## These are sample MCQs to indicate pattern, may or may not appear in examination.

## Mahatma Education Society's Pillai HOC College of Engineering and Technology

Program: BE ELECTRONICS Engineering
Curriculum Scheme: Revised 2016
Examination: BE SEM VII R-2016
Course Code: ELX801 and Course Name: INTERNET OF THINGS

Time: 1hour Max. Marks: 50

Q	ITU-T Reference model for IoT consists of:	M
A	4 Layered Reference Model	1
A	5 Layered Reference Model	0
A	3 Layered Reference Model	0
A	2 Layered Reference Model	0
Q	ITU-T reference model (RM-1) for IoT/M2M has the device Layer which is equivalent to:	М
A	Data Adaptation layer of the six layer modified OSI layer for IoT/M2M recommened by IETF	0
A	Physical cum data link layer of the six layer modified OSI layer for IoT/M2M recommend by IETF	0
A	Network layer of the six layer modified OSI layer for IoT/M2M recommend by IETF	0
A	Data Adaptation and physical cum data link layers of the six layer modified OSI layer for IoT/M2M recommened by IETF	1
Q	ITU-T reference model (RM-1) for IoT/M2M has the Network Layer which is equivalent to:	М
A	Network layer of the six layer modified OSI layer for IoT/M2M recommened by IETF	0
A	Physical cum data link layer of the six layer modified OSI layer for IoT/M2M recommened by IETF	0
A	Data Adaptation and physical cum data link layers of the six layer modified OSI layer for IoT/M2M recommened by IETF	0
A	Transport and Network layers of the six layer modified OSI layer for IoT/M2M recommened by IETF	1
Q	The ETSI high level M2M architecture has	M
A	Two domains	1
A	Four domains	0
A	Six domains	0
Α	Ten domain	0
Q	The following is one of the ETSI high Level architecture domain	M
Α	Transport Domain	0
A	Application and Network Domain	1
A	Services Domain	0
A	Security Domain	0
Q	Gateway is a functional unit of which domain of ETSI high Level architecture:	M
A	Network & Gateway Domain	0
A	Transport & Gateway Domain	0
A	Device & Gateway Domain	1
Α	Application & Gateway Domain	0
Q	M2M Devices is a functional unit of which domain of ETSI high Level architecture:	M
A	Network & Device Domain	0
A	Transport & Device Domain	0
A	Device & Gateway Domain	1
A	Application & Gateway Domain	0
Q	M2M Area Network is a functional unit of which domain of ETSI high Level architecture:	M
Α	Network & Device Domain	0

A	Transport & Device Domain	1
A	Device & Gateway Domain	0
A	Application & Gateway Domain	0
Q	M2M Management functions comes under which domain of ETSI high Level architecture:	M
-	Network Domain	
A		1
A	Transport Domain	0
A	Device Domain	0
A	Application Domain	0
Q	Which is an IoT Functional Block?	M
A	Gateway	0
A	Response Model	0
A	Application	1
A	Request Model	0
Q	XMPP offers extensibility to	M
	Constrained environment messaging and presence only	_
A		0
A	IP network messaging only	0
A	To constrained environment messaging and presence protocols as well as IP network messaging	1
A	M2 M network only	0
Q	The communication gateway facilitates the communication between web server using	M
A	using TCP/IP protocol conversion gateway and IOT devices	1
А		1
A	using UDP/DTLS protocol conversion gateway and IOT devices	0
A	using both TCP/UDP protocol conversion gateway and M2M devices	0
A	using CoAP client and server	0
Q	SoAP is a protocol for access	M
A	to online applications	0
A	to a web service	1
A	to a offline service	0
A	to a web resource	0
Q	An architectural property of REST is	M
-	merging concerns	
A		0
A	To provide user interface	0
A	seperation of concerns	1
A	To collect data from sensors	0
Q	In websockets	M
A	clients and servers exchange messages after a handshake	1
A	client and server exchange messages before handshake	0
A	client and server exchange messages using client server model	0
A	client and server exchange messages using eitert server model	0
Q	web objects can communicate using	M
A	sensors	0
A	web sockets	1
A	actuators	0
A	Router	0
Q	From data transmits from layer one to another layer , each layer performs processing as per	M
A	IP address of source	0
A	IP address of destination	0
A	data stack	0
A	header field bits	1
Q	How many OSI model layers are specified at the TCP/IP protocol suite for internet communication	M
A	3	0
A	2	0
A	4	1
	1	0

