

University of Mumbai

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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?
 - a) Things identifier
 - b) Application Identifier
 - c) User Identifier
 - d) Communication Identifier
2. The sensitivity of thermistor is
 - a) High
 - b) Low
 - c) Moderate
 - d) Very low
3. An Analog to Digital Convertor(ADC) is used in IoT applications because
 - a) Sensors generate analog signal and microcontroller is digital
 - b) Analog computation is faster than digital
 - c) Analog signal consume less battery power than digital
 - d) Digital signal is compact than Analog
4. Which challenge comes under securing the information?
 - a) Signaling
 - b) Security
 - c) Presence detection
 - d) Power consumption
5. Which is considered to be a object in IOT?

- a) Laptop
- b) CPU
- c) Smartphone
- d) TV

6. The output of thermocouple sensor is

- a) Voltage
- b) Resistance
- c) Capacitance
- d) Inductance

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

- a) Glucose level
- b) Hormonal level
- c) Antibodies
- d) Body pain

8. Which sensor can detect nearby objects?

- a) Proximity sensor
- b) Humidity sensor
- c) Touch sensor
- d) Pressure sensor

9. Things connect with social element through _____.

- a) connectivity
- b) modularity
- c) communicating
- d) sensing

10. How to connect things with internet

- a) Sensor
- b) RAM
- c) CPU
- d) Connecting wire

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

- a) MQ
- b) GQ
- c) DQ
- d) EQ

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

- a) AI
- b) ML
- c) IOT
- d) Internet

MODULE NO. 2

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

- a) More efficiency
- b) Shorter Wavelength
- c) Longer wavelength
- d) More reliability

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

- a) Animal tracking
- b) Supply chain management
- c) Toll collection
- d) Temperature tracking

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

- a) Class 1
- b) Class 2
- c) Class 3
- d) Class 4

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

- a) It is software used for tracking people
- b) It is a set of technologies that enables tracking and monitoring activities
- c) It uses the principle of Radio wave transmission
- d) It do not require line-of-sight

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

- a) Readers/scanners for RFID chips transmit normal radio waves
- b) Yes it radiates harmful waves into environment
- c) reader and tags can be at any distance
- d) It should not prefer to use.

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

- a) GATEWAYS
- b) ROUTERS
- c) ACCESS POINT
- d) BRIDGES

7. Which of the following is not RFID application?

- a) Logistics and supply chain,
- b) Finger print attendance
- c) Production, monitoring and maintenance and Product safety,
- d) Quality and information

8. MQTT Protocols works on principle of

- a) M2M
- b) Publish and Subscribe
- c) Request and response
- d) Get and Put

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

- a) Server
- b) RFID
- c) Nano technology
- d) Sensor

10. RFID is preferred over Barcode technology because of _____ characteristic.

- a) Reliability
- b) Accuracy
- c) Non-line-of sight
- d) Selectivity

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

- a) Companies may be required to upgrade hardware and software to accommodate the massive amounts data that are being produced by RFID systems.

- b) RFID systems use tiny tags with embedded microchips containing data about an item and its location
- c) RFID systems provide a powerful technology for tracking the movement of goods throughout the supply chain.
- d) RFID systems transmit radio signals over long distances.

12. Data corruption is which type of issue in RFID

- a) Privacy
- b) Technological
- c) Other
- d) Security

13. What do you mean by UPC

- a) Universal Process Code
- b) Universal Product Code
- c) Universal Parameter Code
- d) Universal Pro Code

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

- a) 15%
- b) 22.40%
- c) 18.40%
- d) 26.30%

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

- a) Tag Collision
- b) Data collision
- c) Data redundancy
- d) Data integrity

16. Reader collision is which type of issue

- a) Privacy
- b) Technological
- c) Other
- d) Security

MODULE NO. 3

1. Which of the following is NOT an application of RFID.
 - a) Tracking patients in hospitals
 - b) Managing the libraries
 - c) Tracing of prisoners in jail
 - d) Traditional farming

2. The anti-collision protocols are based on
 - a) TDMA
 - b) CDMA
 - c) FDMA
 - d) SDMA

3. The design of internet protocol suits adhere to the _____ principle.
 - a) Connection oriented
 - b) End-to end
 - c) Data security
 - d) Reliability

4. Which type of RFID tags are mainly used in logistic applications.
 - a) Semi-Active
 - b) Active
 - c) Semi-Passive
 - d) Passive

