QP CODE: 12012024FPGCSE1

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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FIRST SEMESTER M.TECH DEGREE EXAMINATION, JANUARY 2024

Course Code: 221ECS006

Course Name: Advanced Computer Networks

Max. Marks : 60 **Duration: 2Hrs 30 Minutes**

PART A

Answer All Questions. Each Question Carries 5 Marks

1. Illustrate with an example how standard TCP can be enhanced to support mobile users. **(5)**
2. Explain 4G cellular telephony in detail. **(5)**
3. how are digital data (bits) changed to analog signals (radio waves) in the radio layer of Bluetooth? **(5)**
4. Examine how IPV6 deals with the scalability problem in routing. **(5)**
5. Point out the concept behind data centre networking. **(5)**

Part B

(Answer any five questions. Each question carries 7 marks)

6. A router in DVMRP creates a shortest-path tree on demand. What is the meaning of this statement? What is the advantage of creating shortest path trees only on demand? **(7)**
7. How RTP/RTCP and SIP are used in wireless environment? **(7)**
8. Examine the issues affecting network performance and suggest solutions for the same. **(7)**
9. Show the evolution of cellular technologies from 3G to 5G. **(7)**
10. a. Comment on the statement "Distributed Hash Tables are said to build structured P2P networks". **(4)**
    b. Explain Data Center Networking. **(3)**
11. How is VPN implemented using MPLS? **(7)**
12. Justify the need for Resource Reservation in multicast transmission. **(7)**

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