0	Eastures of Inv\$ are header consists of	M
Q	Features of Ipv\$ are , header consists of	0 0
A	4 words	
A	5 words	1
A	2 words	0
A	6 words	0
Q	6LoWPAN device node fram size is:	M
A	same as ethernet	0
A	256 B	0
A	127 B	1
A	2^16 B	0
Q	Which of the following is not a step in IoT system design methodology?	M
A	Process specification	0
A	Domain model specification	0
A	Structural model specification	1
A	Functional view specification	0
Q	IoT systems where the data involved is big, however, the primary analysis requirement is not	M
Q	computationally intensive and can be done locally suitably follows:	141
A	IoT level-1	0
A	IoT level-2	1
A	IoT level-3	0
A	IoT level-4	0
Q	Relations between users, services, resources and devices are explored at	M
A	Process specification	0
A	Functional view specification	0
A	Structural model specification	0
A	Domain model specification	1
Q	Which of the following is not a type of service providing interaction facility with physical entities?	M
A	Mode service	0
A	Interaction service	1
A	State service	0
A	Controller service	0
Q	In domain model specification, resources are	M
A	Software components which are on-device	0
A	Software components as network resources	0
A	Software components which are either on-device or network resources	1
A	Software components which are neither on-device nor network resources	0
Q	In specification of functional view, application maps to the	M
A	Application functional group, device functional group and security functional group	0
		0
A	Application functional group, device functional group and management functional group  Device functional group, management functional group and security functional group	0
A		
A	Application functional group, management functional group and security functional group	1
Q	includes the communication protocols that form the backbone of IoT systems and enable network	M
Α	connectivity.	1
A	Communication FG	1
A	Management FG	0
A	Device FG	0
A	Security FG	0
Q	Which type of relationship is indicated by the symbol, '→' between the objects?	M
A	Generalization	0
A	One-way association	1
A	Specialization	0
A	Aggregation	0
Q	Domain model specification in IoT design methodology is	M
A	technology independent	0
A	platform independent	0
A	either technology or platform independent	0
A	both technology and platform independent	1
0	Various attribute details like its name, type and possible values/states with their inter-relationships are	М
Q	represented in	IVI
A	Structural model specification	0
A	Information model specification	1
A	Operational view specification	0

A	Functional view specification	0
Q	Forest fire detection system is an example of	M
A	IoT level-3	0
A	IoT level-4	0
A	IoT level-5	1
A	IoT level-6	0
Q	What amongst the following is not true regarding distributed business process?	M
A	Reduces complexity	0
A	Reduces communication cost	0
A	Reduces processing load at the central system	0
A	Reduces response speed	1
Q	Finding the annual sales growth and managing the supplies accordingly is an example of	M
A A	Business intelligence	0
A	Business process	1
A	Service oriented architecture	0
A	Business service	0
Q	Database management system is a software system, which contains a set of programs specially designed for	M
A	Creation and transaction of stored data	0
A	Transaction and management of stored data	0
A	Creation, management and transaction of stored data	1
A	Compression, management and transaction of stored data	0
Q	The following property of cloud computing denotes that an application can deploy local as well as remote applications and release them after the application usage	М
A	Homogeneity	0
A	Localization	0
A	Elasticity	1
	Resilience	0
A 0		
Q	Cloud computing can be considered by the following equation	M
A	Cloud computing = SaaS + PaaS + IaaS + DaaS	1
A	Cloud computing = SaaS + PaaS + IaaS	0
A	Cloud computing = SaaS + IaaS + DaaS	0
A	Cloud computing = SaaS + PaaS + DaaS	0
Q	Which among the following is an advanced type of analytics?	M
A	Descriptive and Predictive analytics	0
A	Predictive and Prescriptive analytics	1
A	Descriptive and Prescriptive analytics	0
A	Descriptive, Prescriptive and Predictive analytics	0
Q	Real-time analytics management means	M
A	Ensuring faster OLTP	0
A	Ensuring faster OLAP	0
A	Ensuring either faster OLTP or faster OLAP	0
A	Ensuring faster OLTP as well as OLAP	1
Q	What amongst the following statements is false for H2 database?	M
Α	Full test search is possible in H2 database	0
A	H2 database is in pure Java	0
A	H2 database footprint is around 4 MB	1
A	H2 database is an encrypted database.	0
Q	MySQL database have one of the following feature.	M
A	It is in pure Java	0
A	It is an encrypted database	0
A	Its footprint is in the form of JAR file	0
A	It does not have provisions for in-memory databases	1
Q	Descriptive analytics of data do not implement one of the following:	М
A	Finding the aggregates, mean and variances.	0
A	Reporting or generating spreadsheets	0
A	Predicting trends in data	1
A	Creation of key performance indicators	0
Q	WSN stands for	M
A	Wired Sensor Network	0
A	Wireless Sensor Network	1

