

67107-N
MCA 3rd Semester (MCA 2 year programme)
WEF 2021-2022 Examination, December-2022
NETWORK PROGRAMMING ELECTIVE II (6)
Paper-21MCA23DB1

Time allowed : 3 hours/

[Maximum marks : 80

Note : *Questions Number 1 will consist of total 8 parts (short-answer type questions) covering the entire syllabus and will carry 16 marks. In addition to the compulsory question there will be four units i.e. Unit-I to Unit-IV. Question Number 1 will be compulsory. In addition question, student will have to attempt four more questions selecting one question from each unit.*

1. (a) Define Web page, Web site and Web browser ?
- (b) List some features of UNIX.
- (c) What is the role of server ?
- (d) What are the basic operations of Server socket ?
- (e) Distinguish between absolute URL and relative URL.
- (f) What is the main function of a firewall ?
- (g) What does Xerox Network System (XNS) mean ?
- (h) Why do we need WAP ? 8×2=16

Unit-I

2. Explain with a suitable diagram the socket system calls used for connection oriented and connection less communication between a client and a server. 16

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3. (a) Explain the functionality provided by select function. List the differences between Poll and Select functions. 8
(b) What is I/O Multiplexing ? Explain different types of Synchronous and asynchronous I/O models. 8

Unit-II

4. (a) What are the different properties of a Java Bean ? 8
(b) What are the main functions in the socket API ? 8

5. (a) What are the different API's are available in Winsock DLL ? 6
(b) Explain with diagrams the following I/O models provided by UNIX :
(i) Blocking I/O model
(ii) Non Blocking I/O model 10

Unit-III

6. (a) What are the different layers of WAP architecture? 8
(b) What is a firewall ? How do you set it up ? 4
(c) Difference between RMI and CORBA. 4
7. (a) Explain the technical details of firewall and any three types of firewall with neat diagram. 6
(b) List some features of JavaScript. 5
(c) What is the difference between a digital signature and an electronic signature? 5

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Unit-IV

8. (a) What are the differences between HTTP Get and HTTP Post ? 6
(b) Write the various steps which are involved in creating a server program. 6
(c) What is the use of URL class ? 4
9. (a) Consider the TCP Echo Server and TCP Echo Client application and discuss what happens to the client when the server process crashes ? 8
(b) What is the difference between client-side and server-side programming language ? 8

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