

Program: BE Information Technology
Curriculum Scheme: Revised 2016
Examination: Final Year Semester VIII
Course Code: ITC802 and Course Name: Internet of Everything
Time: 1 hour
Max Marks:50

1	There are companies that often refer to IoT as IoE which means -
(a)	Internet of Ethernet
(b)	Internet of Elegance
(c)	Internet of Enterprise
(d)	Internet of Everything
2	_____ supports low energy radio operation.
(a)	IETF 6LoWPAN
(b)	IEFT CoAP
(c)	RFID/NFC
(d)	Bluetooth
3	Which of the following is not involved in working of IoT?
(a)	RFID Tag
(b)	Sensor
(c)	Nano tech
(d)	Server
4	_____ enables an open application layer for constrained nodes.
(a)	IETF 6LoWPAN
(b)	IEFT CoAP
(c)	RFID/NFC
(d)	IEEE 802.15.4.LoWPAN
5	What could allow a refrigerator to place a replacement order for an item contained within it?
(a)	digital network
(b)	generator
(c)	smart phone
(d)	sensor
6	_____ is developed to identify physical objects, places and digital information
(a)	RFID
(b)	BAR Code
(c)	ucode
(d)	QR Code
7	The major advantage of an active RFID tag is
(a)	It can be read at distances of one hundred feet or more
(b)	It is very cheap
(c)	It is very small
(d)	It is very lightweight
8	RFID tags commonly use a method of communication called as
(a)	Scattering
(b)	Back communication
(c)	Forward scatter
(d)	Back scatter
9	RFID systems functions via _____ even without _____.
(a)	radio waves, direct line-of-sight
(b)	radio waves, indirect line-of-sight
(c)	tidal waves, direct line-of-sight
(d)	FM radio, indirect line-of-sight
10	Can RFID tags be used to tag metallic objects?
(a)	No, RFID tags cannot be used at all
(b)	Yes, all kinds of RFID tags can be used for this.
(c)	Yes, special kinds of tags called as metal mount tags can be used
(d)	Cannot Say for sure
11	A good RFID reader can detect
(a)	Only one tag in one minute
(b)	Only one tag in two seconds
(c)	Seven tags in one minute
(d)	Many tags in a second
12	The EPC in RFID terminology refers to
(a)	Electromagnetic Process Control
(b)	Electromagnetic Process Coding
(c)	Electromagnetic Point Code
(d)	Electronic Product Code
13	Which of the following is capable of storing information into tag or altering the state of tag?
(a)	Transducer
(b)	Tag
(c)	Reader
(d)	Middleware
14	Which type of RFID technology has the slowest data transfer rate?
(a)	Microwave
(b)	LF
(c)	UHF
(d)	ULF
15	Technically the _____ consists of the RFID electronics with the RFID chip and the transmit circuit, an aluminum antenna loop roughly the size of a/an _____.
(a)	Smart tags, Credit card
(b)	Books, Credit card
(c)	Mobile Phone, A4 Size paper
(d)	Smart tags, Compact Disk
16	RFID _____ consists of a chip and an antenna
(a)	transformer
(b)	trans-lines
(c)	transfer
(d)	transponder
17	In semi-passive RFID tag, _____ is powered while in semi-active RFID, _____ is powered.
(a)	Micro-chip, transmission part

