**Reg. No. \_\_\_\_\_\_\_\_**

**Karunya University**

**(Karunya Institute of Technology and Sciences)**

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

**Supplementary Examination - June 2011**

**Subject Title: COMPUTER NETWORKS Time: 3 hours**

**Subject Code: 09IT214 Maximum Marks: 100**

#### **Answer ALL questions**

**PART – A (10 x 1 = 10 MARKS)**

1. List the characteristics of LAN.

2. What is meant by peer entity?

3. Define the term socket.

4. Mention the types of HTTP protocol.

5. What factors determine the reliability of a delivery?

6. What is the expression to calculate RTT?

7. How does a router differ from a bridge?

8. What are the three elements of distance vector routing?

9. Calculate the hamming code for the original data 10011010.

10. Write the frame format of IEEE 802.3

**PART – B (5 x 3 = 15 MARKS)**

11. Mention the various parameters used for the comparison of physical media.

12. Discuss the components of E-mail briefly.

13. List the design issues of transport layer.

14. Write short note on datagram routing.

15. How is logical ring maintained in IEEE 802.4?

**PART – C (5 x 15 = 75 MARKS)**

16. a. Describe the network architecture in detail. (10)

b. Explain the concepts of access networks briefly. (5)

(OR)

17. a. Compare point -to-point channels with broadcast channels along with suitable examples?

(7)

b. A collection of ﬁve routers is to be collected in a point-to-point subnet. Between each pair of routers, the designers may put a high speed line, a medium- speed line, a low-speed line, or no line. If it takes 100ms of computer time to generate and inspect each topology, how long will it take to inspect all of them to ﬁnd the one that best matches the expected load?

(8)

18. What is DNS? What is its use? How does DNS work? Explain with neat sketch.

(OR)

19. What is meant by browser? Discuss the architecture of browser in detail.

20. Explain the state transition diagram of TCP with a neat diagram.

(OR)

21. What is meant by congestion control? Explain the various techniques available for avoiding congestion.

[P.T.O]

22. What are the disadvantages of distance vector routing? Describe the link state algorithm with example.

(OR)

23. What is IP address? What is the use of it? Discuss the class full and class less IP address in detail

24. Describe the various methods of error detection techniques with example.

(OR)

25. Describe the architecture of SNMP in detail.