5. Which of the FCC's RF bands operates in the frequency range of 2.4 GHz to 2.4835 GHz?
 - a) ISM
 - b) RFID
 - c) UNII
 - d) SOCO

6. Hardware design stages influencing IoT project costs
 - a) Only Analysis
 - b) Only modelling

- c) Only Prototyping
- d) Analysis +modelling +Prototyping +Testing

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

- a) Efficient, Improved QoS, Support for IP Telephony
- b) not Improved QoS
- c) no Support for IP Telephony
- d) capacity

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

- a) one
- b) two
- c) three
- d) many

9. IIoT stands for _____

- a) Industrial Internet of Things
- b) Internet Internet of Things
- c) Intelligence Internet of Things
- d) Internal Internet of Things

10. Which is Multi access method type?

- a) SDMA
- b) TDA
- c) TFWA
- d) FWDA

11. Which is not a following method of ALOHA?

- a) Slotted Aloha
- b) ALOHA
- c) Pure aloha
- d) Frame aloha

12. What is the application of Consumer in RFID?

- a) Wall mart
- b) E-business
- c) E-Commerce
- d) other

13. Which of the different types of antenna used

- a) Oval
- b) Patch
- c) Circular
- d) Other

14. Reader module used in RFID

- a) RFID Scanner
- b) RFID Reader
- c) RFID sensor
- d) RFID identifier

15. End to end operation used in

- a) Weather monitoring
- b) Smart city
- c) Warehouse management
- d) Smart farming

16. Mutual Authentication done in

- a) Smart Payment
- b) Smart city
- c) Warehouse management
- d) Smart farming

MODULE NO. 4

1. The frequency range of 6LoWPAN is

- a) 2.4GHz
- b) 2.8MHz
- c) 2.4MHz
- d) 2.8GHz

2. The assigned port number for MQTT without SSL is

- a) 1880

- b) 1884
- c) 1882
- d) 1883

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

- a) Tubelight
- b) COAP
- c) TCP/IP
- d) MQTT

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

- a) HTTP
- b) MQTT
- c) COAP
- d) TCP/IP

5. CoAP protocol is present at which layer.

- a) service layer
- b) control layer
- c) transport layer
- d) application layer

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

- a) Heterogeneous only
- b) Homogeneous Only
- c) Hybrid
- d) Point to point

7. _____ are designed to protect data and servers.

- a) Physical walls
- b) Logical firewalls
- c) Both Physical and logical
- d) Neither physical nor logical

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

- a) Web Server
- b) Administator
- c) Smart Gateways
- d) Switch

9. What IoT collects?

- a) Human generated data
- b) Sensor data
- c) Machine generated data
- d) Device data

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

- a) Traditional Farming
- b) Smart City
- c) Home Automation
- d) Military Surveillance

11. CoAP working on which messaging mode.

- a) Piggyback
- b) individual
- c) combine
- d) hybrid

12. Which is following COAP feature?

- a) Message Passing
- b) Object passing
- c) Message Exchange
- d) Low bit rate

13. REST is _____

- a) Connected
- b) Connection oriented
- c) Connection less
- d) Stateless

14. REST API characteristic is

- a) Code on demand
- b) RETful API
- c) RESTful API
- d) Piggyback

15. MQTT is _____ protocol.

- a) Machine to Machine
- b) Internet of Things
- c) Machine to Machine and Internet of Things
- d) Machine Things

16. LTP stands for _____

- a) Lean Transducer Protocol
- b) Lean Transport Protocol
- c) Layer Transport Protocol
- d) Layer Transducer Protocol

MODULE NO. 5

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

- a) Physical connection
- b) Virtual connection
- c) Internet Connection
- d) Indirect Connection

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

- a) 800-900 MHz
- b) 2.4 GHz
- c) 800 MHz
- d) 900 MHz

3. It contains _____ design based templates for topography.

- a) SMTP
- b) HTML
- c) MQTP
- d) CoAP

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

- a) TCP/IP
- b) Network
- c) UDP
- d) HTTP

5. _____ enables seamless integration of LoWPAN devices with internet leveraging.

