



**POORNIMA UNIVERSITY, JAIPUR**  
**END SEMESTER EXAMINATION, 2023-2024 EVEN SEMESTER**

Write Roll No Below: \_\_\_\_\_

**BCA (All) I () - II (Main/Back) End Semester Examination,**  
**23BCACCA2101: Computer Networks**

**Time:** 3 Hours

**Total Marks:** 60

**Min. Passing Marks:** 21/24/27

**Question Paper ID:** 001088

**Instructions:** Attempt all five questions. There is an internal choice either (a or b) in Q1 to Q5. Marks of each question or its parts are indicated against each question/part. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

**Bloom Level(BL):** 1-Remembering, 2-Understanding, 3-Applying, 4-Analysing, 5-Evaluating, 6-Creating

Use of following supporting material is permitted during examination for this subject: Nil

- Q1. (a)** (i) Write down the difference between OSI and TCP/IP model. **[6 marks]** **Marks BL CO**  
**12 1 1**  
(ii) Describe following media connectors: **[6 marks]**  
(a) Fiber optics  
(b) Coaxial
- (OR)**
- (b)** Write short notes on the following:  
(i) Switch and Router **[6 marks]**  
(ii) Firewall and Default Gateway **[6 marks]**
- Q2. (a)** Write down short notes on following protocols: **Marks BL CO**  
**12 2 2**  
(i) DHCP **[6 marks]**  
(ii) SMTP **[6 marks]**
- (OR)**
- (b)** (i) Write down the difference between POP3 and IMAP. **[6 marks]**  
(ii) Write down short notes on Telnet and FTP. **[6 marks]**
- Q3. (a)** (i) What are the functions of the Network layer in the OSI model? **[6 marks]** **Marks BL CO**  
**12 2 3**  
(ii) Explain UDP protocol in detail. **[6 marks]**
- (OR)**
- (b)** (i) What do you understand by IP address? Explain the difference between Public and Private IP Address. **[6 marks]**  
(ii) Explain data Encapsulation working in computer networks? **[6 marks]**
- Q4. (a)** Write short notes on: **Marks BL CO**  
**12 1 4**  
(i) ALOHA **[6 marks]**  
(ii) Channel Allocation Problem **[6 marks]**
- (OR)**
- (b)** (i) What do you understand by Wireless security protocol? Write down the difference between WEP and WAP protocols. **[6 marks]**  
(ii) What is wireless networking? Write down the types of Wireless Networks. **[6 marks]**
- Q5. (a)** (i) Analyze the challenges associated with managing a global WAN infrastructure. **[6 marks]** **Marks BL CO**  
**12 4 5**  
(ii) Compare and contrast circuit-switched and packet-switched WAN technologies. **[6 marks]**
- (OR)**
- (b)** (i) Evaluate the security measures commonly employed in WAN environments. **[6 marks]**  
(ii) Write short notes on: **[6 marks]**  
(a) PSTN  
(b) ISDN

\*\*\*End of Question Paper\*\*\*