



**BRAINWARE UNIVERSITY**  
**Term End Examination 2020 - 21**  
**Programme – Master of Computer Applications**  
**Course Name – Internet of Things**  
**Course Code - MCA502B**

**Semester / Year - Semester V**

Time allotted : 85 Minutes

Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

**Group-A**

(Multiple Choice Type Question)

1 x 70=70

1. *(Answer any Seventy)*

(i) IoT is known as

- |                            |                       |
|----------------------------|-----------------------|
| a) Internet of Things      | b) Internet of Theory |
| c) Initialization of Tasks | d) Interest of Things |

(ii) Global Sensor Network is built for \_\_\_\_\_

- |  |  |
|--|--|
| a) Reducing cost and time for development              | b) Reducing cost and increasing time for development   |
| c) Increasing cost and increasing time for development | d) Increasing cost and decreasing time for development |

(iii) Who will use their own IoT business models?

- |                         |         |
|-------------------------|---------|
| a) PaaS                 | b) SaaS |
| c) IoT Service Provider | d) IaaS |

(iv) Bluetooth is the wireless technology for \_\_\_\_\_

- |                          |                              |
|--------------------------|------------------------------|
| a) Local Area Network    | b) Metropolitan Area Network |
| c) Personal Area Network | d) Wide Area Network         |

(v) Which protocol is being used in IoT?

- |         |         |
|---------|---------|
| a) MQTT | b) CoAP |
|---------|---------|

- c) HTTP
- d) All of these

(vi) Which protocol provides server push?

- a) SPI
- b) MQTT
- c) CoAP
- d) HTTP

(vii) HTTP protocol has ..... \_ way handshaking protocol

- a) One
- b) Two
- c) Three
- d) Multiple

(viii) Which one is not an element of IoT?

- a) People
- b) Process
- c) Security
- d) Things

(ix) What risk and challenges should be considered in Internet of Everything?

- a) Privacy and security
- b) Network Congestion
- c) Energy Consumption
- d) All of these

(x) Who invented the term Internet of Things?

- a) Bill Gates
- b) Kevin Asthon
- c) Steve Jobs
- d) McDonald

(xi) In IoT , the huge number of devices connected with internet have to communicate automatically, it is known as

- a) Bot to Bot communication
- b) Machine to Human Communication
- c) Machine to Machine communication
- d) Human to Human communication

(xii) What is the size of IP V4 address?

- a) 32 Bits
- b) 64 Bits
- c) 128 bits
- d) 1024 bits

(xiii) What is the size of IP V6 address?

- a) 32 Bits
- b) 56 Bits
- c) 64 bits
- d) 128 bits

(xiv) What is the name of first recognized IoT device?

- a) Smart watch
- b) Video Game
- c) Radio
- d) ATM

(xv) Which of the following technology is being used by IoT?

- a) Radio Identification Technology
- b) satellite
- c) cable
- d) Broadband

(xvi) When was the term IoT first coined?

- a) 1998
- b) 1999
- c) 2000
- d) 2001

(xvii) How many key features must have in an IoT device?

- a) 5
- b) 6
- c) 7
- d) 8

(xviii) Which one of the following is not a concern for IoT?

- a) Data storage standards
- b) Efficiency
- c) Privacy concern
- d) High Cost of Sensor

(xix) Internet of Things needs a lot of network connection. What is the proposed “white Space” radio standard called?

- a) Bluetooth
- b) Weightless
- c) Zigbee
- d) WiFi

(xx) Open IoT manages the registration, data acquisition, deployment of sensors and interconnected of objects, through which network?

- a) GSN
- b) X-GSN
- c) Zigbee
- d) HTTP

(xxi) OSI Model has how many layers?

- a) 2
- b) 3
- c) 5
- d) 7

(xxii) Which protocol interacts asynchronously over UDP?

