

DEPARTMENT OF INDUSTRIAL AND TECHNOLOGY EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SECOND TERM EXAMINATION, 2019/2020 SESSION

Course Title: Electrical Power and Machines

Course Code: ITE 361

Time allowed: 2 Hrs

Instructions: Answer question One and any other three.

1. (a.) With the aid of a neatly and well labeled diagram, draw the arrangement of a Hydro-electric power plant.
(b.) List and explain any five categories of electricity consumers.
(c.) Differentiate with examples, between conventional and non-conventional methods of power generation.
(d.) State any five merits and five demerits of hydro-electric plants.
2. (a.) What are the reasons that made electrical energy to be considered as more superior to all other forms of energy?
(b.) Explain the main sources of energy used for generation of electricity.
3. (a.) Sketch neatly the arrangement of Nuclear power plant.
(b.) Discuss the merits and demerits of Nuclear plant as compared to other conventional power plants.
4. (a.) Define Diesel Electric power plant.
(b.) State five advantages and five disadvantages of Diesel electric power Plant.
5. Explain the following terms in relation to electrical power:
(a.) Open cycle MHD system
(b.) Closed cycle MHD system
(c.) Gas Turbine power plant
(d.) Steam power plant.