

Question block created by wizard

This exam contains 24 questions.

1. Newtons second law applies to a mass. Which mass in a gas turbine engine does it apply to?
 - a. Mass of the air and fuel.
 - b. Mass of the fuel.
 - c. Mass of the engine.

2. What is the correct working cycle of a gas turbine engine?
 - a. Induction - combustion - compression - exhaust
 - b. Induction - compression - combustion - exhaust
 - c. Exhaust - combustion - compression - induction

3. What do they also use for propulsion of modern aircraft?
 - a. Turbojets and pulsjets.
 - b. Ramjets.
 - c. None of these.

4. What are the main advantages of a turbofan compared to a turbojet?
 - a. low noise level with low fuel consumption.
 - b. Good engine acceleration and compact engine design
 - c. Lightweight engine with good power output.

5. The fuel flow transmitter (FFT) uses electromagnetic pulses...
 - a. to control the amount of fuel sent to the fuel control unit.
 - b. to measure the rate of fuel flow.
 - c. generated by the fuel booster pumps.

6. The fuel control is an engine driven accessory. It can operate by mechanical, hydraulic, electrical, or pneumatic forces in various combinations.

What is the purpose of the fuel control?

 - a. Control the fuel flow from the aircraft fuel booster pumps.
 - b. Maintain a correct combustion air-to fuel mixture.
 - c. Limit the amount of fuel to the combustion chamber.

- 7.** The ECU (on a reciprocating engine) is assigned to cylinder(s). This assignment is to:
- to a pair of cylinders
 - to all cylinders of that engine.
 - one cylinder.
- 8.** The EGT Harness connects to a terminal block.
- From the terminal block, the EGT signal is sent to a...
- display.
 - voltage generator, to increase the temperature.
 - resistor to decrease the actual temperature otherwise it can be too high.
- 9.** Which indication component is using a permanent magnet with three coil assemblies?
- The engine tachometer system.
 - The fuel pump pressure indication system.
 - The airborne vibration system signal conditioner pick up points.
- 10.** Advancing the power levers causes...
- engine thrust and EPR indicator to stabilize then decrease.
 - engine thrust and EPR indicator to rise.
 - actual engine thrust to decrease and EPR indicator to rise.
- 11.** The two primary Electronic Flight Instruments (EFIS) displays are....
- ECAM and EICAS.
 - EIS and E/WD.
 - PFD and ND.
- 12.** On a high bypass the Engine Pressure Ratio (EPR) is measured across the....
- fan.
 - HP compressor.
 - HP turbine.
- 13.** On a high bypass the Engine Pressure Ratio (EPR) uses P1 and PF probes. How many?
- There are 22 P1 and 1 PF probes.
 - There are 1 P1 and 22 PF probes.
 - There are 1 P1 and 1 PF probes.

14. The N1 rpm is the speed of the low pressure shaft.

It is read in the unit....

- a. rpm.
- b. percent.
- c. m/s.

15. Hydraulic actuators on a modern gasturbine are powered by....

- a. skydrol under pressure.
- b. air pressure.
- c. fuel pressure.

16. A manifold pressure gauge on a reciprocating engine is designed to....

- a. indicate absolute pressure in the intake manifold.
- b. maintain constant pressure in the intake manifold.
- c. indicate differential pressure between the intake manifold and atmospheric pressure.

17. Engine torque is used to indicate...

- a. lateral twist on the engine mouths.
- b. the power that is developed by a turbo-propeller engine.
- c. the power that is developed by a tubo fan engine.

18. A common method of coupling the electrical starter drive to the engine is by means of a...

- a. ratchet on the drive gearbox.
- b. jaw on the starter.
- c. direct shaft to high speed shaft.

19. The engine starting system supplies the force to turn the engine N2 or N3 compressor on the ground by...

- a. rotating the gearbox that is connected to the high speed shaft.
- b. supplying air to the fan.
- c. rotating the gearbox that is connected to the low speed shaft.

20. A cartridge starter was mostly used in....

- a. turbofan aircraft engines.

- b. reciprocating aircraft engines.
- c. turbojet aircraft engines.

21. The high tension distribution system conducts the high voltage dc from the ignition exciters to the...

- a. igniter plugs.
- b. compressor case
- c. condenser.

22. Modern gasturbines have....

- a. 2 ignition exciters and 4 igniters.
- b. 1 ignition exciters and 2 igniters.
- c. 2 ignition exciters and 2 igniters.

23. Which of the following would cause rejection of a spark plug without a doubt?

- a. Insulator tip cracked.
- b. Carbon fouling of the electrode and insulator.
- c. Lead fouling of the electrode and insulator.

24. "Ignition system voltage is dangerously high. Ignition switch must be in off position before removal of any ignition component."

Why?

- a. This permits cooling of the high tension lead.
- b. In the off position the cooling will continue. This will prevent hot components.
- c. To ensure complete dissipation of energy from the system