

[3 Hours]

[Total marks: 80]

N.B. (1) Question 1 is compulsory.

(2) Attempt any three from remaining five questions.

1. (a) Discuss the opportunities and challenges in Next Generation Networks. **10**
(b) What is VPN? Explain the architecture. **10**
2. (a) Explain Wireless NG Technology with respect to Broadband Bluetooth. **10**
(b) Differentiate between: **10**
 - i) Layer 2 VPN and Layer 3 VPN
 - ii) Circuit switching and Packet switching
3. (a) Discuss the various Protocols Used for IPTV. **10**
(b) What is High Definition? Explain in brief the 3 D television services. **10**
4. (a) Explain the architecture of the ITU – NGN. **10**
(b) Explain the various services provided by the IMS. **10**
5. (a) Explain the QoS provided using the MPLS. **10**
(b) Discuss Numbering, naming and addressing in NGN. **10**
6. Write short notes on any four of the following: **20**
 - i) HBB-Next
 - ii) Multi service Flexible Networks architecture
 - iii) Long Term Evolution
 - iv) VOIP
 - v) Zigbee
