**University of Mumbai**

**Examination 2020 under cluster 5(APSIT)**

**Program: BE Information Technology**

**Curriculum Scheme: Revised 2016**

**Examination: Final year Semester VIII**

**Course Code:ITC802 and Course Name: Internet of Everything**

**MODULE NO. 1**

1. Which of the following identifier refers to the entities like physical objects in the IOT application?

1. Things identifier
2. Application Identifier
3. User Identifier
4. Communication Identifier

2. The sensitivity of thermistor is

1. High
2. Low
3. Moderate
4. Very low

3. An Analog to Digital Convertor(ADC) is used in IoT applications because

1. Sensors generate analog signal and microcontroller is digital
2. Analog computation is faster than digital
3. Analog signal consume less battery power than digital
4. Digital signal is compact than Analog

4. Which challenge comes under securing the information?

1. Signaling
2. Security
3. Presence detection
4. Power consumption

5. Which is considered to be a object in IOT?

1. Laptop
2. CPU
3. Smartphone
4. TV

6. The output of thermocouple sensor is

1. Voltage
2. Resistance
3. Capacitance
4. Inductance

7. Which of the following parameter cannot be detected by bio-sensors?

1. Glucose level
2. Hormonal level
3. Antibodies
4. Body pain

8. Which sensor can detect nearby objects?

1. Proximity sensor
2. Humidity sensor
3. Touch sensor
4. Pressure sensor

9. Things connect with social element through \_\_\_\_\_\_\_\_.

1. connectivity
2. modularity
3. communicating
4. sensing

10. How to connect things with internet

1. Sensor
2. RAM
3. CPU
4. Connecting wire

11. Which of the following series sensors is used in gas detection?

1. MQ
2. GQ
3. DQ
4. EQ

12. A network of physical objects or things embedded with electronics or software is called \_\_\_\_\_\_ .

1. AI
2. ML
3. IOT
4. Internet

**MODULE NO. 2**

1. The 433MHz operating frequency of Active RFID tags is chosen because of

1. More efficiency
2. Shorter Wavelength
3. Longer wavelength
4. More reliability

2. What is the typical use of passive UHF technology?

1. Animal tracking
2. Supply chain management
3. Toll collection
4. Temperature tracking

3. Semi-passive tags belong to which type of class?

1. Class 1
2. Class 2
3. Class 3
4. Class 4

4. Which of the following statement is not the feature of RFID?

1. It is software used for tracking people
2. It is a set of technologies that enables tracking and monitoring activities
3. It uses the principle of Radio wave transmission
4. It do not require line-of-sight

5. RFID chips bring even more radiation into the environment.

1. Readers/scanners for RFID chips transmit normal radio waves
2. Yes it radiates harmful waves into environment
3. reader and tags can be at any distance
4. It should not prefer to use.

6. A wireless network provides immediate connection anywhere in the wireless range of its \_\_\_\_\_\_\_\_\_\_.

1. GATEWAYS
2. ROUTERS
3. ACCESS POINT
4. BRIDGES

7. Which of the following is not RFID application?

1. Logistics and supply chain,
2. Finger print attendance
3. Production, monitoring and maintenance and Product safety,
4. Quality and information

8. MQTT Protocols works on principle of

1. M2M
2. Publish and Subscribe
3. Request and response
4. Get and Put

9. Which of the following is not involved in working of IoT?

1. Server
2. RFID
3. Nano technology
4. Sensor

|  |
| --- |
| 10. RFID is preferred over Barcode technology because of \_\_\_\_\_\_\_\_ characteristic. |
| 1. Reliability |
| 1. Accuracy |
| 1. Non-line-of sight |
| 1. Selectivity |

11. Which of the following statements about radio frequency identification is not true?

1. Companies may be required to upgrade hardware and software to accommodate the massive amounts data that are being produced by RFID systems.
2. RFID systems use tiny tags with embedded microchips containing data about an item and its location
3. RFID systems provide a powerful technology for tracking the movement of goods throughout the supply chain.
4. RFID systems transmit radio signals over long distances.

