

Faculty of Computers & Artificial Intelligence2st Term (2019-2020) Final ExamNetworking and Mobile Technologies ProgramCourse Code: NBS131Level: 1stSubject: Electronics



Benha University Final Date: 7 / 6 /2020 Total Marks: Pass / Fail Examiner(s): Dr. Mustafa Abdul Salam

#### Research submission: From 31 May to 7 June 2020

#### a) <u>Write a research project in ONE of the following topics:</u>

## **Topic No. 1**

Diodes and its application (choose one application and describe it in details with simulation)

### **Topic No. 2**

Step Response and Natural Response for RL, and RC with applications (choose one

application and describe it in details with simulation)

## **Topic No. 3**

Electronic circuit transformation and simplification using different techniques (choose one technique and describe it in details with simulation)

## **Topic No. 4**

Kirchhoff's circuit laws and its applications (choose one application and describe it in details with simulation)

### **Topic No. 5**

Transistors types and applications (choose one application and describe it in details with simulation)

Notes: please, your research must contain the following elements:

- Introduction to selected topic
- Methods and application description and its importance
- Simulation results and circuits analysis (choose any simulator)
- References

# GOOD LUCK,

Examiner(s) Dr.Mustafa Abdul Salam Program Coordinator Dr. Mohamed Taha