

[Time:2.30 Hrs]

[Marks:75]

Please check whether you have got the right question paper.

- N.B:**
1. All questions are compulsory.
 2. Figures to the right indicate full marks.
 3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English.

- Q.1 Attempt **any three** of the following: 15
- a. Define the differences between the five generations of cellular networks.
 - b. Define application of Ethernet Standards.
 - c. Describe the Internet of Things.
 - d. Explain the concepts of network convergence and unified communications.
 - e. Explain the concept of quality of experience.
- Q.2 Attempt **any three** of the following: 15
- a. Explain the SDN Architecture.
 - b. Explain the different types of functions performed by the data plane network devices.
 - c. Explain the different types of Standards-Developing Organizations for developing the Software-Defined Networking.
 - d. Explain the Open Daylight Architecture.
 - e. State the characteristics of Software-Defined Networking.
- Q.3 Attempt **any three** of the following: 15
- a. Explain NFV infrastructure.
 - b. Explain the hypervisor domain.
 - c. Explain benefits of Network Virtualization.
 - d. Write a note on Virtual Private Network (VPN).
 - e. Explain VNFC to VNFC Communication.
- Q.4 Attempt **any three** of the following: 15
- a. Explain service level agreement.
 - b. Write application of QoE.
 - c. List and explain QoE measurement methods.
 - d. Explain definition of quality of experience.
 - e. Explain classification of QoE/QoS mapping models.
- Q.5 Attempt **any three** of the following: 15
- a. Compare and contrast the ITU-T and IoT World Forum IoT reference models
 - b. Explain cloud deployment models.
 - c. List and discuss the five principal components of IoT-enabled things.
 - d. Explain the scope of the Internet of Things.
 - e. Describe the open source IoTivity IoT implementation.