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**6247**  
**BOARD DIPLOMA EXAMINATION, (C-16)**  
**JUNE-2019**  
**DME - THIRD SEMESTER EXAMINATION**  
**MACHINE DRAWING**

TIME : 3 Hours

Total Marks : 60

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**PART-A**

**5x4 = 20M**

**Instructions:** (1) Answer all questions.  
(2) Each question carries five marks.  
(3) All dimensions are in mm.  
(4) Choose suitable scale.

1. Draw the profiles of
  - a) Buttress thread and b) ACME thread
2. Show by means of neat sketches, the following rivet heads for rivets of diameter 20mm .indicate the standard proportions
  - (a) Flat head and (b) cone head
3. Draw the single line symbols for the following pipe fittings;
  - a) Coupling b) Union c) Cross d) Cap e) Plug
4. Show the welding symbols for the following types
  - (i) Double bevel butt weld (ii) Square butt weld
  - (iii) Single J butt weld (iv) Backing weld
  - (v) Concave fillet weld

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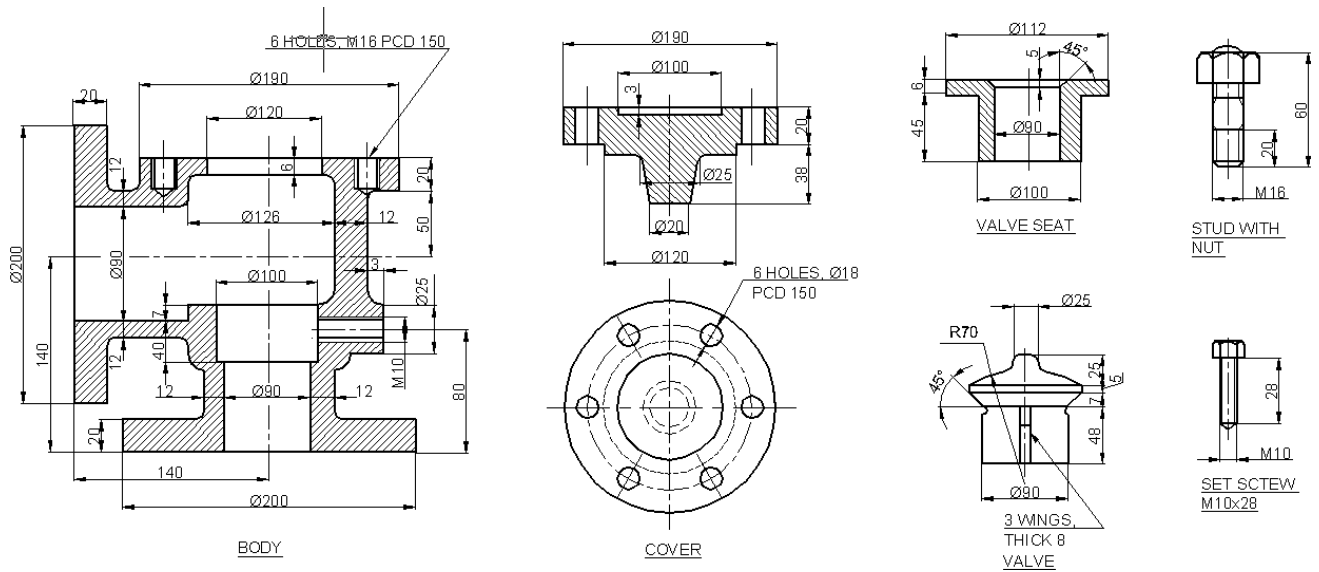
**PART-B**

**1x40=40M**

- Instructions:** (1) Answer any one question.  
 (2) Each question carries forty marks.  
 (3) All dimensions are in mm.  
 (4) Choose suitable scale

5.) Fig1. Shows the details of Non-return valve . Assemble all the parts and draw the following views of the assembly at scale 1:2 .

- (a) Elevation – full in section. (20 M + 4 M for dimensioning)  
 (b) Plan (10 M + 2 M for dimensioning)  
 (c) Prepare material list (4 M)



**Fig.1 Parts of Non Return valve.**

6) The parts of a Stuffing Box - 65 mm diameter shaft are given in Fig. 2. Assemble all the parts and draw the following views of the assembly to full scale.

- (a) Elevation – full in section. (19 M + 5 M for dimensioning)
- (b) Plan. (9 M + 3 M for dimensioning)
- (c) Prepare material list (4 M)

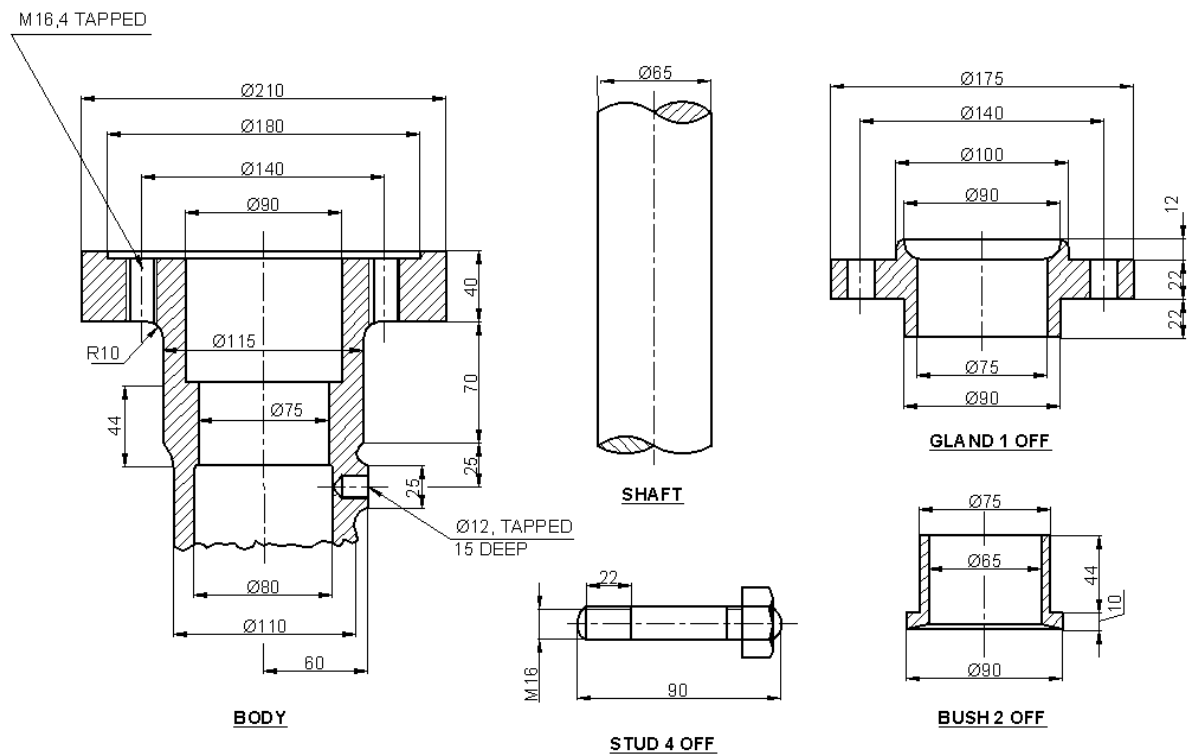


Fig.2 Stuffing Box parts