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(Accredited by National Assessment & Accreditation Council (NAAC) with 'A' grade)



Department of Electronics & Communication Engg.

Continuous Internal Evaluation – III

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|--|------------|---------------|
| Course Name : EMBEDDED SYSTEM AND IOT APPLICATIONS | Date : | 16-08-2021 |
| Course Code : 18EC6DCEAI | Day : | Monday |
| Semester : 6 | Timings : | 3.00pm-4.30pm |
| Max Marks : 50 M | Duration : | 1&1/2 hours |

| No. | | Question Description | Mks | CO & LEVELS |
|-----|-----|---|-----|-------------|
| Q1 | (a) | What is the program counter value when the board turns on? i) 0x00000 ii) 0xFFFFF iii) Where the previous program ends iv) At the location where we write the code | 1 | |
| | (b) | What is another name of the tactile sensor? i) Weight sensor ii) Imaging sensor iii) Proximity sensor iv) Touch sensor | 1 | |
| | (c) | Who invented the term internet of things? i) Bill gates ii) Kevin Ashton iii) McDonald iv) Steve jobs | 1 | |
| | (d) | Which one of the following is not an IoT device? i) Amazon echo voice controller ii) Google Home iii) Nest Smoke Alarm iv) None of the above | 1 | |
| | (e) | The process of building iot hardware and devices enhanced with smart sensors and embedded system using many of the shelf components like sensors , circuits and microcontrollers is called i) prototyping ii) casting iii) casting iv) protocol typing | 1 | |
| | (f) | is an open source electronic platform base on easy to use hardware and software. i) servo motor ii) Arduino iii) CPU iv) GPU | 1 | |
| | (g) | Fog computing can be perceived in _____ and _____ (i) Big data and Cloud systems (ii) Big data and IoT (iii) Cloud systems and IoT (iv) Big data, Cloud systems and IoT | 1 | |
| | (h) | _____ is a community that is working together to establish an IoT architecture. i) Eclipse IoT ii) Red Hat iii) Intercloud iv) Bot 2 Bot | 1 | |
| | (i) | What is the role of Gateway in smart grid architecture of IoT? i) Store data ii) Manage data iii) Collect data iv) Security | 1 | |
| | (j) | Which environment does Global Sensor Network work on? i) C++ ii) JAVA iii) HTML iv) C | 1 | |
| Q2 | a | Discuss IOT benefits for an organisation in the field of Education. | 4 | CO4 L2 |
| | b | List and explain commonly used controllers for IOT application. | 6 | CO5 L3 |
| Q3 | c | Explain briefly the Connectivity and I/O interfaces of IOT hardware platforms. | 10 | CO6 L2 |
| Q4 | a | Explain the issues pertaining in managing IOT systems | 10 | CO3 L2 |
| OR | | | | |
| Q5 | b | Illustrate IOT life cycle with suitable examples. | 10 | CO1 L2 |
| Q6 | a | Discuss IOT benefits in the field of industry. | 10 | CO4 |

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|----|---|--|----|-----------|
| | | | | L3 |
| | | OR | | |
| Q7 | b | List and explain IOT hardware development platforms and its applications | 10 | CO4 L2 |