

Code :9A21301

R9

II B.Tech I Semester(R09) Supplementary Examinations, May 2011
AIRCRAFT ENGINEERING DRAWING WITH CAD
(Aeronautical Engineering)

Time: 3 hours

Max Marks: 70

Answer ALL questions
First angle projection to be adopted

1. Answer any two of the following: [05 x 02=10 Marks]
 - (a) Sketch the conventional representation of the following:
 - i) Square on shaft ii) Holes on circular shaft
 - (b) Show by sketches dimensioning of tapered features:
 - i) external and ii) internal
 - (c) Sketch the following thread profiles for a nominal size of 30*3 mm, to a scale of 10:1.
 - i) Buttress thread ii) ACME thread.
2. Answer any two of the following: [10 x 02=20 Marks]
 - (a) Draw the sectional view from the front and view from the side of a cottered joint with sleeve to connect two shafts of 40 mm dia. each.
 - (b) Draw the sectional view from the front and view from the top of the double riveted double strap zig - zag butt joint with dia of the rivet as 16 mm.
 - (c) Draw the sectional view from the front and view from the side of a cottered joint with sleeve to connect two shafts of 40 mm dia. each.
3. Details of single wheel landing gear are shown in the fig1. (appended) with dimensions in cm. Assemble all the parts and provide the following views of the assembled single wheel landing gear. View from the front and view from the right. Take suitable scale. [01 x 20=20 Marks]
4. Write the commands in sequence in CAD(any) to generate the model shown in the figure 2 below. Dimensions are in mm (write in drawing sheet only) [01 x 20=20 Marks]

Figure 2


