

**BACHELOR OF COMPUTER  
APPLICATION (BCA)**

**Term-End Examination**

**June, 2020**

**BCS-061 : TCP/IP PROGRAMMING**

*Time : 2 Hours*

*Maximum Marks : 60*

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*Note : (i) Question No. 1 is compulsory.*

*(ii) Attempt any three questions from the rest.*

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1. (a) Explain TCP connection establishment process with the help of a diagram. 8
  - (b) How is 'error control' managed by TCP ? Explain. 7
  - (c) Explain the mechanism used by TCP for congestion control and flow control. 7

- (d) What is DNS Server ? Differentiate between primary and secondary DNS server. 4
- (e) "TCP is a connection-oriented, reliable protocol." Justify the statement. 4
2. (a) Describe "Binding" in network programming. Explain any *two* uses of bind() system call. 4
- (b) Write the syntax for the following system calls along with the description of the parameters and purpose of their use : 6
- (i) socket( )
- (ii) write( )
- (iii) recv( )
3. (a) Explain the conditions which force the re-transmission of the TCP segment. 5
- (b) Compare and contrast ARP vs. RARP. 5

4. (a) Mention the use of MIME. Describe any *four* reader components of MIME. 5
- (b) Briefly write the role of POP protocol. 5
5. (a) Describe the Quality of Service (QoS) in Internet Protocol. 5
- (b) What is Multicasting ? Differentiate between unicasting and multicasting. 5