

## Q1. 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

#### Q2. 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

# Q3. Balance correction is done by

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

# 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. 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
- Q6. A Blisk is a
  - a. Bladed Disc-ans
  - b. Bladed drum
  - c. Location where shaft meets the disc
  - d .None of these
- Q7. "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
- Q8. 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

#### Q9. Eddy current inspection is performed

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

## Q10. 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

#### Q11. Annular Combustor has

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

# **Q12.**"Air worthiness Directive

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



- a.Option 1 and 2
- b.Option 1 and 3
- c.Option 2 and 3
- d.All the above
- Q13. Advantage of shrouded High Pressure Turbine blades is
  - a. It improves Engine Performance
  - b. It reduces vibrations
  - c. Both 1 and 2 above
  - d. None of these
- Q14. 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
- Q15. 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
- Q16. A bradable 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
- 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
  - a. Overhaul burden
  - b. Line maintenance burden
  - c. Cost of Ownership
  - d. None of the above
- Q19. During Compression process the pressure and temperature of air
  - a. Increase-ans
  - b. Decrease.
  - c. Initially increase and then decrease
  - d. None of these
- Q20. 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