

**BACHELOR OF COMPUTER APPLICATIONS  
(BCA) (Pre-Revised)**

**Term-End Examination**

**00310 December, 2017**

**CS-69 : TCP/IP PROGRAMMING**

*Time : 2 hours*

*Maximum Marks : 60*

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**Note :** *Question number 1 is compulsory. Answer any three questions from the rest.*

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1. (a) Given the network address 132.10.0.0., find its class and write the range of its address class. 3
- (b) What is DNS ? Explain DNS message format. 6
- (c) Give any two examples of how computers can be connected together. 4
- (d) Explain how TCP manages corrupted segments and lost acknowledgements with the help of illustration. 5
- (e) What is a Socket ? Explain any two types of sockets. 5
- (f) Explain the concept of three-way handshaking mechanism for connection establishment in TCP. Use an appropriate diagram for explanation. 7

2. (a) What are the different commands used to copy files between FTP clients and FTP server ? Also write the syntax and use of any two of these commands. 5
- (b) List and explain any four messages used in ICMP. 5
3. Explain the purpose and importance of the following IP header fields : 10
- (a) IP Header Length
- (b) Protocol
- (c) Time to Live
- (d) Identification
- (e) Data
4. (a) What is Subnet Mask ? Explain with the help of an example. 5
- (b) What is UDP ? Explain the basic characteristics of UDP. 5
5. Differentiate between the following : 10
- (a) Half Duplex and Full Duplex
- (b) Authentication and Authorization
- (c) Class-C and Class-D IP Addresses
- (d) Direct Routing and Indirect Routing
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