



- 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) Explain primary control system used in aircraft. **6**
b) Describe Instrument landing system with main segments. **7**
OR
2. a) classify and explain flight control system. **6**
b) Explain the digital fly by wire control system with its redundancy. **7**
3. a) Describe types of accumulator used in hydraulic system with neat sketches. **7**
b) Explain working principle, construction of pressure relief valve with suitable sketch. **7**
OR
4. a) Explain properties of hydraulic fluid used in Aircraft hydraulic system. **7**
b) Describe working of selector valve & its types. **7**
5. a) Explain emergency extension system of landing gear and safety devices. **7**
b) Explain the procedure involved in shock strut bleeding. **6**
OR
6. a) Describe typical air pressure system used in pneumatic system. **7**
b) Explain the emergency break system. **6**
7. Describe the cross feed fuel system with neat sketches. **13**
OR
8. Describe types of fuel tanks with neat sketches. **13**
9. Explain turbojet fire protection system. **13**
OR
10. What are the thermal Anti-icing system? Explain in detail. **13**
11. Write short notes on: a) TAS b) EAS c) Pressure gauges. **14**
OR
12. a) Explain working principle, construction of Gyroscope with neat sketch. **8**
b) Write short note on 'Altimeter'. **6**
