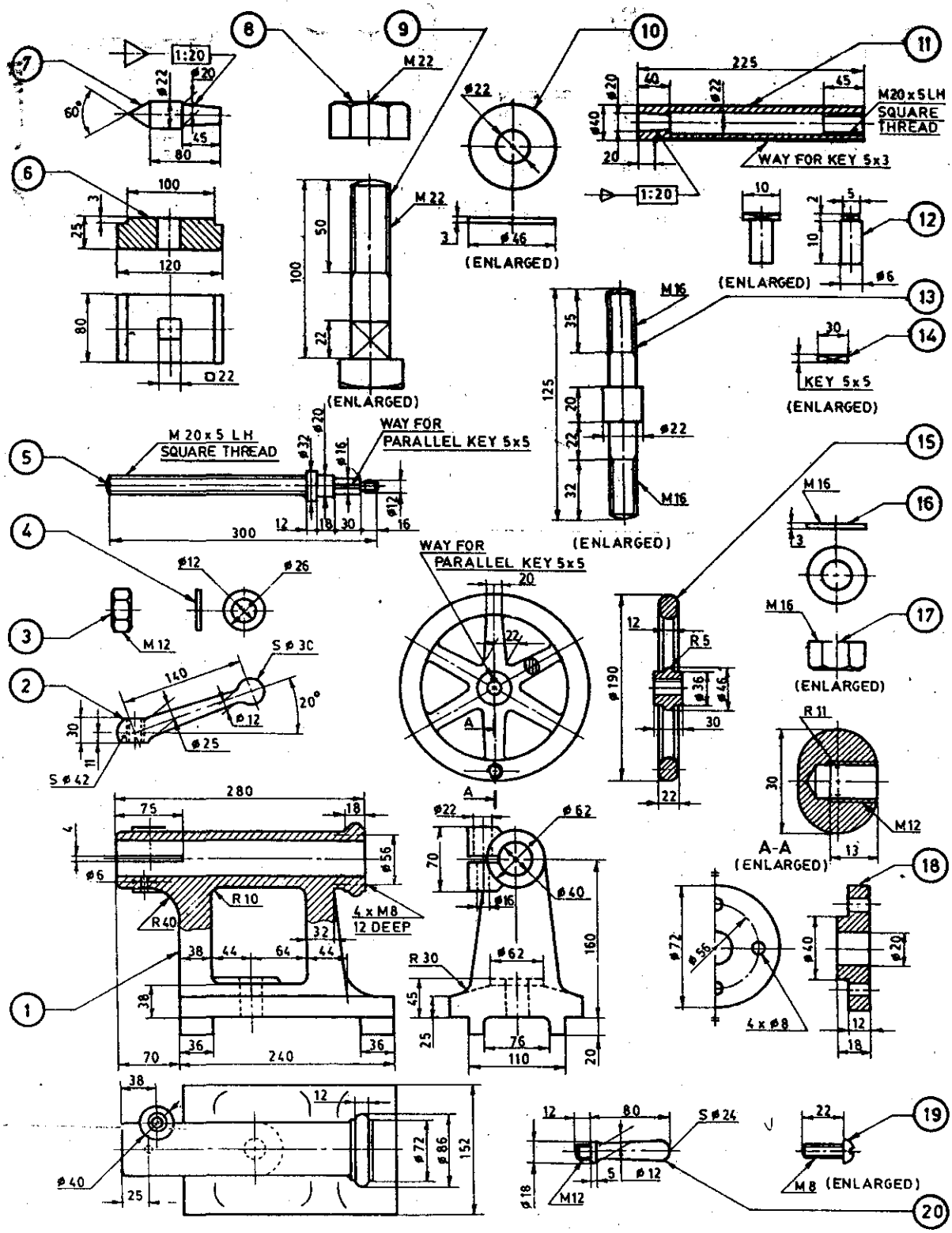
1:20
M22
M20x5LH SQUARE THREAD
WAY FOR KEY 5x3
WAY FOR PARALLEL KEY 5x5
KEY 5x5
(ENLARGED)
M16
M12
4 x M8 12 DEEP
A-A
4 x ø8

FIG. 4

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