A	Without Sensors Networking	0
Q	CAN bus is an example of	M
A	Half-duplex communication	1
A	Full-duplex communication	0
A	Simplex comunication	0
A	Both simplex and full-duplex communication	0
Q	A 3-bit ADC system can generate how many different digital outputs	M
A	8	1
	9	0
A	12	
A		0
A	16	0
Q	The resolution of 8 bit ADC/DAC is equal to	M
A	256	1
A	265	0
A	562	0
A	625	0
Q	In a NTC thermistor, the resistance value	M
A	increases with rise in temperature	0
A	decrease with rise in temperature	1
Α	remains constant with rise in temperature	0
A	is independent of change in temperature	0
Q	What is QR code stands for	M
A	Quick Response code	1
A	Quick Result code	0
A	Quick Reading code	0
A	Query Reading code	0
Q	Which of the following is not a pin on Raspberry Pi for SPI interface?	M
A	SCK(Serial Clock)	0
A	Tx(Transmit)	1
A	MISO(Master In Slave Out)	0
A		0
	MOSI(Master Out Slave IN)	
Q	Which of the following RAM choice is not available with Raspberry Pi-4?	M
A	2	0
A	4	0
A	6	1
A	8	0
Q	Which of the following specification is common in both Raspberry Pi-3B and Raspberry Pi-4 models?	M
A	Choice of RAM	0
A	Presence of type C port	0
Α	Presence of USB 3.0	0
Α	2.4 GHz and 5 GHz 802.11b/g/n/acwireless LAN	1
Q	What is GPS stands for	M
A	Geometric Positioning System	0
A	Geostationary Positioning System	0
A	Global Position Sensor	0
A	Global Positioning System	1
Q	Which of the following is not a part of smart-city solution?	M
A	Smart parking system	0
A	Smart street lighting	0
A	Intenet conencted car	1
A	Smart water management	0
	In the domain architecture reference model for the smart city applications and services, 'edge computing' is a	
Q	part of	M
		0
Δ	Smart cell	11
Α	Smart cell Cloud petwork	
A	Cloud network	0
A A	Cloud network City cloud	0
A	Cloud network City cloud IoT Core	0
A A	Cloud network City cloud IoT Core In the domain architecture reference model for the smart city applications and services, the edge sensors and	0
A A A Q	Cloud network City cloud IoT Core In the domain architecture reference model for the smart city applications and services, the edge sensors and devices wirelessly connects with small cells using	0 0 1 M
A A A	Cloud network City cloud IoT Core In the domain architecture reference model for the smart city applications and services, the edge sensors and	0 0 1

A	GSM	0
A	CDMA	0
Q	A parking assistance system (PAS) is used in which layer of the domain architecture reference model for the smart parking applications and services?	M
A	Layer3	0
A	Layer 1	0
A	Layer 2	1
A	Layer 4	0
Q	In the device subdomain of weather monitoring system, which transceiver interface is used for medium range?	M
A	RFID and NFC	0
A	ZigBee and Wi-Fi	1
A	4G and 3G	0
A	RSA and SHA	0
Q	How many layers are present in the architecture reference model for TCCICDD?	M
A	2	0
A	4	0
A	6	1
A	3	0
Q	Which IoT sensor is used in smart irrigation system?	M
Α	Pressure sensor	0
A	Accelerometer	0
Α	Gas sensor	0
A	Moisture sensor	1