

## C09-IT-606C

## 3780

# BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2017 DIT—SIXTH SEMESTER EXAMINATION

### INTERNETWORKING WITH TCP/IP

Time: 3 hours [ Total Marks: 80

#### PART—A

 $3 \times 10 = 30$ 

**Instructions**: (1) Answer **all** questions.

- (2) Each question carries three marks.
- (3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. Write a short note on the internet architecture board.
- 2. Give ARP refinements.
- 3. Define RARP.
- **4.** What is meant by record route option?
- **5.** Briefly explain connectionless delivery system.
- **6.** Discuss about time to live field.
- **7.** Write a short note on how to handling incoming datagram.
- **8.** What is meant by default router?

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9. Briefly explain echo request and reply message format.

10. Write short notes on error reporting and error correction.

PART—B

 $10 \times 5 = 50$ 

6

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10

#### **Instructions**: (1) Answer any **five** questions. (2) Each question carries **ten** marks. (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer. 3 **11.** (a) Explain router. (b) Explain interconnection through IP routers in internet architecture. 7 **12.** (a) Explain timing RARP transaction. 6 (b) Explain ARP encapsulation and identification. 4 **13.** (a) Explain the purpose of internet protocol. 5 5 (b) Explain the concept of unreliable delivery. **14.** (a) Explain datagram size, network MTU and fragmentation. 6 (b) Explain reassembly of fragments. 4 **15.** (a) Define circuit switched and packed switched network. 4

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**18.** Explain briefly about the internet control message protocol.

(b) Explain source route option and timestamp option.

**16.** (a) Explain next-hop routing and host-specific router.

(b) Write a short note on direct delivery service.

17. (a) Write the IP routing algorithm.

(b) Explain routing with IP addresses.