(b)	Transmission part, micro-chip
(c)	Transmission part, reception part
(d)	reception, Transmission
18	_____ are simplest version of RFID tags which do not contain their own power source, such as a battery, and cannot initiate communication with the reader.
(a)	Passive Tags
(b)	Active tags
(c)	Extra Active tags
(d)	Super Active tags
19	Ultra-High Frequency Systems operate between _____ and microwave frequencies between
(a)	400 and 1000 GHz, 2.4 and 2.5 MHz
(b)	2.4 and 2.5 GHz, 400 and 1000 MHz
(c)	2.4 and 2.5 THz, 400 and 1000 GHz
(d)	400 and 1000 MHz, 2.4 and 2.5 GHz
20	Real-time handling of incoming data from the RFID readers and Interfacing with multiple applications is handled by
(a)	RFID middleware
(b)	RFID tags
(c)	RFID transponder
(d)	Active Enterprise tags
21	The _____ layer maintains the device drivers of all the devices supported by the system, and manages all the hardware related parameters like reader protocol, air interface, and host-side communication.
(a)	Data Processor and Storage
(b)	Middleware Management
(c)	Reader interface
(d)	Application Interface
22	If a shopper goes into a supermarket and purchases two identical boxes of cereals which have standard LF RFID tags containing Electronic Product Code numbers on them. These numbers on the two RFID tags could be
(a)	Identical numbers
(b)	Different numbers
(c)	There is a likelihood of them being identical
(d)	True numbers
23	The _____ of RFID Middleware provides the application with an API to access, communicate and configure the RFID middleware
(a)	Application interface
(b)	Application programming interface
(c)	REST Interface
(d)	REST API
24	For pure ALOHA protocol, the vulnerable period is how many packet duration?
(a)	Double
(b)	Equal
(c)	Ten times
(d)	Not equal
25	Maximum Efficiency in Pure Aloha
(a)	18.60%
(b)	36.90%
(c)	18.40%
(d)	36.80%
26	The vulnerable period of slotted ALOHA is how many packet duration?
(a)	One
(b)	Ten
(c)	Three
(d)	Four
27	_____ tags can be written several times
(a)	Class 0
(b)	Class 1
(c)	Class 5
(d)	Class 2
28	Query Window Tree Protocol is which Tree-based Protocol?
(a)	Memoryless
(b)	Easy Frame Adjustment
(c)	Improved Efficiency
(d)	Fast slotting
29	Anti-Collision Protocol is a critical part of which system?
(a)	ALOHA
(b)	Binary Tree
(c)	MBQTP
(d)	RFID
30	Binary search algorithms are based on the transmission of
(a)	IDs
(b)	Iterations
(c)	Binary Digits
(d)	Branches of BT
31	Which RFID Tag suitable for Production, monitoring and maintenance applications in Archive systems, asset management, facility management, airplanes, food and consumable goods
(a)	Passive
(b)	Semi-passive
(c)	Active
(d)	Semi-Active
32	Chip-less RFID utilizes
(a)	Inkjet-printed Antenna
(b)	Metallic soft Antenna
(c)	Read-write Antenna
(d)	Server Antenna
33	_____ RFID Tag is used for product safety in the field of textile, electronics, consumable goods

(a)	Active
(b)	Semi-active
(c)	Semi-passive
(d)	Passive
34	Which is not a part of an RFID interrogator?
(a)	Power amplifier
(b)	Controller/processor
(c)	Inlay
(d)	Oscillator
35	Due to which property, RFID technology is suitable to replace its predecessor, the barcode in Logistics and supply chain
(a)	The non-line-of-sight characteristics
(b)	Contactless cards
(c)	Miniaturization
(d)	Nanotechnology
36	Tree protocols divide the tag space in order to perform
(a)	Marking Process
(b)	Division Process
(c)	Identification process
(d)	ORing Process
37	In RFID architecture, _____ allows exchange of information for commercial purposes, tracing, item location and so on
(a)	Tag
(b)	Integration server
(c)	Edge server
(d)	Reader
38	Interrogator in RFID is also known as
(a)	Transponder
(b)	Active tag
(c)	Reader
(d)	Semi-active tag
39	802.11-WiFi comes under?
(a)	Network layer
(b)	Link layer
(c)	Transport layer
(d)	Application layer
40	Who created MQTT?
(a)	Robert Cailliau
(b)	Tim Berners-Lee
(c)	Andy Stanford-Clark
(d)	Vint Cerf
41	RESTful web service is a collection of resources which are represented by
(a)	UIDs
(b)	URIs
(c)	UPIs
(d)	UINs
42	CoAP is a specialized _____ protocol.
(a)	Web Transfer
(b)	Power
(c)	client
(d)	Resource
43	Which application comes under IoT for Smart Cities?
(a)	Smart Roads
(b)	prognostics
(c)	Fleet tracking
(d)	Shipment monitoring
44	Which HTTP method lists all the resources in a collection?
(a)	POST
(b)	PUT
(c)	GET
(d)	DELETE
45	Which of the following applications come under “Environment” for IoT?
(a)	Forest fire detection
(b)	Smart cards
(c)	Wearable electronics
(d)	Fleet tracking
46	Applications interested in sensor data are examples for
(a)	Subscribers
(b)	Publishers
(c)	Topics
(d)	brokers
47	Which of the following is not a messaging mode in CoAP?
(a)	Piggyback
(b)	Direct
(c)	Separate
(d)	Confirmable
48	Which of the following is the protocol used by REST APIs?
(a)	HTTPS
(b)	RDP
(c)	SSH
(d)	Telnet
49	MQTT is having
(a)	Small code footprint
(b)	Large code footprint
(c)	High power consumption
(d)	High bandwidth
50	Features of 6 LOWPAN
(a)	Header expansion, fragmentation, assembly
(b)	Header compression, fragmentation, reassembly of fragments
(c)	Header compression, no fragmentation, assembly
(d)	Header expansion, fragmentation, ressembly

