Reg. No	Name
105. 110	1401110

# B. C. A. DEGREE END SEMESTER EXAMINATION OCTOBER 2017 SEMESTER – 3: BACHELOR OF COMPUTER APPLICATIONS (CORE COURSE)

COURSE: 16U3CRBCA10, COMPUTER NETWORKS

(For Regular - 2016 Admission)

Time: Three Hours Max. Marks: 75

#### PART - A

(Answer all questions. Each question carries 1 mark)

- 1. List out the three types of Networks.
- 2. Explain Bus Topology.
- 3. List out the functions of Bridge.
- 4. How does a Router differ from a Bridge?
- 5. Define SMTP.
- 6. List out the five Application layer protocols
- 7. What is a WAN?
- 8. List out the major characteristics of ISDN networks.
- 9. What is Cellular Technologies?
- 10. Define Firewall.  $(1 \times 10 = 10)$

#### PART - B

(Answer any *eight* questions. Each question carries 2 marks)

- 11. Draw the UDP segment structure diagram.
- 12. Define ICMP protocol.
- 13. List out the benefits of wireless technology.
- 14. Explain any two wireless network components
- 15. Explain the different IPV4 address class and its rage.
- 16. Draw the TCP segment structure diagram.
- 17. Explain Tunneling.
- 18. Discuss Authentication and Authorization
- 19. Explain: 1) Ping and 2) IPconfig
- 20. List out the three goals of Operating System.

 $(2 \times 8 = 16)$ 

## PART - C

(Answer any *five* questions. Each question carries 5 marks)

- 21. Differentiate between TCP and UDP.
- 22. Explain the Client/Server Architecture.

- 23. Explain the main functions of NIC.
- 24. With the help of a diagram describe FTP.
- 25. Differentiate between Circuit Switching and Packet Switching.
- 26. Define VPN.
- 27. Explain SONET with diagram.

 $(5 \times 5 = 25)$ 

### PART - D

(Answer any two questions. Each question carries 12 marks)

- 28. Illustrate the function of each layers of ISO/OSI Reference model with the help of a neat diagram.
- 29. Explain IPV4 and IPV6 Datagram format with neat diagrams.
- 30. Describe the various Transmission Media used in networks.
- 31. Compare the UNIX and LINUX System Structures.

 $(12 \times 2 = 24)$ 

\*\*\*\*\*\*