### **GURU NANAK INSTITUTE OF TECHNOLOGY**

# An Autonomous Institute under MAKAUT

### 2022

### CLOUD COMPUTING IT701A

#### TIME ALLOTTED: 3HR

**FULL MARKS:70** 

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable

#### GROUP - A

(Multiple Choice Type Questions)

Answer any *ten* from the following, choosing the correct alternative of each question: 10×1=10

Marks CO No

1. i) What is Cloud Computing?

a) Cloud Computing means providing services like storage, servers, database, networking, etc.

b) Cloud Computing means storing data in a database

c) Cloud Computing is a tool used to create an application

b) Cloud Computing means storing data in a database
c) Cloud Computing is a tool used to create an application
d) None of the mentioned

ii) Point out the wrong statement:
a) All applications benefit from deployment in the cloud
b) With cloud computing, you can start very small and become big very fast
c) Cloud computing is revolutionary, even if the technology it is built on is evolutionary
d) None of the mentioned

iii) Which of the following is not a type of cloud server?
a) Merged Cloud Server

iii) Which of the following is not a type of cloud server?

a) Merged Cloud Server

b) Private Cloud Servers

c) Dedicated Cloud Servers

d) Public Cloud Servers

iv) Which of the following is a type of cloud computing service?

a) Software-as-a-Service (SaaS)

b) Software-and-a-Server (SaaS)

b) Software-as-a-service (SaaS)
c) Service as Software (SaaS)
d) Software-as-a-Server (SaaS)
v) Which of the following can be identified as cloud?

a) Web Applications

b) Intranet

c) Hadoop

d) All of the mentioned

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| vi)   |  |                          | _ system and it is necessarily unidirec     | tional            | 1     | CO3             |
|-------|--|--------------------------|---|-------------------|-------|-----------------|
|       | in nature.   |                          |   |                   |       |                 |
|       |  | Stateless                |   |                   |       |                 |
|       | b)   |                          |   |                   |       |                 |
|       |  | Reliable                 |   |                   |       |                 |
|       | d)   | All the mentioned        |   |                   |       |                 |
| vii)  | Which of the following model attempts to categorize a cloud network                  |                          |   |                   |       | CO3             |
|       | based on four dimensional factors?   |                          |   |                   |       |                 |
|       | a)   | Cloud Cube               |   |                   |       |                 |
|       | b)   | Cloud Square             |   |                   |       |                 |
|       | c)   | Cloud Service            |   |                   |       |                 |
|       | d)   | All of the mentioned     |   |                   |       |                 |
| viii) | Which  | architectural layer is a | used as a backend in cloud computing?       |                   | 1     | CO3             |
| viii) |  | Cloud                    | ised as a sacketta in croad companing.      |                   |       | 005             |
|       | 1000   | Soft                     |   |                   |       |                 |
|       |  | Client                   |   |                   |       |                 |
|       |  |                          |   |                   |       |                 |
|       | d)   | all of the mentioned     |   |                   |       |                 |
| ix)   | Point o  | out the wrong statemen   | it.   |                   | 1     | CO3             |
| ,     | a) Cloud services span the gamut of computer applications                            |                          |   |                   |       |                 |
|       |  |                          | computing on network communication          | isto              |       |                 |
|       | 0)   |                          |   |                   |       |                 |
|       | discourage the use of open-source network protocols in place of proprietary protocol |                          |   |                   |       |                 |
|       | - 1  |                          | f HTTD                                      | l                 |       |                 |
|       | c)   |                          | n format that allows for HTTP protoco       | IS to             |       |                 |
|       |  | create and update inf    |   |                   |       |                 |
|       | d)   | None of the mention      | ed  |                   |       |                 |
| X)    | Which of the following lets a Web service advertise itself in terms of a             |                          |   |                   |       | CO3             |
|       | collection of endpoints?   |                          |   |                   |       |                 |
|       | a)   | WSDL                     |   |                   |       |                 |
|       | b)   | VMc                      |   |                   |       |                 |
|       | -  | SOAP                     |   |                   |       |                 |
|       | d)   | All of the mentioned     |   |                   |       |                 |
| xi)   | Into which expenditures does Cloud computing shifts capital                          |                          |   |                   |       | CO <sub>3</sub> |
|       | expenditures?  |                          |   |                   |       |                 |
|       | a)   | Local                    |   |                   |       |                 |
|       | b)   | Operating                |   |                   |       |                 |
|       | c)   | Service                  |   |                   |       |                 |
|       | d)   | none of the mentione     | ed  |                   |       |                 |
|       |  |                          |   |                   |       |                 |
|       |  |                          | GROUP – B                                   |                   |       |                 |
|       |  | pon                      | (Short Answer Type Questions)               |                   |       |                 |
|       |  | ( )                      | Answer any <i>three</i> of the following)   | $3 \times 5 = 15$ |       |                 |
| 2     | VV/14  | 1                        |   |                   | larks | CO No           |
| 2.    |  | antages of cloud comp    | computing? Discuss about the advantaguting? | ges and           | 5     | CO2             |

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| 3. a.  | Mention three significant characteristics of a typical SaaS solution   | 3      | CO2             |
|--------|--|--------|-----------------|
| b.     | What are the functions of Google Analytics?  | 2      | CO1             |
| 4. a.  | Discuss three main advantages and three major disadvantage of cloud computing with suitable example.   | 3      | CO2             |
| b.     | Determine role of cloud computing in healthcare application.   | 2      | COI             |
| 5.     | Explain the full form and the usage of 'Eucalyptus' in Cloud Computing.  | 5      | CO2             |
| 6.     | What are the characteristics of cloud architecture that differ from traditional cloud architecture?  | 5      | CO4             |
|        | GROUP - C  |        |                 |
|        | (Long Answer Type Questions)   |        |                 |
|        | (Answer any <i>three</i> of the following) $3 \times 15 = 45$  |        |                 |
|        |  | Marks  | CO No           |
| 7. a.  | What data base related services cloud can provide  | 5      | COI             |
| b.     | Discuss about two Data base services provided by Google cloud  | 5      | CO <sub>2</sub> |
| C.     | Analyze the concept of virtualization  | 5      | CO4             |
|        |  |        |                 |
| 8. a.  | Suppose you are going to establish an startup HR firm. Justify that it would be better to use cloud service  | 7      | CO1             |
| b.     | Suppose you are providing an cloud based health care application for a hospital having features of online doctor's appointment, online booking for bed, different medical tests also, Remote access to patient, remote monitoring for critical patient, Employee management, Employee payroll, Visitor log maintain, online payment. Justify what kind of cloud service and deployment models you will provide to client for different features described above. | 8      | CO3             |
| 9. a.  | Describe the architecture of Windows azure.  | 7      | CO2             |
| b.     |  | 8      | COI             |
| 0.     | classified in cloud computing.   | 0      | COI             |
| 10. a. | Evaluate the performance of cloud computing in healthcare industries   | 5      | CO4             |
| b.     | Design a cloud based employee management system architecture deployed  | 10     | CO2             |
|        | in cloud.  |        |                 |
| 11.    | Write Short note: (Any three)  | 3*5=15 |                 |
| a.     | CRM  | 5      | CO4             |
| b.     | ERP  | 5      | CO1             |
| c.     | AWS  | 5      | CO2             |
| d.     | VLAN   | 5      |                 |
|        |  |        | CO2             |
| e.     | Hadoop   | 5      | CO <sub>3</sub> |