



Faculty of Computers & Artificial Intelligence
2nd Term (2019-2020) Final Exam
Information Security and Digital Forensics Program
Course Code: FBS131 Level: 1st
Subject: 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) Write a research project in ONE of the following topics:

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. Ahmed Taha