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Q1. Shot-peening is a process used for introducing a

a. compressive surface layer  
b. Use a hardening coating to improve metal properties  
c. Reduce metal surface imperfection by machining  
d. Is the process of coating with a anti-corrosive paint

Q2. The Oil system in Turbofan engine has the following roles

a. It cools the bearing and spline  
b. It lubricates bearings and spline  
c. Both 1 and 2  
d. None of these

Q3. Variable geometry inlet duct are used on supersonic aircrafts for

a. Slowing the airflow to subsonic speeds at the face of the compressor and increase static pressure  
b. accelerating the airflow, to supersonic speeds, during cruising flight  
c. Increasing the airflow, at outlet end of compressor  
d. None of these

Q4. What are the metal removal techniques

a. Ultra High Pressure jet Machining  
b. Electro Discharge Machining  
c. Electro Chemical Machining
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Q5. Why do we need to do Inspection

1. To determine whether the component is serviceable
2. To restore Fit, Form and Function of the component
3. To determine whether the component is repairable

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

Q6. Full Authority Digital Engine Control (FADEC) system

a. Decrease the Fault detection capability of the engine
b. Has no effect on Fault detection capability of the engine
c. Increase the fault detection capability of the engine
d. None of the above

Q7. The surge magic of Centrifugal compressor is-----than that of an Axial compressor

a. More
b. Less
c. Equal
d. Not adequate

Q8. In normal flight conditions, an increase in aircraft speed

a. Cause the nose of the aircraft to drop
b. Cause the nose of the aircraft to lift
c. The nose remains in the same position
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d. None of these

Q9. With increasing altitude pressure decrease and

a. Temperature decreases at the same rate as pressure reduces
b. Temperature decreases but at a lower rate than
c. Temperature remains constant to 8000 ft
d. None of these

Q10. Longitudinal stability is given by

a. The fin
b. the wing dihedral
c. the horizontal tail plane
d. None of the above

Q11. What are the types of rivets that are used in Aerospace Industry

a. Solid river
b. Hollow river
c. Blind river

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

Q12. During a glide the following forces act on an aircraft
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Q13. Which of the following properties makes titanium ideal for fan blades

a. It is very light
b. It is very leap
c. It is silver coloured
d. all the above

Q14. What are the metal joining techniques

a. Welding
b. Brazing
c. Thermal spray Technique
d. Mechanical Fastner

a. Option 1,2 and 3
b. Option 2,3 and 4
c. Option 1,2 and 4
d. All the above

Q15. The Thermal Expansion of the Turbine casting is controlled throughout the cycle to

a. Maintain optimum clearance between Blade tip and case
b. To relieve the stresses developed in the casing
c. To support Engine Health Monitoring
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d. To reduce Turbine speed

Q16. The component used for transferring axial thrust form a rotating component to a static component is

a. Roller Bearing
b. Thrust Bearing
c. Ball Bearing
d. Both 2 and 3 above

Q17. The boundary layer is

a. Thicker at the leading edge
b. Thickest at the trailing edge
c. Constant thickness from leading to trailing edges
d. None of the above

Q16. Additional thrust is required for

a. Landing
b. Acceleration and climb
c. Decelerating aircraft
d. Cruise

Q18. With increase in pressure ration the specific fuel consumption

a. Increase
b. Decrease
c. Remains constant
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d.None of the above

Q19. An aircraft which is longitudinally stable, will tend to return to level flight after a movement about which axis

a. Pitch  
b. Roll  
c. Yaw  
d. All the above

Q20. To ensure component integrity, types of Inspection Techniques used is

a. Visual inspection  
b. Dimensional inspection  
c. Non destructive Inspection  
d. All the of the above

Q21. Rotating stall, surge and flutter can be overcome by the

a. Variable stater Vanes  
b. Introducing inter-stage bleed  
c. Both the above  
d. None of the above

Q22. Radiographic examination is performed

1. To identify the cracks  
2. To identify internal defects component  
3. To identify the defects in magnetic material
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a. Option 1 and 2
b. Option 1 and 3
c. Option 2 and 3
d. all the above

Q23. Specific Fuel consumption (SFC) is ratio of

a. Fuel Flow rate/Thrust
b. Thrust/Fuel/Flow rate
c. Thrust/Air mass flow rate
d. None of the above