BCA 5th Sem

Computer Networks

1. Explain Network?
2. Explain LAN, MAN, WAN.

3. What is switching?

4. Define ISDN.

5. Differentiate between static and dynamic channel allocation.

6. Write a note on flooding.

7. What is the significance of HTTP?

8. Define FTP.
9. Explain internet, intranet, extranet.
10. What is Hub? How it is different from Switch?
11. Differentiate between analog and digital signals?
12. What is Laser transmission?
13. Define internetworking.
14. Define communication media.
15. Co-axial cable.
16. Why we use Fiber optics?
17. Distinguish between Connection oriented and connection- less services.
18. Define Full duplex mode.
19. What is the purpose of bridge?
20. What is HDLC? How it is different from SDLC.
21. Flow control.
22. SLIP & PPP
23. Leased line
24. Frequency Spectrum
25. Optimality Principle.
26. Services provided by network layer
27. What do you mean by computer network? What are the various hardware and software requirement for network?
28. What are network topologies? Explain various network topologies with their advantages and disadvantages.
29. Explain various types of wireless transmission in brief.
30. What is Multiplexing? Explain its various types in brief.
31. What is Ethernet? Explain IEEE standards.
32. What is packet switching? Compare it with circuit switching.
33. Explain the various services offered by data link layer.
34. Explain CSMA/CD/CA.
35. Discuss the concept of multiplexing. Explain various types of multiplexing in detail.
36. List major design issues of data link layer. Discuss data link protocols for noisy andnoiseless channels.
37. Explain the significance of error detection and error correction codes for data transfer. Construct the hamming code for bit sequence 1001110.
38. Discuss various IP address classes highlighting the concept of sub netting and subnetmask.
39. Explain the principles of congestion control. Discuss working of leaky bucket and tokenbucket algorithms.
40. Explain the architecture and services of electronic mail in detail. Write a note on MIME.

41. Explain SMTP
42. Discuss the different routing algorithms.
43. How data Communication is done in OSI Reference model? Discuss the activity   carried at each layer?
44. What are the uses of computer networks? Explain various topologies used in computer networks with advantages and limitations of each.
45. Difference between LAN,MAN,WAN
46. Explain POP
47. Explain DNS
48. Explain FTP Commands.
49. Explain parallel and serial transmission concepts.
50. Differentiate between (a)analog and Digital
                              (b) Simplex and Half Duplex.

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Java Programming

1. Why is Java Known as platform neutral language?

2. How is Java More secured than other languages?

3. Why do you need the import statement?

4. What is Byte code?

5. Write short note on JVM

6. Write short note on JDK

7. What do you mean ternary operator?

8. What is the significance of Operator precedence?

9. What is the difference between unary, binary and ternary operators?

10. What do you mean by labelled loop?

11. WAP to find reverse of a number?

12. WAP to calculate sum of digits of a number.

13. What is method overloading?

14. Why we need a constructor?

15. Define access specifier?

16. Differentiate between local variables, instance variable and class variables?

17. In what ways does a Switch statement differ from if statement?

18. What are the user defined exceptions?
19. Difference between Procedure oriented and Object Oriented Approach?

20. Name the various data types used in Java.

21. What is a container in a GUI?

22. What is the importance of paint() method ln Applet?

23. What is deadlock in multithreading.

24. Write any six characteristics of Java programming language?

25. Explain various types of inheritance supported in Java with suitable examples.

26. Discuss the various flow control statements in Java programming

27. Explain the use of Final keyword.

28. How to implement interfaces in Java? Explain with suitable example.

29. Discuss any two functions of String Buffer class.

30. What are the types of packages? Discuss the access protection in package with a program.

31. Write short notes on one-dimensional Arrays and Streams

32. What are the types of Exception? How Exceptions can be handled in Java? Explain with suitable examples.

33. Explain the Java thread model.

34. What are the types of applet? Discuss the applet lifecycle and give suitable example.

35. What is Layout manager in Java? Explain the Flow Layout, Border Layout, and Grid Layout.

36. What is the use of JDBC? Write the steps to insert and delete record in database using **JDBC?**

37. What are various types of inheritance implemented in Java?

38. How is multiple inheritance implemented in Java?

39. What are Interfaces? Explain with Program

40. How multiple interfaces is are implemented in java? Explain with program?

41. What is dynamic binding?

42. What are two ways methods by which we may stop threads?

43. How do you add a class or interface to a package?

44. How does Sting Class differ from StringBuffer class?

45. How do the various access modifiers provide the data protection in programs?

46. What is the significance of Keyword Super?

47. What is the difference between suspending and stopping a thread?

48. Describe the Applet Life cycle?

49. WAP to demonstrate different types of initialization of arrays?

50. What are various string handling methods used in Java?

51. What are the similarities between interfaces and classes?

52. WAP to demonstrate how to pause execution of running thread using Sleep() method?

53. Types of error in Java?

54. WAP to demonstrate the use of throws in exception handling/

55. How applets differ from applications?

BCA 5th Sem.

Web Applications Development using PHP

1. What is the role of scripting in website development?
2. Define PHP?
3. What is WAMP server?
4. How to install and use a WAMP server?
5. What is the difference between Static and Dynamic Webpage?
6. Explain the difference between client sides and sever side scripting?
7. How to define PHP variables?
8. Define constants in PHP?
9. Define tokens.
10. What is the use of echo in PHP?
11. Write a note a Ternary operators.
12. Discuss various kinds of logical operators used in PHP?
13. Define Looping. Explain different kinds of looping statements used in PHP with examples.
14. Define conditional statements used in PHP.
15. Which PHP functions can be used to include one PHP file into another PHP file?
16. Define function. What are the uses of functions?
17. What are the Library functions in PHP?
18. Explain the difference between Library function and user defined function.
19. Write down the various features of a single quoted string used in PHP.
20. How heredoc syntax method is better than string quoting techniques used in PHP?
21. Define Indexed array. How to create and initialize an indexed array in PHP?
22. How to access array elements? Explain it by giving a suitable example.
23. Define super global array. How to use super global array in PHP?
24. What is the use of array () function in PHP.
25. Define Multidimensional Array. How to create and initialize a multidimensional array in PHP.
26. How to delete element from an array in PHP.
27. What is associative array?
28. How to Retrieve HTML form data with PHP? Give suitable example.
29. How to connect MySQL database with PHP?
30. How to create database in PHP?
31. Explain the steps required to integrate HTML form with MySQL database.
32. Define cookies.
33. What is a session in PHP?
34. What is the difference between Session and Cookie?
35. What do you mean by session? How session is more secured than cookies in PHP?
36. What is session variable in PHP? Explain how session variable is registered in PHP.
37. How to create and destroy session in PHP?
38. How to open and close file in PHP? Explain it with example.
39. How to read and write file in PHP? Give example.
40. Explain file system and directory function in detail.

41. Compare file and directory. Discuss various file handling functions provided by PHP.
42. How to upload a file over a web server in PHP?
43. Explain the working of chgrp() and chow() functions in file permission with example.
44. Write a program in PHP to show the sum of digits.
45. Write a PHP code to print the table of a number using functions
46. Write a program in PHP to find the factorial of a number.
47. Write a program to check whether the given number is odd or even.
48. Write a program to check whether the number is Palindrome or not.
49. Write a program in PHP to count the number of vowels inside the String.
50. Write a program in PHP to Reverse the String.