

Code No: 07A42102

R07

SET-1

**B.Tech II Year - II Semester Examinations, April-May, 2012**

**AIRCRAFT PRODUCTION TECHNOLOGY**

**(Aeronautical Engineering)**

**Time: 3 hours**

**Max. Marks: 80**

**Answer any five questions  
All questions carry equal marks**

- - -

1. Explain in detail about hydraulic shaper mechanism with a neat sketch. [16]
2. Explain in detail how a boiler barrel is formed by plate rolling with neat sketches. [16]
3. Write short notes on:  
(a) Acoustic Holography (b) Ultrasonic testing  
(c) Six – sigma quality [6+6+4]
- 4.a) Describe in detail arc welding  
b) Differentiate between welding and brazing [8+8]
5. Write short notes on the following:  
(a) Electrical Discharge Machining (b) Electro-Chemical Grinding  
(c) Laser beam machining (d) Micro-welding by Laser Beam. [16]
6. What are the general rules for a good casting design? [16]
- 7.a) Discuss the causes of residual stresses and how they can be controlled.  
b) Explain case hardening [8+8]
8. Write short notes on: [4+4+4+4]  
(a) Tool guiding elements (b) Wedge clamps  
(c) Locking devices (d) Plastics as fixture component material.

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SET-2

**B.Tech II Year - II Semester Examinations, April-May, 2012**

**AIRCRAFT PRODUCTION TECHNOLOGY**

**(Aeronautical Engineering)**

**Time: 3 hours**

**Max. Marks: 80**

**Answer any five questions  
All questions carry equal marks**

- - -

1. Write short notes on:  
(a) Acoustic Holography (b) Ultrasonic testing  
(c) Six – sigma quality [6+6+4]
- 2.a) Describe in detail arc welding  
b) Differentiate between welding and brazing [8+8]
3. Write short notes on the following:  
(a) Electrical Discharge Machining (b) Electro-Chemical Grinding  
(c) Laser beam machining (d) Micro-welding by Laser Beam. [16]
4. What are the general rules for a good casting design? [16]
- 5.a) Discuss the causes of residual stresses and how they can be controlled.  
b) Explain case hardening [8+8]
6. Write short notes on: [4+4+4+4]  
(a) Tool guiding elements (b) Wedge clamps  
(c) Locking devices (d) Plastics as fixture component material.
7. Explain in detail about hydraulic shaper mechanism with a neat sketch. [16]
8. Explain in detail how a boiler barrel is formed by plate rolling with neat sketches. [16]

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SET-3

**B.Tech II Year - II Semester Examinations, April-May, 2012**

**AIRCRAFT PRODUCTION TECHNOLOGY**

**(Aeronautical Engineering)**

**Time: 3 hours**

**Max. Marks: 80**

**Answer any five questions  
All questions carry equal marks**

- - -

1. Write short notes on the following:  
(a) Electrical Discharge Machining (b) Electro-Chemical Grinding  
(c) Laser beam machining (d) Micro-welding by Laser Beam. [16]
2. What are the general rules for a good casting design? [16]
- 3.a) Discuss the causes of residual stresses and how they can be controlled.  
b) Explain case hardening [8+8]
4. Write short notes on: [4+4+4+4]  
(a) Tool guiding elements (b) Wedge clamps  
(c) Locking devices (d) Plastics as fixture component material.
5. Explain in detail about hydraulic shaper mechanism with a neat sketch. [16]
6. Explain in detail how a boiler barrel is formed by plate rolling with neat sketches. [16]
7. Write short notes on:  
(a) Acoustic Holography (b) Ultrasonic testing  
(c) Six – sigma quality [6+6+4]
- 8.a) Describe in detail arc welding  
b) Differentiate between welding and brazing [8+8]

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SET-4

**B.Tech II Year - II Semester Examinations, April-May, 2012**

**AIRCRAFT PRODUCTION TECHNOLOGY**

**(Aeronautical Engineering)**

**Time: 3 hours**

**Max. Marks: 80**

**Answer any five questions  
All questions carry equal marks**

- - -

- 1.a) Discuss the causes of residual stresses and how they can be controlled.
- b) Explain case hardening [8+8]
2. Write short notes on: [4+4+4+4]  
(a) Tool guiding elements (b) Wedge clamps  
(c) Locking devices (d) Plastics as fixture component material.
3. Explain in detail about hydraulic shaper mechanism with a neat sketch. [16]
4. Explain in detail how a boiler barrel is formed by plate rolling with neat sketches. [16]
5. Write short notes on:  
(a) Acoustic Holography (b) Ultrasonic testing  
(c) Six – sigma quality [6+6+4]
- 6.a) Describe in detail arc welding
- b) Differentiate between welding and brazing [8+8]
7. Write short notes on the following:  
(a) Electrical Discharge Machining (b) Electro-Chemical Grinding  
(c) Laser beam machining (d) Micro-welding by Laser Beam. [16]
8. What are the general rules for a good casting design? [16]

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