

Roll No. ....

Total No. of Questions : 09]

[Total No. of Pages : 02

**B.Tech. (Sem. - 6<sup>th</sup>)**  
**ADVANCED INTERNET TECHNOLOGIES**  
**SUBJECT CODE : IT - 302**

**Paper ID : [A0519]**

[Note : Please fill subject code and paper ID on OMR]

**Time : 03 Hours**

**Maximum Marks : 60**

**Instruction to Candidates:**

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Two** questions from Section - C.

**Section - A**

**Q1)**

**(10 × 2 = 20)**

- a) What do you mean by subnet mask?
- b) Define port number.
- c) Explain Simple Mail Transfer Protocol.
- d) What do you mean by UDP?
- e) What is client-server model?
- f) Why do we need protocols?
- g) Explain the concept of Serial Line IP.
- h) Why do you mean by TCP timeout?
- i) What are the advantages of using Rlogin?
- j) What is Ethernet?

**Section - B**

**(4 × 5 = 20)**

**Q2)** Discuss the concept of dynamic routing.

**Q3)** What is subnetting? Why it is required?

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**Q4)** What are the core differences Between TCP and UDP?

**Q5)** What do you mean by domain name server and how it resolves different addresses?

**Q6)** Write a short note on Internet Control Message Protocol.

**Section - C**

**(2 × 10 = 20)**

**Q7)** Explain the need and advantages of using IP Routing Principle.

**Q8)** What are the data units at different layers of the TCP/IP protocol suite?

**Q9)** Write short note on the following:

(a) FTP.

(b) ARP.