12. Data corruption is which type of issue in RFID

1. Privacy
2. Technological
3. Other
4. Security

13. What do you mean by UPC

1. Universal Process Code
2. Universal Product Code
3. Universal Parameter Code
4. Universal Pro Code

14. What is the maximum efficiency of Pure ALOHA protocol for RFID?

1. 15%
2. 22.40%
3. 18.40%
4. 26.30%

15. Which of the following is technological issue in RFID?

1. Tag Collision
2. Data collision
3. Data redundancy
4. Data integrity

16. Reader collision is which type of issue

1. Privacy
2. Technological
3. Other
4. Security

**MODULE NO. 3**

1. Which of the following is NOT an application of RFID.

1. Tracking patients in hospitals
2. Managing the libraries
3. Tracing of prisoners in jail
4. Traditional farming

2. The anti-collision protocols are based on

1. TDMA
2. CDMA
3. FDMA
4. SDMA

3. The design of internet protocol suits adhere to the \_\_\_\_\_\_\_\_\_\_\_\_ principle.

1. Connection oriented
2. End-to end
3. Data security
4. Reliability

4. Which type of RFID tags are mainly used in logistic applications.

1. Semi-Active
2. Active
3. Semi-Passive
4. Passive

5. Which of the FCC's RF bands operates in the frequency range of 2.4 GHz to 2.4835 GHz?

1. ISM
2. RFID
3. UNII
4. SOCO

6. Hardware design stages influencing IoT project costs

1. Only Analysis
2. Only modelling
3. Only Prototyping
4. Analysis +modelling +Prototyping +Testing

7. Which of these are offered by IPV6 over IPV4?

1. Efficient, Improved QoS, Support for IP Telephony
2. not Improved QoS
3. no Support for IP Telephony
4. capacity

8. A reader may have number of antennas that are responsible for sending and receiving radio waves

1. one
2. two
3. three
4. many

9. IIoT stands for \_\_\_\_\_\_\_\_\_\_

1. Industrial Internet of Things
2. Internet Internet of Things
3. Intelligence Internet of Things
4. Internal Internet of Things

10. Which is Multi access method type?

1. SDMA
2. TDA
3. TFWA
4. FWDA

11. Which is not a following method of ALOHA?

1. Slotted Aloha
2. ALOHA
3. Pure aloha
4. Frame aloha

12. What is the application of Consumer in RFID?

1. Wall mart
2. E-business
3. E-Commerce
4. other

13. Which of the different types of antena used

1. Oval
2. Patch
3. Circular
4. Other

14. Reader module used in RFID

1. RFID Scanner
2. RFID Reader
3. RFID sensor
4. RFID identifier

15. End to end operation used in

1. Weather monitoring
2. Smart city
3. Warehouse management
4. Smart farming

16. Mutual Authentication done in

1. Smart Payment
2. Smart city
3. Warehouse management
4. Smart farming

**MODULE NO. 4**

1. The frequency range of 6LoWPAN is

1. 2.4GHz
2. 2.8MHz
3. 2.4MHz
4. 2.8GHz

2. The assigned port number for MQTT without SSL is

1. 1880
2. 1884
3. 1882
4. 1883

3. Which of the following could be an IoT device?

1. Tubelight
2. COAP
3. TCP/IP
4. MQTT

4. Which of the following is not light weight protocol?

1. HTTP
2. MQTT
3. COAP
4. TCP/IP

5. CoAP protocol is present at which layer.

1. service layer
2. control layer
3. transport layer
4. application layer

6. Which of the following networks is interacting under IoT?

1. Heterogeneous only
2. Homogeneous Only
3. Hybrid
4. Point to point

7. \_\_\_\_\_\_\_\_ are designed to protect data and servers.

