

**III B.Tech II Semester Supplementary Examinations,  
November/December 2005  
AIRCRAFT PRODUCTION TECHNIQUES  
(Aeronautical Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions  
All Questions carry equal marks**

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1. Classify the tools and give details about every type of tool used in the aircraft industry. [16]
2. (a) What is a super plastic; explain the process to make a super plastic.  
(b) Explain the different types of welding processes. [16]
3. Explain the process of shearing and blanking . Describe the various types of shearing machines used in aircraft industry with their specific applications. [16]
4. (a) What is case hardening, what are the various techniques for case hardening of steels? Explain.  
(b) Describe the various methods for preventing the corrosion. [16]
5. Explain the heat treatment processes of aluminium alloys used in aircraft industry. Give examples. Describe the process of alclading. [16]
6. What is automation; describe the various automated processes in the aircraft assembly. [16]
7. What is a sandwich construction; explain its advantages and methods of making sandwich panels for use in aircrafts. [16]
8. Write short notes on the following [4 x 4]
  - (a) CNC machine
  - (b) Heat treatment of aircraft rivets.
  - (c) Advantages of composites.
  - (d) ISO-9000 series.

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