51	MQTT belongs to which layer?
(a)	Control layer
(b)	Network layer
(c)	Service layer
(d)	Application layer
52	UDP belongs to which layer?
(a)	Transport layer
(b)	Network layer
(c)	Service layer
(d)	Application layer
53	Which is a communication protocol?
(a)	WiFi
(b)	CoAP
(c)	Websocket
(d)	MQTT
54	Which HTTP method updates a resource?
(a)	POST
(b)	PUT
(c)	GET
(d)	DELETE
55	Which HTTP method replace the entire collection with another collection?
(a)	Delete
(b)	post
(c)	get
(d)	put
56	_____ causes the complete failure of GPS in indoor environments.
(a)	Inability of satellite signals to cover large number of objects
(b)	Inadequate number of satellites
(c)	Inability of satellite signals to penetrate buildings
(d)	Inability of satellite signals to cover large area
57	Received signal metric TDOA stands for _____
(a)	Time Difference of Arrival
(b)	Total Difference of Arrival
(c)	Time Delay of Arrival
(d)	Total Delay of Arrival
58	IPv6 is _____ IPv4
(a)	Runs on top of
(b)	Extension of
(c)	Compatible with
(d)	Not compatible with
59	RFID was initially used as an _____ system consisting of two basic components: a reader and a tag
(a)	automatic detection
(b)	automatic verification
(c)	automatic identification
(d)	automatic registration
60	The MIP protocol extends IP by allowing a mobile node to effectively utilize _____ IP addresses
(a)	one
(b)	three
(c)	four
(d)	two
61	According to IEEE 802.11 standard specifications, layer 2 handover process follows _____ phases.
(a)	two
(b)	three
(c)	four
(d)	five
62	Second phase in link layer handover is _____
(a)	Discovery phase
(b)	Authentication phase
(c)	Association phase
(d)	Binding phase
63	Deploying RFID readers will be _____ than deploying passive RFID tags.
(a)	less or equal expensive (depends on setup)
(b)	equally expensive
(c)	less expensive
(d)	more expensive
64	_____ collision occurs when signals from multiple tags simultaneously arrive at the reader.
(a)	Reader-to-Reader
(b)	Multiple Readers-to-Tag
(c)	Tag-to-Tag
(d)	Multiple Tags-to-Reader
65	Detecting the movement of the mobile node has been proposed for reducing the _____.
(a)	handover probability
(b)	handover efficiency
(c)	handover latency
(d)	handover likelihood
66	The Ubisense [UBI] is an example of an _____ based location sensing system.
(a)	DTOA
(b)	TOA
(c)	TDOA
(d)	AOA
67	Second stage in General framework of RRS-based positioning is _____
(a)	RRS Sensing
(b)	Estimation of location related signal metric
(c)	Positioning algorithm
(d)	Authentication

68	In user-based location determination or movement detection schemes each _____ is responsible for collecting and processing the information necessary for determining its location or detecting its movement.
(a)	mobile node
(b)	stationary node
(c)	home agent
(d)	foreign agent
69	The path loss model defines the power received at the receiver given the _____.
(a)	reader interference
(b)	distance between neighboring tags
(c)	distance between neighboring readers
(d)	transmission power
70	If a mobile node roams between two access points of the same subnetwork, _____ issues occur.
(a)	no routing
(b)	static routing
(c)	dynamic routing
(d)	hybrid routing
71	IP addresses play two roles: from a network point of view, they act as a _____ and from an application point of view they identify _____ for the duration of a communications session.
(a)	Locator, hosts
(b)	Host, Locator
(c)	Locator, network
(d)	Transmitter, hosts
72	If R_u and R_l are the maximum and minimum values of a reader transmission range, then the Degree of Irregularity (DOI) is the _____ of the reader's transmission range per unit degree change.
(a)	standard deviation
(b)	average variation
(c)	maximum variation
(d)	minimum variation
73	Localization accuracy is highly dependent on the _____ problem.
(a)	Tag-to-Tag collision
(b)	Reader-to-Reader inference
(c)	Multiple Tags-to-Readers collision
(d)	Multiple Readers-to-Tag collision
74	While mobile node is situated away from its home, the data packets flowing from a corresponding node are transparently routed via _____ to a care of address that represents its current location.
(a)	interaction agent
(b)	home agent
(c)	care of agent
(d)	correspondence agent
75	Apache Hadoop YARN stands for _____.
(a)	Yet Another Reserve Negotiator
(b)	Yet Another Resource Network
(c)	Yet Another Resource Negotiator
(d)	Yet Another Reserve Negotiator
76	A sensor is a device that converts _____.
(a)	Physical quantity into measurable signals
(b)	Physical quantity into mechanical signal
(c)	Electrical signal into physical quantity
(d)	Physical quantity into electric signal only
77	Hadoop is a framework that works with a variety of related tools. Common cohorts include _____.
(a)	MapReduce, Heron and Trumpet
(b)	MapReduce, MySQL and Google Apps
(c)	MapReduce, Hummer and Iguana
(d)	MapReduce, Hive and HBase
78	In HDFS, Master node is called as _____ where Slave nodes are called as _____.
(a)	NameNode, DataNode
(b)	DataNode, NameNode
(c)	NameNode, NameNode
(d)	DataNode, DataNode
79	The chef is designed for _____ automation.
(a)	Network
(b)	Office
(c)	Cloud
(d)	Data
80	Apache Hadoop _____ provides a persistent data structure for binary key-value pairs.
(a)	GetFile
(b)	SetFile
(c)	PutFile
(d)	SequenceFile