- a) HMTP
- b) CoAP
- c) HTTP
- d) TCP/IP

(xxiii) The IETF standards documents are called

- a) RFC
- b) RCF
- c) ID
- d) DFC

(xxiv) The structure or format of data is called

- a) Syntax
- b) Semantics
- c) Structure
- d) Noise

(xxv) Which of the following is the physical path over which a message travels

- a) Path
- b) Medium
- c) Protocol
- d) Route

(xxvi) The huge number of devices connected to the Internet of Things has to communicate automatically, not via humans. What is this called?

- a) Bot to Bot
- b) Machine to Machine
- c) Process to Process
- d) None of these

(xxvii) Which of the following is a set of rules that governs data communication

- a) Data
- b) Noise

c) Message

d) Protocol

(xxviii) Application layer protocol defines

a) Types of messages exchanged

b) message format, syntax and semantics

c) rules for when and how processes send and respond to messages

d) All of these

(xxix) Which one of the following is an internet standard protocol for managing devices on IP network?

a) DHCP

b) SNMP

c) SMTP

d) HTTP

(xxx) When displaying a web page, the application layer uses which of the following protocol?

a) HTTP Protocol

b) TCP/IP Protocol

c) FTP Protocol

d) SMTP Protocol

(xxxii) The default connection type used by HTTP is

a) Persistent

b) Non-Persistent

c) Can be either persistent or non-persistent depending on connection request

d) P-Persistent

(xxxiii) MQTT is a/an ..... protocol.

a) Machine to Machine

b) Internet of Things

c) Both Machine to Machine and Internet of Things

d) Machine Things

(xxxiiii) Which protocol is lightweight?

a) MQTT

b) HTTP

c) FTP

d) CoAP

(xxxiv) MQTT stands for \_\_\_\_\_

- a) MQ Telemetry Things
- b) MQ Transport Telemetry
- c) MQ Transport Things
- d) MQ Telemetry Transport

(xxxv) CoAP is known as.....

- a) Constraint Application Protocol
- b) Constrained Application Protocol
- c) Combined Application Protocol
- d) Constrained Active Protocol

(xxxvi) Global Sensor Network is built for

- a) Reducing cost and time for development
- b) Reducing cost and increasing time for development
- c) Increasing cost and increasing time for development
- d) None of these

(xxxvii) Which environment does Global Sensor network work on?

- a) C++
- b) JAVA
- c) C
- d) HTML

(xxxviii) Which of the following provides a middleware and application container for IoT gateway.

- a) Eclipse Kura
- b) Red Hat
- c) Inter Cloud
- d) Bot 2 Bot

(xxxix) WSN Stands for

- a) Wireless sensor network
- b) Wired sensor network
- c) Workable Sensor Network
- d) None of these

(xl) PIP stands for which of the following?

- a) Package Management System
- b) Python Package Index
- c) PIP installs packages
- d) Python Management System

(xli) A request from client is basically made of

- a) Method
- b) Task
- c) Event
- d) Signal

(xlii) MQTT is which of the following oriented?

- a) Data
- b) Message
- c) Device
- d) Network

(xliii) Who created MQTT?

- a) Robert Cailliau
- b) Tim Berners-Lee
- c) Andy Stanford-Clark
- d) Rajkumar Buyya

(xliv) Point out the wrong statement

- a) Abstraction enables the key benefit of cloud computing: shared, ubiquitous access
- b) Virtualization assigns a logical name for a physical resource and then provides a pointer to that physical resource when a request is made
- c) All cloud computing applications combine their resources into pools that can be assigned on demand to users
- d) All of these

(xlv) The technology used to distribute service requests to resources is referred to as

- a) Load Performing
- b) Load scheduling
- c) Load Balancing
- d) Load distributing

(xlvi) Which of the following network resources can be load balanced?

- a) Connections through intelligent switches
- b) DNS
- c) Storage Resource
- d) All of these

(xlvii) Which of the following service provider provides the least amount of built in security?