1. Physical walls
2. Logical firewalls
3. Both Physical and logical
4. Neither physical nor logical

8. In smart warehousing system, sensors and actuators are connected through

1. Web Server
2. Administator
3. Smart Gateways
4. Switch

9. What IoT collects?

1. Human generated data
2. Sensor data
3. Machine generated data
4. Device data

10. Which of the following is NOT an application of Wireless sensor network?

1. Traditional Farming
2. Smart City
3. Home Automation
4. Military Survilleance

11. CoAP working on which messaging mode.

1. Piggyback
2. individual
3. combine
4. hybrid

12. Which is following COAP feature?

1. Message Passing
2. Object passing
3. Message Exchange
4. Low bit rate

13. REST is \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Connected
2. Connection oriented
3. Connection less
4. Stateless

14. REST API characteristic is

1. Code on demand
2. RETful API
3. RESTful API
4. Piggyback

15. MQTT is \_\_\_\_\_\_\_\_\_ protocol.

1. Machine to Machine
2. Internet of Things
3. Machine to Machine and Internet of Things
4. Machine Things

16. LTP stands for \_\_\_\_\_\_\_\_\_

1. Lean Transducer Protocol
2. Lean Transport Protocol
3. Layer Transport Protocol
4. Layer Transducer Protocol

**MODULE NO. 5**

1. Link layer handover occurs because mobile node must establish a \_\_\_\_\_\_\_ to a new access point.

1. Physical connection
2. Virtual connection
3. Internet Connection
4. Indirect Connection

2. The physical layer of HART operates in which of the following frequency band?

1. 800-900 MHz
2. 2.4 GHz
3. 800 MHz
4. 900 MHz

3. It contains \_\_\_\_\_\_\_\_\_\_ design based templates for topography.

1. SMTP
2. HTML
3. MQTP
4. CoAP

4. Which protocol is used to link all the devices in the IoT?

1. TCP/IP
2. Network
3. UDP
4. HTTP

5. \_\_\_\_\_\_\_\_ enables seamless integration of LoWPAN devices with internet leveraging.

1. IETF 6LoWPAN
2. IEFT CoAP
3. RFID/NFC
4. IEEE 802.15.4.LoWPAN

 6. \_\_\_\_\_\_\_\_ tags, devices, smart phones useful in identification.

1. IETF 6LoWPAN
2. IEFT CoAP
3. RFID/NFC
4. IEEE 802.15.4.LoWPAN

7. 6LoWPAN Adaption layer contains?

1. Header compression
2. Fragmentation
3. Layer 2 forwarding
4. Header compression, Fragmentation, and Layer 2 forwarding

8. \_\_\_\_\_\_\_\_ resources are identified by Uniform Resource Identifiers.

1. CoAP
2. HMTP
3. MQTT
4. TCP/IP

 9. WSN stands for \_\_\_\_\_\_\_\_\_\_

1. Wired Sensor Network
2. Wireless Sensor Network
3. Wired Service Network
4. Wireless Service Network

10. An IoT \_\_\_\_\_\_\_\_ center is envisaged as an important part of the generic IoT platform to unify the organization.

