Enrollment No......................................

Faculty of Science / Engineering

End Sem (Odd) Examination Dec-2022

CA3CO03 Computer Fundamentals

Programme: BCA / BCA-MCA Integrated   Branch/Specialisation: Computer Application

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i.   OMR and OCR work on-   **1**
         (a) Sound   (b) Light   (c) Energy   (d) All of these

     ii. What are the different types of Software?   **1**
         (a) System Software   (b) Application Software
         (c) Both (a) and (b)   (d) None of these

     iii. Which operating system supports single user process and single thread?   **1**
         (a) UNIX   (b) MS-DOS   (c) OS/2   (d) Windows 2000

     iv. Which of the following device broadcasts the signal to all the devices connected?   **1**
         (a) Hub   (b) Switch   (c) Gateway   (d) Router

     v.   Which of the following are triggered by the activation of their host?   **1**
         (a) Trojans   (b) Malware   (c) Virus   (d) Worms

     vi. _____ are self-replicated and propagate independently.   **1**
         (a) Worms   (b) Malware   (c) Virus   (d) Spyware

     vii. Data about data is normally termed as-   **1**
         (a) Directory   (b) Data bank (c) Meta data (d) Manifest

     viii. Centralized repository of information about data along with its meaning and relationships to other data is: **1**
         (a) Data Bank   (b) Data Dictionary
         (c) Data Manifest   (d) Data Metadata

     ix. GCP is provided by –   **1**
         (a) Amazon   (b) Microsoft (c) Google   (d) IBM

P.T.O.

     x.   Which of these is not a major type of cloud computing usage?   **1**
         (a) Hardware as a service   (b) Platform as a service
         (c) Software as a service   (d) Infrastructure as a service

Q.2 i.   Differentiate data and information.   **2**
     ii. What is information technology? Discuss pros and cons of information technology in detail.   **3**
     iii. Explain different generations of computers along with key features and important component used in its designing.   **5**
OR   iv. What do you mean by storage unit of computer? Explain in detail the different types of storage units in computer.   **5**

Q.3 i.   Differentiate: Router and switch.   **2**
     ii. What do you mean by topology? Explain types of topologies that are incorporated in LAN type of network.   **8**
OR   iii. What do you mean by operating system? Explain its functions along with different types in detail.   **8**

Q.4 i.   What is firewall? Explain with types.   **3**
     ii. Explain in detail different types of attacks in computer system.   **7**
OR   iii. What is trojan horse? How is it different from worms?   **7**

Q.5 i.   What are the different types of users in DBMS? Explain the role of DBA.   **4**
     ii. What is DBMS architecture? Why three level architecture of database system is used?   **6**
OR   iii. Define data models in DBMS. Explain any two data models and list the advantages and disadvantages of data models.   **6**

Q.6   Attempt any two:
     i.   Define cloud. What is cloud computing? Discuss various advantages and disadvantages of cloud computing in detail.   **5**
     ii. Explain different service delivery models in cloud with details.   **5**
     iii. Explain different cloud deployment models in cloud with details.   **5**

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Marking Scheme
CA3CO03 Computer Fundamentals

Q.1	i)	OMR and OCR work on: (b) Light	1
	ii)	What are the different types of Software? (c) Both	1
	iii)	Which Operating System supports Single User Process and Single Thread. (b) MS-DOS	1
	iv)	Which of the following device broadcasts the signal to all the devices connected? (d) Router	1
	v)	Which of the following are triggered by the activation of their host? (c) Virus	1
	vi)	……………… are self-replicated and propagate independently? (a) Worms	1
	vii)	Data about data is normally termed as: (c) Meta data	1
	viii)	Centralized repository of information about data along with its meaning and relationships to other data is: (b) Data Dictionary	1
	ix)	GCP is provided by – (c) Google	1
	x)	Which of these is not a major type of cloud computing usage? (a) Hardware as a service	1
Q.2	i.	Differentiate Data and Information. 2 marks	2
	ii.	What is Information Technology? 1.5 mark Discuss pros and cons of Information technology in detail. 1.5 mark	3
	iii.	Explain different Generations of Computers along with key features and important component used in its designing. 1 mark each	5
OR	iv.	What do you mean by Storage Unit of Computer? 2 marks Explain in detail the different types of storage units in Computer. 3 marks	5
Q.3	i.	Differentiate: Router and Switch 1 mark each	2
	ii.	What do you mean by Topology? 2 marks Explain types of Topologies along with its pros and cons that are incorporated in LAN type of Network 2 marks for each topology	8
OR	iii.	What do you mean by Operating System? 1 mark Explain its functions 3 marks along with different types in detail. 4 marks	8
Q.4	i.	What is Firewall? 1 mark Explain with types. 2 marks	3
	ii.	Explain in detail different types of Attacks in Computer System.	7
OR	iii.	What is Trojan Horse? 3 marks How is it different from Worms? 4 marks	7
Q.5	i.	What are the different types of Users in DBMS? 2 marks Explain the role of DBA. 2 marks	4
	ii.	What is DBMS Architecture? 2 marks Why three level architecture of database system is used? 4 marks	6
OR	iii.	Define Data Models in DBMS. 2 marks Explain any two data models and list the advantages and disadvantages of data models. 2 marks each	6
Q.6		Attempt any two:	
	i.	Define Cloud. 1 mark What is Cloud Computing? 2 marks Discuss various advantages and disadvantages of cloud computing in detail. 1 mark each	5
	ii.	Explain different Service Delivery Models in cloud with details.	5
	iii.	Explain different Cloud Deployment Models in Cloud with details.	5

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