

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
Third Semester MCA (2 Year) Degree Examination December 2021

**Course Code: 20MCA265**

**Course Name: CLOUD COMPUTING**

Max. Marks: 60

Duration: 3 Hours

**PART A**

*Answer all questions, each carries 3 marks.*

Marks

- |    |   |     |
|----|---|-----|
| 1  | Define cloud computing and its service models.                              | (3) |
| 2  | What are the main components of Neutron architecture? Explain each.         | (3) |
| 3  | Explain clustering and its types used in OpenStack.                         | (3) |
| 4  | What is the service provided for image management in OpenStack? Explain it. | (3) |
| 5  | Write a short note on Cinder block storage service and its components.      | (3) |
| 6  | What are the approaches available for segregating cloud services?           | (3) |
| 7  | Write a short note on Neutron plugins and its categorization.               | (3) |
| 8  | Explain two type of Neutron subnet port connectivity.                       | (3) |
| 9  | Describe HA and its levels in OpenStack.                                    | (3) |
| 10 | Differentiate Terraform and Heat in OpenStack orchestration.                | (3) |

**PART B**

*Answer any one question from each module. Each question carries 6 marks.*

**Module I**

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|----|--|-----|
| 11 | Explain OpenStack cloud architecture and any 4 service components. | (6) |
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**OR**

- 12 Explain Nova compute service and its basic components. (6)

**Module II**

- 13 Describe Keystone service and its service providers. (6)

**OR**

- 14 Explain the working of Ansible playbooks. (6)

**Module III**

- 15 Write a comparison about Nova Docker driver and OpenStack Magnum project for hosting an application. (6)

**OR**

- 16 Describe Swift architecture. (6)

**Module IV**

- 17 How to implement virtual network in OpenStack and also explain two categories of implementation. (6)

**OR**

- 18 Explain implementation of network security in OpenStack. (6)

**Module V**

- 19 Explain Heat orchestration in OpenStack. (6)

**OR**

- 20 Describe about HA proxy and its load balancing features. (6)

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