Department of Electronics

Sri Y N College(Autonomous) – Narsapur
Andhra Pradesh, India

Certificate Course in
Electronics & Information Technology

SRI Y N COLLEGE (AUTONOMOUS)

(Affiliated to Adikavi Nannaya University)
Thrice Accredited by NAAC at 'A' Grade
Recognized by UGC as "College with Potential for Excellence"
II B.Sc.(MPE, MECs, MPCs, MSCs) Semester IV (w.e. f. 2019-20)
CERTIFICATE COURSE IN
ELECTRONICS & INFORMATION TECHNOLOGY (CEIT)

(30 Lectures)   **(Credits: 02)**

Module I   **(8 Lectures)**

Electronics Systems Technology Introduction, Basic Components, Power Supplies, Set Top box, DTH, LCD, LED, OLED,CCTV Technologies, Projectors

Module III   **(7 Lectures)**
Mobile Communication Technology:

Concept of Cell, SIM number, IMEI number, block diagram of mobile communication network, idea of GSM, CDMA, TDMA and FDMA technologies., block diagram of mobile phone ,2G, 3G, 4G & 5G Technologies. Mobile Processors Wireless Technologies in Mobile Phone

Module IV   **(7 Lectures)**
Artificial Intelligence (AI): Introduction, contributions of AI, Applications of AI, Research areas of AI (Expert Systems, Neural Networks, Robotics, Fuzzy Logic Systems, Natural Language Processing.)
Robotics: Overview of Robotics, Pattern recognition, Components of Robot, Robot Locomotion-Types of robot Locomotion, ,Types of Robot, Computer Vision-Tasks of Computer Vision, Applications of Robotics

Module IV   **(8 Lectures)**
Internet of Things: Overview, Hardware, Software, Protocols, Manufacturing Applications, Case Study.
Blockchain Technology: Introduction, Short History, Getting Started, The Block Structure, Forming a Chain, Proof of work, Transactions.

Reference Book:
Lecturer Material will be provided by department

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Narsapur-534275, AP, India
CERTIFICATE COURSE IN
ELECTRONICS & INFORMATION TECHNOLOGY (CEIT)

Duration: 2hrs   **Max Marks: 50**

SECTION-A

Answer ALL questions   **3X10M = 30M**

1. (a) Discuss about IoT Biometrics Domain

   (Or)

   (b) Discuss about Key Components of Robotics?

2. (a) Draw and Explain the block diagram of PA system?

   (Or)

   (b) Draw and Explain the block diagram of DTH System?

3. (a) Explain the Architecture of Mobile Phone with Block diagram?

   (Or)

   (b) Explain the architecture of Cellular Mobile Communication Network.?

SECTION-B

Answer any FOUR questions   **4X5M = 20M**

4 Explain briefly about Set-Top Box?

5 What is OLED Technology? What are the differences LED TV & OLED TV

6 Explain the differences between LCD & LED Displays?

7 Write a short note on SIM Number?

8 Explain the Concept of Cellular System?

9 Write a short note on IMEI Number?

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