

THAKUR COLLEGE OF SCIENCE & COMMERCE

Exam: April 2018
Programme: F.Y.BSc

Max. Marks: 75.
Semester: II

Paper Code:
Subject: Aircraft & Engine

Q1. Write a short note on any 3 of the following: **15**

- a) Deep Stall
- b) Errors of ASI
- c) Servo Altimeter
- d) Acceleration and Turning Errors
- e) Properties of Gyroscope

Q2. Write a short note on any 3 of the following: **15**

- a) Airspeed Indicator Markings
- b) Effect of non-standard Temperature and Pressure on Altimeter
- c) Artificial Horizon
- d) Approach Climb and Landing Climb
- e) Coffin's Corner

Q3. Write a short note on any 3 of the following: **15**

- a) Aperiodicity
- b) Anti-Skid system
- c) Mach Tuck
- d) VSI
- e) Properties of a gyroscope

Q4. Write a short note on any 3 of the following: **15**

- a) Define: QNH, QFE, QNE, QFF, VMCA
- b) Airspeed Indicator Markings
- c) Normal Shock Wave

d) APU

e) An aircraft has one altimeter set to QFE and one to aerodrome QNH 1000 mb. If the airfield elevation is 300 ft, immediately before take-off the altimeter with QFE set will read and the other..... If the QFE altimeter is set to 1013 when passing through the transition altitude 3000ft, it will read..... (Assume 1 mb = 30 ft)

Q5. Write a short note on any 3 of the following:

15

a) Subdivisions of Aerodynamic Flow. Define MFS and MCRIT.

b) Aperiodicity

c) Define: Altitude, Height, Transition Altitude, Transition Level, Transition Layer

d) Vortex Generators

e) Errors affecting Pressure Altimeter