- a) IETF 6LoWPAN
- b) IEFT CoAP
- c) RFID/NFC

- d) IEEE 802.15.4.LoWPAN
6. _____ tags, devices, smart phones useful in identification.
- a) IETF 6LoWPAN
 - b) IEFT CoAP
 - c) RFID/NFC
 - d) IEEE 802.15.4.LoWPAN
7. 6LoWPAN Adaption layer contains?
- a) Header compression
 - b) Fragmentation
 - c) Layer 2 forwarding
 - d) Header compression, Fragmentation, and Layer 2 forwarding
8. _____ resources are identified by Uniform Resource Identifiers.
- a) CoAP
 - b) HMTP
 - c) MQTT
 - d) TCP/IP
9. WSN stands for _____
- a) Wired Sensor Network
 - b) Wireless Sensor Network
 - c) Wired Service Network
 - d) Wireless Service Network
10. An IoT _____ center is envisaged as an important part of the generic IoT platform to unify the organization.
- a) Individual Information
 - b) Individual Integration
 - c) Integrated Information
 - d) Individual and Integrated Information
11. The core element is operated by _____
- a) PaaS
 - b) IoT service Provider
 - c) SaaS
 - d) IaaS
12. Robust mobility enables communication based on
- a) MPLS
 - b) DTLS

- c) SLS
- d) CSLP

13. IOT encapsulate which component for modeling and simulating

- a) interface for mobile nodes
- b) global class
- c) local class
- d) internet class

14. Which platform support in IOT for researcher

- a) Net Sim
- b) GateSim
- c) FlatSim
- d) NodeSim

15. Which are the different types of localization in IOT

- a) Actuator based
- b) Sensor based
- c) Tag based
- d) Internet based

16. Device mobility is supported by

- a) HTTP
- b) SMTP
- c) FTP
- d) Security Protocol

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

- a) 16
- b) 8
- c) 64
- d) 32

18. Bootstrap is used for _____

- a) Web applications
- b) IoT
- c) Bigdata
- d) Data

19. The _____ field determines the lifetime of IPv6 datagram

- a) TTL
- b) Next header

- c) Hop limit
- d) Type of traffic

20. The full form of TDOA in localization

- a) Time division of arrival
- b) Time difference of arrival
- c) Time done of arrival
- d) Time determined of arrival

MODULE NO. 6

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

- a) Open-Source
- b) Data generation
- c) Data spreading
- d) Data processing

2. Which of the following is structured data?

- a) Audio signal
- b) Weather data
- c) E-mails
- d) Employee record

3. Apache hadoop is_____.

- a) Real time processing
- b) Batch processing
- c) Serial processing
- d) Parallel Processing

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

- a) Check point node
- b) Secondary name node
- c) Secondary data node
- d) Rack awareness

5. Which one is not a big data feature?

- a) Velocity
- b) Viscosity
- c) Volume
- d) Variety

6. Apache Spark is _____.

- a) Open source Data processing engine
- b) Close source data processing engine
- c) Parallel data processing
- d) Batch Data processing

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

- a) MapReduce, Hive and HBase
- b) MapReduce, MySQL and Google Apps
- c) MapReduce, Hummer and Iguana
- d) MapReduce, Heron and Trumpet

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

- a) Mlib
- b) Spark Streaming
- c) GraphX
- d) Spark SQL

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

- a) Impala
- b) Oozie
- c) Mahout
- d) HIVE

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

- a) PREP
- b) START
- c) RESUME
- d) END

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

- a) Action
- b) Control
- c) Data
- d) SubDomain

12. Any people use Kafka as a replacement for a _____ solution.

- a) Compaction
- b) Log aggregation
- c) Collection
- d) Distribution

13. How many types of nodes are present in Storm cluster?
- a) 1
 - b) 2
 - c) 4
 - d) 3
14. Apache Storm added open source, stream data processing to _____ Data Platform.
- a) Hortonworks
 - b) Cloudera
 - c) Local Cloudera
 - d) MapR
15. For Apache _____ users, Storm utilizes the same ODBC interface.
- a) cTakes
 - b) Pig
 - c) Hive
 - d) Oozie
16. The simplest way to do authentication is using _____ command of Kerberos.
- a) auth
 - b) kinit
 - c) authorize
 - d) Aauthenticate
17. HiveServer2 introduced in Hive 0.11 has a new CLI called _____.
- a) BeeLine
 - b) SqlLine
 - c) HiveLine
 - d) CLilLine
18. In _____ mode HiveServer2 only accepts valid Thrift calls.
- a) HTTP
 - b) Embedded
 - c) Remote
 - d) Interactive
19. _____ is a cluster manager that provides resource sharing and isolation across cluster applications.
- a) Merlin
 - b) Mesos
 - c) Max
 - d) Merge

20. _____ is OData implementation in Java.

- a) Bigred
- b) Olingo
- c) Nuvem
- d) Onami