

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION
FIRST SEMESTER EXAMINATION 2018/2019 SESSION

COURSE CODE: ITE314

COURSE TITLE: FUEL SUPPLY SYSTEM AND CARBURETION

TIME: 2HRS

INSTRUCTION: Attempt only Four (4) Questions

1. a, Differentiate between gravity and autovac gravity fuel supply systems. Sketches are essential.
b, State FIVE functional requirements of a vehicle carburetor
2. a, Enumerate the following terms: i, carburetion ii, anti-nock iii, calorific value and iv, octane number.
b, Differentiate between down draught and semi draught carburetors. Support your claims with the necessary diagrams.
c, Mention THREE major causes of noisy electric fuel pump.
3. a, With the aid of a suitable sketch, explain the action of a balancing type of fuel gauge
b, Generally, enumerate reasons why petrol tanks are baffled and treated with anti-corrosive finishes.
c, Outline FIVE merits of petrol injection system.
4. a, With aid of a diagram explain the action of paper element type of air filter.
b, Identify FOUR factors that determine the carburation process.
c, What are the main constructional and operational differences between supercharger and turbocharger?
5. a, Enumerate FIVE additives that improves the quality of gasoline used in automotives.
b, With the aid of diagram, explain the working principle of a simple carburetor.

Best @wishes