

Federal University of Technology, Minna
School of Science and Technology Education
Department of Industrial and Technology Education
SECOND SEMESTER EXAMINATION
2017/2018 SESSION

Course Title: - Auto Workshop Practice

Course Code: - AUT 521

INSTRUCTION: - ANSWER ANY FOUR (4) QUESTIONS ONLY

TIME ALLOWED: - 2HRS

1a. Write short note on the followings;

- Test light - Multimeter - Timing Belts and Tensioners - Dwell meter
- Exhaust gas analyzer - Tachnometer - Dial bore gauge

b. Explain the definition of digital volt meter (DVOM)?

c. State three reasons why measurement may be required in automobile repair work?

2a. What is an engine coolant sensor?

b. Why is the coolant sensor refer to as a master sensor?

c. Enumerate five ways in which a coolant sensor can affects engine operation?

3a. What is engine compression testing?

b. State two ways in which compression test can be conducted?

c. What is leak down or cylinder leakage test?

4a. If a cylinder has poor compression but minimal leakage, it usually has a valve train problem. State the four possible problems?

b. Briefly explain what is engine knocking?

c. What is a knocking sensor?

d. Enumerate five major causes of power loss in a vehicle?

5a. State the purpose of knocking sensor?

b. What is engine overhauled?

c. Define top overhaul and full overhaul?

d. If a gasket on a recently installed or rebuilt engine fails, it may be an "installer errors". Enumerate four of such errors?

6a. What is a blown head gasket?

b. Write briefly on the following as it's applied to automobile vehicle;

- New limits - Service limits

c. List ten various things that ought to be done while engine reconditioning?

d. Enumerate three precautions to be observed when using a micrometer screw gauge?