

(2Hours)

[Total Marks: 60]

- N. B.: (1) All questions are compulsory.  
(2) Make suitable assumptions wherever necessary and state the assumptions made.  
(3) Answers to the same question must be written together.  
(4) Numbers to the right indicate marks.  
(5) Draw neat labeled diagrams wherever necessary.  
(6) Use of Non-programmable calculators is allowed.

**Q1. Attempt the two of the following.**

**12 Marks**

1. Discuss the various applications of modern networking.
2. Write a short note on Element of Unified Communications
3. Explain the Big data networking with example.
4. Write a short note on NFV.

**Q2. Attempt two of the following**

**12 marks**

1. Describe the SDN architecture.
2. Discuss the SDN and NFV Open Standard Activities.
3. Write a note on SDN Data Plane
4. Write a short note on routing.

**Q3. Attempt two of the following.**

**12 marks**

1. Write a short note on virtual machine
2. Discuss the NFV reference architecture.
3. Write a note on Versus L3 Virtual networks
4. Write a short note on virtual LANs.

**Q4. Attempt two of the following.**

**12 marks**

1. Describe the QoS architectural Framework.
2. Discuss ISA Approach.
3. What are the solutions to achieve actionable QoE
4. Write a short note on QoE based network and services

**Q5. Attempt two of the following.**

**12 marks**

1. Explain SaaS in detail.
2. Write a short note on NIST cloud computing reference architecture.
3. Write a short note on components of IoT -enabled things.
4. Write a short note on RFID.

\*\*\*\*\*