81	Spark is packaged with higher level libraries, including support for _____ queries.
(a)	Java
(b)	SQL
(c)	C
(d)	C++
82	Which of the following command runs ResourceManager admin client?
(a)	Proxy server
(b)	Run
(c)	Admin
(d)	Rmadmin
83	_____ is used to model both configuration and state data of network elements.
(a)	PUPPET
(b)	NETCONF
(c)	YANG
(d)	CHEF
84	Pick up the wrong statement about Apache spark
(a)	Spark can be run on cloud, hadoop, kubernetes, standalone systems
(b)	Spark cannot achieve high performance for batch and streaming data
(c)	Spark provides more than 75 high level API to build parallel apps
(d)	Spark provides a solution to combine multiple libraries
85	The output of the _____ is not sorted in the Mapreduce framework for Hadoop.
(a)	Reducer
(b)	Mapper
(c)	Cascader
(d)	Scalding
86	Chef implements security measures with
(a)	Chef Vault
(b)	Chef 52
(c)	Chef DLS
(d)	Chef MySQL
87	Point out the wrong statement.
(a)	Oozie is a scalable, reliable and extensible system
(b)	Oozie is a server-based Workflow Engine specialized in running workflow jobs
(c)	Oozie Coordinator jobs are recurrent Oozie Workflow jobs triggered by time (frequency) and data availability
(d)	Oozie is not an Open Source Java Web-Application
88	Chef is an automation tool that provides a way to define
(a)	Infrastructure as code
(b)	Configuration as code
(c)	Both A and B
(d)	Automated Infrastructure as code
89	For Apache _____ users, Storm utilizes the same ODBC interface.
(a)	cTakes
(b)	Hive
(c)	Pig
(d)	Oozie
90	Which demon is responsible for replication of data in Hadoop?
(a)	HDFS
(b)	Task Tracker
(c)	Job Tracker
(d)	Name Node
91	HDFS, by default, replicates each data block _____ times on different nodes and on at least _____ racks.
(a)	3, 2
(b)	1, 2
(c)	2, 3
(d)	2, 1
92	An RFID system is used for Yard Management in a large container yard having many trucks and containers. The system keeps track of moving trucks and containers in a large area. What kind of RFID system is this likely to be?
(a)	UHF type
(b)	LF type
(c)	VVHF type
(d)	VHS Type
93	During Reading cycle of RFID reader, the electromagnetic field overpowers any response a tag could give, so therefore tags reply on _____ which are located directly _____ the frequency of the continuous wave.
(a)	side-channels, below and above
(b)	side-channels, left and right
(c)	micro-channels, left and right
(d)	micro-channels, front and back
94	The RFID reader generated electromagnetic field is called
(a)	Continuous wave
(b)	Continuous Spike
(c)	Continuous field
(d)	Surplus wave
95	With the help of IPv6 addressing protocol, approximately _____ number objects can be connected directly to the internet.
(a)	2^16
(b)	2^32
(c)	2^64
(d)	2^128
96	_____ specification defines the PHY and MAC layer of low power devices.
(a)	IETF 6LoWPAN
(b)	IETF CoAP
(c)	RFID/NFC
(d)	IEEE 802.15.4 LoWPAN