

TEST BOOKLET

MAINTENANCE COURSE

FOR

**3KW TACTICAL QUIET GENERATOR SET (TQG)
MODELS MEP 831A AND MEP 832A**

TEST INSTRUCTIONS TO THE EXAMINEE

1. The following test consists of 25 questions and represents part of your course grade. You have 30 minutes to complete this test and must correctly answer 18 items to receive a passing grade. Each question is worth 4 points.
2. There is only one correct response for each item. Place an uj-n in the block provided. Write your name and date on the Answer Sheet.
3. You may reference the technical documentation and the Trainee Guide presented to you in the beginning of this course.
4. When you have completed the test, turn your Answer Sheet in to the instructor and wait further instructions.
5. Read the sample test question below and look over the sample answer sheet before you begin the test

SAMPLE TEST QUESTION	ANSWERS				
1. What is the fuel used to power the T. Q. Generator set engine? a. Gasoline b. Electricity c. Diesel d. Atomic Fusion	1.	a ()	b ()	c (X)	d ()

MAINTENANCE TRAINING COURSE TEST BOOKLET

Test Questions

1. What section provides a general explanation of all maintenance and repair functions authorized at various maintenance categories?
 - a. Appendix H.
 - b. Appendix B.
 - c. Unit Preventive Maintenance Checks and Services.
 - d. Troubleshooting.
2. Which statement correctly describes the 3 kW TQG?
 - a. Single cylinder, water cooled, electrically driven.
 - b. Permanent, brush energized, 2-phase power.
 - c. A portable, quiet source of AC power.
 - d. A heavy duty DC power source.
3. Which statement correctly describes the TQG main generator.
 - a. Negative ground, brushless 6-phase, self-rectifying.
 - b. Permanent magnet generator, output proportional to engine speed.
 - c. Positive ground, brushless 6-phase, self-rectifying.
4. What is the MEP 831A's dry weight in pounds?
 - a. 245 pounds
 - b. 286 pounds
 - c. 304 pounds
 - d. 325 pounds
5. Indicator lights are located on the ____
 - a. Fault indicator module.
 - b. Remote control panel assembly.
 - c. Skid base assembly, above the oil port.
 - d. All of the above.
6. Which of the following devices are located on the control panel?
 - a. REMOTE/LOCAL, PREHEAT, BATTLE SHORT.
 - b. PRIMARYIAUX, STARTIRUN/STOP, EMERGENCY STOP.
 - c. VOLTAGE ADJUST, PREHEAT, CIRCUIT INTERRUPTER.
 - d. REMOTE/LOCAL EMERGENCY STOP, STARTING AID.
7. The TQG's kilowatt capacity at 4000 feet 95 degrees F, is _____
 - a. 2.7 kilowatts.
 - b. 2.4 kilowatts.
 - c. 3.2 kilowatts.
 - d. 2.3 kilowatts.

8. The TQG battery is charged by a _____ when the engine is running.
- Battery voltage charger AI.
 - Battery charging power pack CI2.
 - Engine preheat contactor KI 3.
 - Battery charging regulator A9.
9. The TQG DC system is powered by
- A 24 VDC battery located in the host vehicle.
 - Two 30 VDC batteries mounted in the TQG enclosure.
 - A 24 VDC battery housed in the skid base.
 - A 12 VDC battery located below the control panel.
10. Engine cranking is initiated by placing the _____
- AUX/BAT switch in the BAT position.
 - START/PRIME - RUN/OFF switch in the PRIME - RUN position.
 - START/RUN/STOP switch in the START position.
 - START/PRIME/RUN switch in the PRIME position.
11. Pressing the EMERGENCY STOP switch opens the _____ and also disconnects power to the governor control.
- Battery charging regulator A8.
 - AC circuit interrupter K1.
 - DC circuit breaker CB2.
 - Fault lockout relay K12.
12. Placing the PREHEAT switch in the ON position signals the engine preheat contactor to energize the _____
- Engine oil glow plug GP2.
 - Generator air fan.
 - Engine fuel heat pump P2.
 - Air heaters.
13. Fault lockout relay KI2 will lockout power to the engine until the _____ is depressed.
- START/RUN/STOP switch SI.
 - PREHEAT switch 54.
 - FAULT RESET/LAMP TEST switch AZ
 - BATTLE SHORT INTERRUPTER switch A2.
14. The TQG is equipped with _____ test points, located on _____
- 5, terminal board TB3.
 - 12, terminal board TB4.
 - 3, fault indicator module.
 - 4, fault indicator module.

