

- Q.26 Describe position error leak test.
- 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 ISO9000/IS14000/AS9100- Certification mean?
- Q.31 What is the effect of hydraulic failure?
- Q.32 What are the quality system standards when it comes to manufacturing instruments?
- Q.33 How VSI is installed?
- Q.34 Write short note on operational test of instruments.
- Q.35 Explain lead test and its use?

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 What is the principle of thermocouple? Describe ASI, Altimeter, and turn & bank indicator.
- Q.37 Describe the constructional details of VSI and its working.
- Q.38 Explain the various gyro-based instruments.

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Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 What are aircraft instruments?
- The various displays and dials the pilots can see inside a cockpit.
 - The devices pilots used to control the motion of the plane.
 - The parts the plane that affect the way it moves.
 - The facts about the planes position, direction etc.
- Q.2 What is the full form of IAS?
- Implied airspeed
 - Indicated airspeed
 - Incident airspeed
 - Immediate airspeed
- Q.3 Which Instrument that measures the height of an aircraft above a given pressure level.
- Airspeed Indicator
 - Altimeter
 - Heading Indicator
 - Vertical Speed Indicator

- Q.4 A pitot tube measures
- Static Pressure
 - Dynamic Pressure
 - Total Pressure
 - Difference between static and dynamic pressure
- Q.5 The compass instrument shows the aircraft's heading relative to magnetic _____
- West
 - North
 - South
 - East
- Q.6 The turn indicator indicates rotation about the _____
- Horizontal axis
 - Vertical axis
 - Longitudinal axis
 - Diagonal axis
- Q.7 Ram air enters the system through the _____
- Pitot tube
 - Static tube
 - Engines
 - APU Exhaust
- Q.8 TAS shows airspeed in _____
- Miles per hour
 - Knots
 - Nautical miles
 - Kilometer per hour
- Q.9 The most common limit gage used for inspecting the hole diameter is
- Snap gage
 - Ring gage
 - Plug gage
 - Master gage
- Q.10 For contactless body temperature measurement, advanced thermometers are used. They are based on:
- Infrared radiation
 - Ultraviolet radiation
 - Alpha particles
 - Laser beams

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SECTION-B

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

- Q.11 What are different types of instruments?
- Q.12 Name pitot-based instruments?
- Q.13 What is a position error?
- Q.14 What is the input in rate of climb indicator?
- Q.15 What is the principle of operation of Altimeter?
- Q.16 What is the use of Turn and Bank indicator?
- Q.17 What instrument is used to measure RPM?
- Q.18 Name three electrically operated instruments?
- Q.19 How does temperature gauge work?
- Q.20 What is TQM??

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 What is a periodic inspection Give examples.?
- Q.22 Explain AS9100 certification?
- Q.23 Describe fuel flow gauge.
- Q.24 How manifold pressure gauge works?
- Q.25 How are constructional features checks of Airspeed Indicator done?

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