Q.27 What are the different Quality System standards?

Q.28 What is the importance of periodical inspection of instruments?

Q.29 How is position error leak test done?

Q.30 How does ISO9005/ISI4000/AS9100 Issue Certification work?

Q.31 What does hydraulic failure mean? How is it identified and worked upon?

Q.32 What are the quality system standards when it comes to manufacturing instruments?

Q.33 How does cylinder head temperature gauge work? Explain its benefits.

Q.34 Write short notes on two Instruments that are based on gyroscope.

Q.35 Explain the working of manifold pressure gauge?

SECTION-D

Note: Long answer type questions. Attempt any Two question out of three questions. (2x10=20)

Q.36 What is the principle of thermocouple? What are the different types of thermometer used in aviation?

Q.37 What is the principle of operation of Altimeter? Explain the constructional details.

Q.38 Explain the Total Quality Management (TQM) as applicable to aviation industry.

Roll No.....

4th Sem / Aircraft Maintenance

Subject : Aircraft Instruments

Time : 3 Hrs. **M.M. : 100**

SECTION-A

Note : Multiple choice types questions. All questions are compulsory. (10x1=10)

Q.1 Where is the alternative static port located?

a) Inside the wings of the aircraft

b) Inside the rudder of the aircraft

c) Inside the engine of the aircraft

d) Inside the cabin of the aircraft

Q.2 What is the full form of IAS?

a) Implied airspeed

b) Indicated airspeed

c) Incident airspeed

d) Immediate airspeed

Q.3 What is the difference between the pilot pressure and the static pressure called?

a) Atmospheric Pressure

b) Dynamic Pressure

c) Air Pressure

d) Cabin Pressure

Q.4 The top half of the attitude indicator is _____.

a) Green b) Blue

c) Brown d) Yellow

Q.5 The compass instrument shows the aircraft's heading relative to magnetic_____.

a) West b) North

c) South d) East

Q.6 The turn indicator indicates rotation about the_____.

a) Horizontal axis b) Vertical axis

c) Longitudinal axis d) Diagonal axis

Q.7 The instrument which combines both the static and total pressure is _____.

a) Dynamic probe b) Static probe

c) Pitot static probe d) Stagnation probe

Q.8 TAS shows airspeed in _____.

a) Miles per hour b) Knots

c) Kilometer per hour d) Kilometer per hour

Q.9 When the aircraft is moving forward, air entering the Pitot tube is at a _____ pressure than the static line.

a) Equal b) Lower

c) Greater d) Infinite

Q.10 Altimeter is not a part of the "Big Five" flight instruments.

a) False b) True

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 How does suction gauge work?

Q.12 How does gyroscope-based instrument work?

Q.13 How is position error calculated?

Q.14 What is the importance of quality assurance is testing?

Q.15 What is the principle of operation of Altimeter?

Q.16 What is the use of Turn and Bank indicator?

Q.17 How does suction gauge work?

Q.18 What is the importance of content gauge?

Q.19 How does temperature gauge work?

Q.20 What is the principle behind VSI?

SECTION-C

Note: Short answer type questions. Attempt any Twelve question put of fifteen questions. (12x5=60)

Q.21 How is position error leak test done?

Q.22 what is AS9100 certification?

Q.23 Give a few examples of electrically operated instruments.

Q.24 How is the periodical inspection of temperature gauge done?

Q.25 How are constructional features checks of Airspeed Indicator done?

Q.26 How does suction gauge work?