15. Two short circuit relays, _____ monitor the TOG for shorts during operation.
- K1 and K2, located in power converter AS.
 - K1 and K2, located in power server A6.
 - K6 and K8, located in power converter A8.
 - KS and K9, located on the input source panel.
16. Placing the _____ in the OPEN position immediately terminates current to load terminals.
- VOLTAGE ADJUST rheostat.
 - CIRCUIT INTERRUPTER switch.
 - PREHEAT switch.
 - CIRCUIT BREAKER switch.
17. The AC generator produces voltage by _____
- Rotating permanent magnets in the rotor past the flywheel shaft.
 - Rotating permanent magnets in the rotor past a stator winding.
 - Rotating stator brushes past a magnetized field.
 - Spinning three magnetized brushes past a rotating shaft on the engine.
18. Engine oil must be changed every _____
- 100 operating hours.
 - 150 operating hours.
 - 200 calendar hours.
 - 3 months or 300 hours, whichever comes first.
19. The fuel filter/water separator must be replaced every _____.
- 100 operating hours.
 - 300 operating hours.
 - 500 operating hours.
 - 600 operating hours.
20. Engine valve clearance must be adjusted every _____ hours in accordance with _____.
- 500, TM 9-2815-257-24.
 - 500, TM 9-6115-639-14.
 - 750, TM 9-6115-639-14.
 - 100, TM 9-2815-257-14.
21. The engine's mechanical governor is set for _____ maximum, and is controlled by _____.
- 2700 RPM, an automatic fuel injection pump.
 - 3200 RPM, an electrical actuator for variable speed operation.

- c. 3800 RPM, an electrical governing system for variable speed operation.
 - d. 3750 RPM, a fixed speed pneumatic actuator.
22. The engine is cooled by means of _____.
- a. A water cooler mounted at the top of the engine crankcase.
 - b. An oil cooler and electric fan mounted behind the control panel.
 - c. Three electric fans located in the skid base.
 - d. A flywheel fan which forces air over the cylinder fins and engine.
23. Which statement correctly describes engine horsepower?
- a. 13.2 HP at 5000 RPM.
 - b. 6.7HPat3600 RPM.
 - c. 6.9 HPat4600 RPM.
 - d. 15.4 HP at 3600 RPM.
24. The generator set is equipped with a — gallon fuel tank and can operate for at least _____ at full load.
- a. 10, 12 hours.
 - b. 8, 8 hours.
 - c. 4, 8 hours.
 - d. 4, 4 hours.
25. The generator set has an output voltage of _____.
- a. 120/208 three phase.
 - b. 120/240 three phase.
 - c. 240/416 three phase.
 - d. 120/240 single phase.

ANSWER SHEET

1. a. ___ b. ___ c. ___ d. ___
2. a. ___ b. ___ c. ___ d. ___
3. a. ___ b. ___ c. ___ d. ___
4. a. ___ b. ___ c. ___ d. ___
5. a. ___ b. ___ c. ___ d. ___
6. a. ___ b. ___ c. ___ d. ___
7. a. ___ b. ___ c. ___ d. ___
8. a. ___ b. ___ c. ___ d. ___
9. a. ___ b. ___ c. ___ d. ___
10. a. ___ b. ___ c. ___ d. ___
11. a. ___ b. ___ c. ___ d. ___
12. a. ___ b. ___ c. ___ d. ___
13. a. ___ b. ___ c. ___ d. ___
14. a. ___ b. ___ c. ___ d. ___
15. a. ___ b. ___ c. ___ d. ___
16. a. ___ b. ___ c. ___ d. ___
17. a. ___ b. ___ c. ___ d. ___
18. a. ___ b. ___ c. ___ d. ___
19. a. ___ b. ___ c. ___ d. ___
20. a. ___ b. ___ c. ___ d. ___
21. a. ___ b. ___ c. ___ d. ___
22. a. ___ b. ___ c. ___ d. ___
23. a. ___ b. ___ c. ___ d. ___
24. a. ___ b. ___ c. ___ d. ___
25. a. ___ b. ___ c. ___ d. ___