Code: 9A21301

<div style="float:right">**R09**</div>

B.Tech II Year I Semester (R09) Supplementary Examinations December 2015

AIRCRAFT ENGINEERING DRAWING WITH CAD

(Aeronautical Engineering)

Time: 3 hours   Max. Marks: 70

All questions to be answered

First angle projection to be adopted

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Section – I

Answer any two of the following (02 × 5 = 10 Marks)

1   Draw two views of woodruff key for a shaft of diameter 25 mm with all proportional dimensions.

2   Draw conventional representation of the following materials:
(a) Glass.
(b) Packing and insulating materials.
(c) Liquids.
(d) Wood.
(e) Concrete.

3   Sketch the conventional representation of the following:
(a) External threads.
(b) Internal threads.
(c) Splined shaft.
(d) Bearing.
(e) Square on shaft.

Section – II

Answer any two of the following (02 × 10 = 20 Marks)

4   Draw the sectional front view and top view of a knuckle joint used to connect two rods of 25 mm diameter each.

5   Draw sectional front view and top view of double strap diamond butt joint to join the plates of thickness of 10 mm.

6   Draw:
View from the front.
Sectional view from the side of a Plummer block suitable for supporting a shaft of diameter 30 mm.
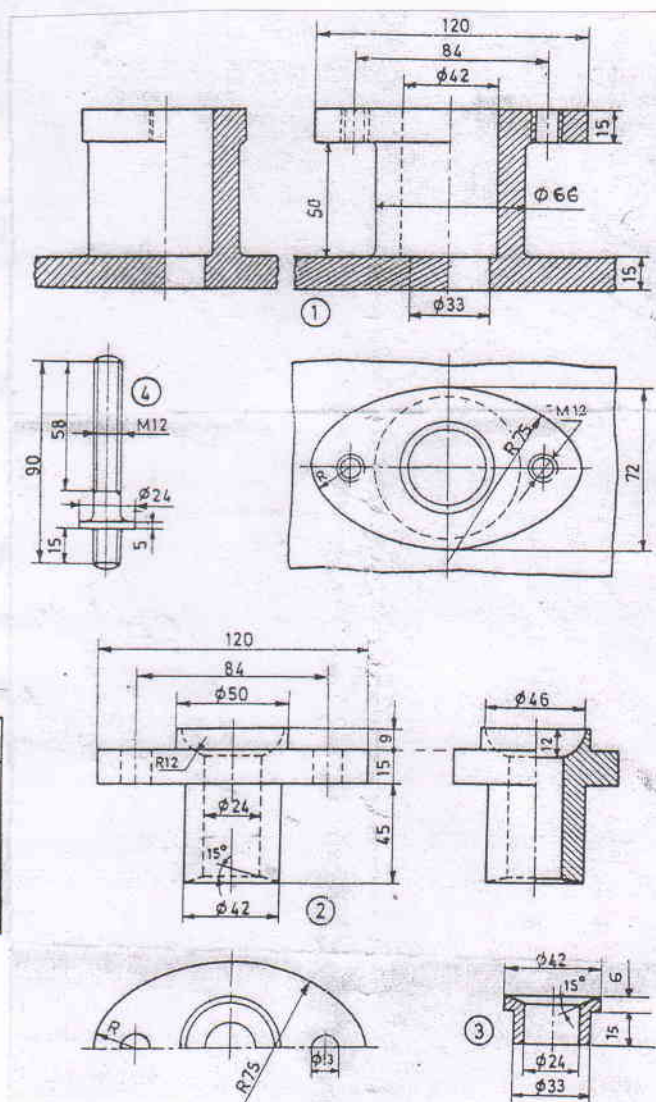
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Section – III
Answer the following (01 × 20 = 20 Marks)

7   Assembly the parts of Stuffing box shown in figure below and draw (i) sectional view from the front. (ii) View from the right.

Parts list			
Part No.	Name	Matl	Qty
1	Body	C I	1
2	Gland	Brass	1
3	Bush	Brass	1
4	Stud	MS	2
5	Nut, M12	MS	2

Section – IV
Answer the following (01 × 20 = 20 Marks)

8   Explain the command prompt procedure for the isometric figure given below, using Auto CAD.