Reg. No…….. Name…… **17U303**

B. Sc. DEGREE END SEMESTER EXAMINATION OCTOBER 2017

SEMESTER – 3: B. Sc. COMPUTER APPLICATION (CORE COURSE)

COURSE: 15U3CRCAP05, DATA COMMUNICATION AND COMPUTER NETWORKS

(For Regular - 2016 Admission and Supplementary / Improvement 2015 Admission)

Time: Three Hours Max. Marks: 75

PART A

(Answer ***all*** questions. Each question carries **1** mark)

1. Define Data Communication.
2. What is a Protocol?
3. Define Frequency spectrum of a signal.
4. Which is the external energy that corrupts a signal?
5. Which is the most powerful redundancy checking technique?
6. Which layer corrects the error in the transmission?
7. Define Bridge.
8. Write the acronym for WMAN.
9. What is DNS?
10. Define Cloud Computing. (1 x 10 = 10)

PART B

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

11. Which are the components in data communication.
12. Point out the layers in TCP/IP model.
13. Contrast bit rate and baud rate.
14. Define the transmission modes.
15. Which are the four common methods of error detection?
16. Which are the two categories of flow control?
17. Differentiate IPV4 and IPV6.
18. Compare PaaS and SaaS
19. What is Hand off?
20. Define Multicasting. (2 x 8 = 16)

PART C

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

21. Briefly describe categories of networks.
22. Differentiate PAM and PCM.
23. Explain Vertical Redundancy Check (VRC).
24. Describe stop and wait ARQ.
25. With the help of figure, explain gateways.
26. Discuss Cellular Networks.
27. What are the differences between cloud computing and grid computing. (5 x 5 = 25)

PART D

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

28. Define Multiplexing. Explain different techniques of multiplexing.
29. Discuss about the different types of guided media and its advantages and disadvantages.
30. Explain symmetric and asymmetric cipher models.
31. What is cloud computing? What are its characteristics and its advantages? (2 x 12 = 24)