

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION
FIRST SEMESTER EXAMINATION 2019/2020 SESSION

COURSE CODE: ITE314

COURSE TITLE: FUEL SUPPLY SYSTEM AND CARBURETION

TIME: 2HRS

INSTRUCTION: Attempt only Four (4) Questions

1. a, Clearly state the main function of an exhaust system.
b, Provide a well labelled diagram of an exhaust system.
c, Enumerate i, exhaust manifold ii, oxygen sensor iii, catalytic converter iv, muffler and v, resonator
2. a, Enumerate the following terms: i, flash point ii, oxidation inhibitors iii, anti-knock value and iv, ignition temperature.
b, Differentiate between side draught and up draught carburetors. Support your claims with the necessary diagrams.
c, Mention THREE between differences supercharger and turbocharger.
3. a, With the aid of a suitable sketch, explain the action of a bimetal thermostat type of fuel gauge
b, Generally, enumerate reasons why petrol tanks are baffled and treated with anti-corrosive finishes.
c, Outline THREE merits and TWO demerits of supercharging an engine.
4. a, With aid of a diagram explain the action of oil wetted type of air filter.
b, Identify FOUR factors that determine the carburation process.
c, List FIVE traits of a carburetor
5. a, Differentiate between gravity and autovac gravity fuel supply systems. Sketches are essential.
b, Enumerate FIVE properties of liquid fuel for use in an internal combustion engine.

Best @wishes