- a) SaaS
- b) PaaS
- c) IaaS
- d) VaaS

(xlviii) Which of the following is the operational domain of CSA?

- a) Portability and interoperability
- b) Scalability
- c) Interoperability
- d) Flexibility

(xlix) All of the following accurately describe Hadoop, EXCEPT

- a) Open source
- b) Real time
- c) Java based
- d) Distributed Approach

(l) Which one of the following has the world's largest Hadoop cluster

- a) Apple
- b) Facebook
- c) Xerox
- d) Yahoo

(li) Facebook Tackles Big Data With \_\_\_\_\_ based on Hadoop

- a) Project Prism
- b) Project data
- c) Prism
- d) None of these

(lii) What is IIoT?

- a) Industrial Internet of Things
- b) Information Internet of Things
- c) Innovative Internet of Things
- d) None of these

(liii) Which industry branches are suitable for Industry 4.0?

- a) Service Industry
- b) All industrial area wants to be more intelligent
- c) Agriculture industry
- d) Education industry

(liv) What is smart factory

- a) Where Robot will replace human
- b) Factories with operate themselves without any interaction



- c) Making smart entry in the factory      d) None of these

(lv) What is/ are the objective of industry 4.0?

- a) Increase efficiency      b) Reduce Complexity  
c) Enabling Self control      d) All of these

(lvi) Which of the following is not best described about industry 4.0?

- a) Analytics      b) Smart factory  
c) Speed      d) Prediction

(lvii) How many design principles are applied for Industry 4.0?

- a) 6      b) 4  
c) 3      d) 5

(lviii) Which of the following is not a tool or application used in Industry 4.0?

- a) Cockpit      b) 3D Visualization  
c) Condition Monitoring      d) performance manager

(lix) Which one is/are design principles of Industry 4.0?

- a) Interoperability      b) Virtualization  
c) Viscosity      d) Both Interoperability and Virtualization

(lx) When will the industry 4.0 reach the market?

- a) To reach a production environment – this will not happen before 2030.      b) First implementations will be released by 2020.  
c) Industry 4.0 is already being used in several production lines      d) Industry 4.0 is already being used in several logistics lines

(lxi) Which economical potential do you see with industry 4.0 in the german speaking area?

- a) a plus of 43 billion euros until 2025 in      b) a plus of 59 billion euros until 2025 in

the value chain.

c) a possible plus of 78 billion euros until 2025 in the value chain

the value chain.

d) None of these

(lxii) Point out the correct statement about Hadoop

a) Hadoop do need specialized hardware to process the data

b) Hadoop 2.0 allows live stream processing of real time data

c) In Hadoop programming framework output files are divided into lines or records

d) All of these

(lxiii) According to analysts, for what can traditional IT systems provide a foundation when they're integrated with big data technologies like Hadoop?

a) Data warehousing and data mining

b) Data warehousing and Business Intelligence

c) Management of Hadoop clusters

d) Collecting and storing unstructured data

(lxiv) 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

(lxv) What was Hadoop named after?

a) The toy elephant of Cutting's son

b) Cutting's School Friend

c) Cutting's Home

d) None of these

(lxvi) Which of the following is a Web search software?

a) Imphala

b) Oozie

c) Nutch

d) None of these

(lxvii) Which one is an open source SQL query engine for Apache HBase.

a) Pig

b) Phoenix

c) Pivot

d) Oracle

(lxviii) Which of the following computing emphasizes proximity to end user?

- a) Fog Computing
- b) Edge Computing
- c) Cloud Computing
- d) Mist Computing

(lxix) QoS stands for

- a) Query for Service
- b) Quality of Service
- c) Quality of Security
- d) Quantitative Operative Service

(lxx) Which of the following means practice of using a network of remote servers hosted on the Internet to store

- a) Fog Computing
- b) Cloud Computing
- c) Mist Computing
- d) Edge Computing