

B.E. (Aeronautical Engineering) Seventh Semester (C.B.S.)  
**Aircraft General Engineering & Maintenance Practices**

P. Pages : 2

Time : Three Hours



**TKN/KS/16/7614**

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.
  7. Solve Question 11 OR Questions No. 12.
  8. Due credit will be given to neatness and adequate dimensions.
  9. Assume suitable data whenever necessary.
  10. Diagrams and chemical equations should be given whenever necessary.
  11. Illustrate your answers whenever necessary with the help of neat sketches.
  12. Use of non programmable calculator is permitted.

1. a) Write down the refuelling procedure boeing followed to refuel an aircraft. 7
- b) Explain about the procedure which is carried out to eliminate the hydraulic lock present in spark plug of the engine. 7

**OR**

2. a) Explain about the 'Hot start' and hung start' in turbojet engine. 7
- b) Explain briefly about the ground support air start units. 7
3. Explain briefly about the lubrication system of piston-engine aircraft and gas-turbine engine aircraft. 13

**OR**

4. Write short notes on the following. 13
- i) Cabin air pressure safety valve.
  - ii) Maintenance procedure of air conditioning system.
  - iii) Maintenance procedure of pressurization system.
5. a) List the safety and cleanliness procedure followed in the maintenance hanger. 7
- b) List out the safety procedures followed during aircraft welding. 6

**OR**

6. Explain the special tools & equipments used in an airplane maintenance shop. 13
7. a) Explain in detail about radiographic methods used for aircraft component special inspection. 7

- b) Explain in detail about ultrasonic testing methods used for aircraft component special inspection. **6**

**OR**

- 8.** Write short notes on the following. **13**
- a) Type certificate data sheet.
  - b) ATA specifications.
  - c) FAR.
  - d) Airworthiness directives.

- 9.** Explain in detail about different types of fluid lines & its identification terminology. **13**

**OR**

- 10.** a) Write a note on the aircraft bolts identification and coding. **7**

- b) Write a note on the aircraft nuts identification and coding. **6**

- 11.** a) Explain about the cable swaging procedure and test carried out on cable. **7**

- b) Explain about the cable splicing procedure and test carried out on cable. **7**

**OR**

- 12.** a) What are the different types of plumbing connections used in aviation industry? Explain in detail. **8**

- b) What are the inspection carried out on cables swaging ends? Explain in detail. **6**

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