

Technical Questions - QuEST Global Placement Test

Q1. A knife edge seal is used to

- a. Reduce pressure variation in cavity**
- b. Stop leakage-ans**
- c. Avoid thermal leakage**
- d. Is used as a support**

ANS: b

Q2. A brad able coating are used for

- a. Maintaining clearance between the rotating components and casing/seals**
- b. To provide heat insulation for the component**
- c. Both Option (A) and (B)-ans**
- d. None of the above**

ANS: c

Q3. Advantage of Titanium alloys are

- 1.Low density and possess good corrosion resistance property**
 - 2.High Specific strength**
 - 3.suitable for high temperature operation**
-
- a.Option 1 and 2**
 - b.option 1 and 3**
 - c.Option 2 and 3**
 - d.All the above**

Technical Questions - QuEST Global Placement Test

Q4. By pass ratio is defined as

- a .Ratio of core air to bypass air**
- b. Ratio of bypass air to core air**
- c. Ratio of total air mass flow to bypass air**
- d .None of the above**

Q5. During the normal start of a gas turbine engine

- a .The starter alone is used**
- b. Starter and ignition system are used simultaneous**
- c. Ignition system alone is used**
- d. None of the above**

Q6. Engine vibrations refer to

- a. Whirling of shaft**
- b. Bucking of shaft**
- c .Movement of the shaft in the axial direction**
- d. None of these**

Q7. High Pressure Turbine blades are cooled using air from

- a. Ambient atmosphere**
- b. High Pressure Compressor**
- c. Low Pressure Compressor**
- d. None of the above**

Q8. Eddy current inspection is performed

Technical Questions - QuEST Global Placement Test

- a. For subsurface cracks**
- b .For surface cracks**
- c. For nicks and scratches**
- d. For composite materials**

Q9. "Most common type of bearing used in a gas turbine engine are

- a. ball bearing**
- b. roller bearings**
- c. plane bearing**

- a. Option 1 and 2**
- b. Option 1 and 3**
- c. Option 2 and 3**
- d. All the above**

Q10."Air worthiness Directive

- 1. Requires mandatory compliance**
- 2. Compliance is based on Operator policy**
- 3. Is issued by Airworthiness Authority**

- a. Option 1 and 2**
- b. Option 1 and 3**
- c. Option 2 and 3**
- d. All the above**

Q11. Advantage of shrouded High Pressure Turbine blades is

- a.It improves Engine Performance**
- b.It reduces vibrations**

Technical Questions - QuEST Global Placement Test

- c.Both 1 and 2 above**
- d.None of these**

Q12.A high Pressure compressor Blade is found to have a crack near the root

- a. The blade has to be rejected for further operation as root is a high stress area**
- b. The blade is accepted bal for further service operation**
- c. Compressor blades can never develop cracks at the root**
- d. None of the above is correct**

Q13. A Blisk is a

- a. Bladed Disc-ans**
- b. Bladed drum**
- c. Location where shaft meets the disc**
- d. None of these**

ANS: a

Q14. Advantage of composite are

- a. Composite provides strengths similar to metal components**
- b. Light in weight-ans**
- c. Act as noise suppression mechanism**
- d .All of the above**

Technical Questions - QuEST Global Placement Test

ANS: b

Q15. During Compression process the pressure and temperature of air

- a .Increase-ans
- b. Decrease.
- c. Initially increase and then decrease
- d .None of these

ANS: a

Q16. Balance correction is done by

- a. Re-distribution of weight
- b. Addition of weight
- c. Removal of weight
- d .All the above

Q17. High by pass ratio engines give

- a. High specific thrust
- b .Low specific thrust
- c .Constant specific thrust
- d. None of the above

Q18. Modular engine architecture reduces

Technical Questions - QuEST Global Placement Test

- a. Overhaul burden**
- b .Line maintenance burden**
- c. Cost of Ownership**
- d. None of the above**

Q19. Annular Combustor has

- a. More pressure loss**
- b. Less combustion efficiency**
- c. Less heat release for a given volume**
- d .Less pressure loss**

Q20. Centrifugal force is directed

- a. Towards the center**
- b. Away from center**
- c. Perpendicular to the radius of the circle**
- d. None of the above**