

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
School of Science and Technology Education
Department of Industrial and Technology Education
SECOND SEMESTER EXAMINATION, 2019/2020 SESSION

COURSE TITLE: - Auto-Workshop Practice

COURSE CODE: - AUT 521

INSTRUCTION: - Answer Any Four (4) Questions Only

TIME ALLOWED: - 2hrs

- 1a. What is cylinder honing
- b. List ten instruments use in testing modern automobile components

- 2a. What is engine testing or engine turn-up
- b. List six precautions to be observed when using a micrometer
- c. State four reasons why an injector needed to be tested

- 3a. Enumerate three types of measurement employed on any motor vehicle component
- b. Explain the following type of fits as applied to automobile;
 - Clearance fit
 - Interference fit
 - Transition fit

- 4a. Enumerate five conditions to be observed during engine re-conditioning
- b. With a neat sketch, give the following Vernier caliper readings;
7.38mm, 0.30mm, 5.25mm, and 10.90mm

- 5a. What measuring instruments should be used in a service station for the following motor vehicle components;
 - Measurement of tappet and valve clearance
 - Measurement of cylinder bore
 - Checking an axle shaft for straightness
 - Measurement of crankpin
 - Testing valve stem for straightness
- b. Outline five reasons why it is necessary to carryout maintenance and repair on motor vehicle

- 6a. What are scored cylinder bores
- b. Differentiate between cylinder boring and cylinder re-boring