1. Individual Information
2. Individual Integration
3. Integrated Information
4. Individual and Integrated Information

11. The core element is operated by \_\_\_\_\_\_\_\_

1. PaaS
2. IoT service Provider
3. SaaS
4. IaaS

12. Robust mobility enables communication based on

1. MPLS
2. DTLS
3. SLS
4. CSLP

13. IOT encapsulate which component for modeling and simulating

1. interface for mobile nodes
2. global class
3. local class
4. internet class

14. Which platform support in IOT for researcher

1. Net Sim
2. GateSim
3. FlatSim
4. NodeSim

15. Which are the different types of localization in IOT

1. Actuator based
2. Sensor based
3. Tag based
4. Internet based

16. Device mobility is supported by

1. HTTP
2. SMTP
3. FTP
4. Security Protocol

17. In Geography based unicast address Interface Id used how many bit

1. 16
2. 8
3. 64
4. 32

18. Bootstrap is used for \_\_\_\_\_\_\_\_\_\_

1. Web applications
2. IoT
3. Bigdata
4. Data

19. The \_\_\_\_\_\_\_\_\_ field determines the lifetime of IPv6 datagram

1. TTL
2. Next header
3. Hop limit
4. Type of traffic

20. The full form of TDOA in localization

1. Time division of arrival
2. Time difference of arrival
3. Time done of arrival
4. Time determined of arrival

**MODULE NO. 6**

1. Which of the following is NOT the feature of Big Data Analytics?

1. Open-Source
2. Data generation
3. Data spreading
4. Data processing

2. Which of the following is structured data?

1. Audio signal
2. Weather data
3. E-mails
4. Employee record

3. Apache hadoop is\_\_\_\_\_\_\_.

1. Real time processing
2. Batch processing
3. Serial processing
4. Parallel Processing

4. When a backup node is used in a cluster there is no need of \_\_\_\_\_\_.

1. Check point node
2. Secondary name node
3. Secondary data node
4. Rack awareness

5. Which one is not a big data feature?

1. Velocity
2. Viscosity
3. Volume
4. Variety

6. Apache Spark is\_\_\_\_\_\_\_\_\_\_\_.

1. Open source Data processing engine
2. Close source data processing engine
3. Parallel data processing
4. Batch Data processing

7. Hadoop is a framework that works with a variety of related tools. Common cohorts include\_\_\_\_\_\_\_\_\_\_\_\_.

1. MapReduce, Hive and HBase
2. MapReduce, MySQL and Google Apps
3. MapReduce, Hummer and Iguana
4. MapReduce, Heron and Trumpet

8. \_\_\_\_\_\_\_\_ is a distributed graph processing framework on top of Spark.

1. Mllib
2. Spark Streaming
3. GraphX
4. Spark SQL

9. \_\_\_\_\_\_\_\_\_\_\_ is a Java Web application used to schedule Apache Hadoop jobs.

1. Impala
2. Oozie
3. Mahout
4. HIVE

10. Which of the following is one of the possible state for a workflow jobs?

1. PREP
2. START
3. RESUME
4. END

11. \_\_\_\_\_\_\_\_ nodes that control the start and end of the workflow and workflow job execution path.

1. Action
2. Control
3. Data
4. SubDomain

12. Any people use Kafka as a replacement for a \_\_\_\_\_\_\_\_\_\_\_ solution.

1. Compaction
2. Log aggregation
3. Collection
4. Distribution

13. How many types of nodes are present in Storm cluster?

1. 1
2. 2
3. 4
4. 3

14. Apache Storm added open source, stream data processing to \_\_\_\_\_\_\_\_\_ Data Platform.

1. Hortonworks
2. Cloudera
3. Local Cloudera
4. MapR

15. For Apache \_\_\_\_\_\_\_\_\_\_ users, Storm utilizes the same ODBC interface.

1. cTakes
2. Pig
3. Hive
4. Oozie

16. The simplest way to do authentication is using \_\_\_\_\_\_\_\_\_ command of Kerberos.

1. auth
2. kinit
3. authorize
4. Aauthenticate

17. HiveServer2 introduced in Hive 0.11 has a new CLI called \_\_\_\_\_\_\_\_\_\_.

1. BeeLine
2. SqlLine
3. HiveLine
4. CLilLine

18. In \_\_\_\_\_\_ mode HiveServer2 only accepts valid Thrift calls.

1. HTTP
2. Embedded
3. Remote
4. Interactive

19.\_\_\_\_\_\_\_\_\_\_ is a cluster manager that provides resource sharing and isolation across cluster applications.

1. Merlin
2. Mesos
3. Max
4. Merge

20. \_\_\_\_\_\_\_\_\_\_ is OData implementation in Java.

1. Bigred
2. Olingo
3. Nuvem
4. Onami