Enrollment No……

Bachelor of Engineering
Sixth Semester Examination, June-2021
Distributed Systems [IT-601]
Branch- IT

Time: 3:00 Hrs **Max Marks 70**

Note: 1. Attempt any five questions out of eight.
2. All question carry equal marks.

Q.1 (a) What are design issues to be considered in designing distributed system?
(b) List the various challenges in distributed system and explain then.

Q.2 (a) How resource sharing done in distributed system?
(b) Discuss in detail about the examples (any two) of distributed system

Q.3 (a) With a simple case study explain the concept of distributed deadlock.
(b) What are different deadlock handling strategies?

Q.4 (a) What is RMI? How is it implemented?
(b) Describe the various RPC protocol supporting Client-serve communication

Q.5 (a) Describe in detail about wave and traversal algorithm.
(b) Describe in detail about Andrew file system in detail.

Q.6 (a) How concurrency control is possible in distributed transactions?
(b) Define fault tolerant. Describe in brief the methods to guard the system against different kinds of faults.

Q.7 (a) Elaborate on any three election algorithm.
(b) Explain destination based routing algorithm. with suitable example.

Q.8 Write a short note:-
(i) CORBA
(ii) Assignment problem in parallel (APP)

Enrollment No……

Bachelor of Engineering
Sixth Semester Examination, June-2021
Computer Graphics & Multimedia [IT-602]
Branch- IT

Time: 3:00 Hrs **Max Marks 70**

Note: 1. Attempt any five questions out of eight.
2. All question carry equal marks.

Q.1 (a) Define random scan system.
(b) Mention the principles of animation. How does the principle help compute amination.

Q.2 (a) What are the advantages and disadvantages of lossess compression?
(b) Describe a method to reflect a 3D object about an arbitrary plain.

Q.3 (a) Write characteristics of a multimedia presentation.
(b) What are the properties associated with curve? Explain significance of each of them.

Q.4 (a) Consider co-ordinates (-3, 3) and (4, -4). Determine the line management using generalized Bresenham's integer algorithm.
(b) What are the steps required to plot a line whose slope is between 40° and 90° using Brenham's method.

Q.5 (a) Describe an illustrative example of procedural technique. Why are such techniques useful in computer animation?
(b) Briefly describe the architecture of multimedia. Discuss its various components and elaborate them.

Q.6 (a) What is animation? What are the uses and principles of animation?
(b) What is a color model? Explain viewing transformation.

Q.7 (a) Write down the algorithm for drawing a circle using mid-point circle drawing. Implement your algorithm to draw a circle of radius 10.
(b) Explain homogeneous co-ordinate system. Why do we need it in modeling transformation?

Q.8 Write a short note on (any three) -
(a) Multimedia Architecture (b) Z-Buffer algorithm
(c) HSV color model (d) Audio components of an audio system

Enrollment No……

Bachelor of Engineering
Sixth Semester Examination, June-2021
Internet Technology & Network Management [IT-603]
Branch-IT

Time: 3:00 Hrs **Max Marks 70**

Note: Attempt any five questions. All questions carry equal marks.

Q.1 (a) TCP transmission has three phases explain each in detail
(b) What is data gram fragmentation? Why datagram fragmentation is not is issue in IPV6? How is it achieved?

Q.2 (a) Discuss the functions of router.
(b) Discuss the issue and solutions related to the interworking of IPV6 and IPV4.

Q.3 (a) How does TCP handle the flow control? Explain it with the help of diagram showing the status of sliding window at different stages.
(b) What is subnet mask? Also discuss the role of loop back address.

Q.4 (a) Write the various features of UDP protocol.
(b) Explain range of TCP/ IP classes. What is the range of private IP addresses?

Q.5 Explain in detail about the functionalities of SMTP. Specify the flow the SMPT commands between the client and server.

Q.6 (a) What is address resolution? Describe ARP and RARP with illustration.
(b) What are the properties of reliable delivery system? How these properties are achieved by TCP?

Q.7 Write notes on:-
(i) HTTP (ii) SNMP

Q.8 Write short notes on:-
(i) Security management
(ii) Fault management
(iii) SMTP vs. POP

Enrollment No……

Bachelor of Engineering
Sixth Semester Examination, June-2021
Web Technology [IT-604]
Branch-IT

Time: 3:00 Hrs **Max Marks 70**

Note: Attempt any five questions. All questions carry equal marks.

Q.1 (a) How Java servlet performs session handling?
(b) Discuss the architecture of servlet.

Q.2 (a) Explain about XML and how to create HTML document with the help of XML.
(b) What is HTTP? Explain its utilities and various method used in HTTP.

Q.3 (a) Compare between servlet and CGI.
(b) Describe Java beans classes and JSP.

Q.4 (a) What is DOM and how does it release to XML.
(b) What is difference between Java and JavaScript?

Q.5 (a) Explain about World Wide Web.
(b) Define the GET () and Post () method with example.

Q.6 (a) How to use email validation in JavaScript?
(b) Explain HTTPS.

Q.7 (a) Write the code for database connectivity with Java.
(b) What are web services platform elements? Describe any one with example.

Q.8 Write short notes on:-
(i) Proxy Server
(ii) Multimedia Server
(iii) JavaScript using loop

Enrollment No……

Bachelor of Engineering

Sixth Semester Examination, June-2021

Software Engineering & Project Management [IT-605]

Branch - IT

Time: 3:00 Hrs **Max Marks 70**

Note: 1. Attempt any five questions out of eight.
2. Each question carry equal marks.

Q.1 (a) Explain the SDLC model briefly. Explain requirement phase of SDLC.
(b) Differentiate between function oriented and object oriented software development.

Q.2 (a) What are the fundamentals of software project management?
(b) Differentiate between verification and validation

Q.3 (a) What is software re- engineering and software?
(b) What is SQA? What do you understand by project scheduling?

Q.4 (a) Discuss various software testing strategies. What are the goals of testing?
(b) What are the fundamentals of software project management?

Q.5 (a) Write short note on SCM.What is the relation between SCM and maintenance?
(b) Explain cost estimation methods. Explain COMOMO model.

Q.6 (a) Explain integration testing with its classification.
(b) Write down the difference between black box testing and white box testing.

Q.7 (a) Explain:-
(i) Waterfall model (ii) Spiral model
(b) Explain unit testing & system testing.

Q.8 Define following - (any three)
(i) Web engineering (ii) CASE Tool
(iii) Project tracking (iv) Critical path method