1B5N19277 (Pages : 2) Reg. No:..........................

Name: ....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Computer Science Degree Examination, November 2019

BCSS5B11 –Computer Networks

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

PART A

Questions 1 to 12. Answer all questions. Each question carries *one*mark.

1. What is Unicode?

2. What is a Circuit Switched Network?

3. Define Protocol. Why is it needed in Data Communication?

4. What are Analog and Digital Signals?

5. What is Bit Rate?

6. What is Multicast Routing?

7. What is Burst Error?

8. What is Cyclic Redundancy Check?

9. What is IPv4 Addressing?

10. ALOHA stands for ....

11. What is Network File System?

12. Define SNMP.

(12x1=12 Marks)

PART B

Questions 13 to 19. Answer all questions. Each question carries *two*marks

13. Explain Half Duplex Mode of Data Flow?

14. Describe Encapsulation and De-capsulation in Protocol Layering?

15. What are Time and Frequency Domains?

16. Explain Nyquist Bit Rate.

17. Briefly describe Link State Routing.

18. Explain Trivial File Transfer Protocol.

19. Explain Simple Mail Transfer Protocol.

(7x2=14 Marks)

PART C

Questions 20 to 27. Answer any *six*. Each question carries *five* marks

20. Explain various components of a Data Communication System in detail.
21. What is Transmission Impairment? What are the causes of Impairment?
22. Explain Haffman Coding with Example.
23. Explain the Longitudinal Redundancy Check method for Error Detection with example.
24. Explain different classes of IPv4 addresses. What is the importance of subnet mask?
25. Explain the format of a PPP Frame.
26. Explain CSMA / CA method for Network Collision.
27. Explain the architecture of DNS with a neat diagram

(6x5=30 Marks)

PART D

Questions 28 to 32. Answer any *three*. Each question carries *eight* marks

28. Explain various physical Network Topologies.
29. Explain ISO OSI reference model
30. Discuss the Advantages and Disadvantages Optical Fiber.
31. What is Channelization? Explain various methods for Channelization.
32. Write short notes on

    a) Polling   b) SCTP

    c) UDP Services   d) Multicast Open Shortest Path First Protocol

(3x8=24 Marks)

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Computer Science Degree Examination, November 2019

BCSS5B10 – Web Programming Using PHP

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

Part – A
Answer *all* questions
Each question carries One mark.

1. What is webserver ?

2. Expand DNS. Why it is used?

3. What is the purpose of comments in PHP?

4. What is the role of IIS in web programming?

5. What is syntax of switch statement?

6. What is alert() in javascript?

7. What is static and dynamic website?

8. What is tag used to list items in HTM?

9. What is session in PHP?

10. What are the advantages of javascript?

11. What are the tags used in Table structure in HTML?

12. What is a flowchart?

(12 x 1 = 12 Marks)

Part – B
Answer *all* questions
Each question carries Two mark.

13. What is the use of header() function in PHP ?

14. What is a program? Write down the parts of a typical HTML program.

15. Differentiate echo and print operations in PHP?

16. What is an arithmetic expression? Brief the rules of evaluation of arithmetic expression.

17. What is the purpose of foreach() construct in PHP?

18. Explain constants in PHP.

19. Explain the use of alert() in javascript with example.

Part – C
Answer *any Six* questions
Each question carries Five mark.

20. Write a brief note on partial page update using AJAX.

21. With the help of neat flow chart, Write a PHP program to find the fibinaucci numbers within a range.

22. Write a note on sessions and cookies in PHP. Give examples.

23. Briefly describe the database functions in PHP.

24. Explain arrays and different sort functions associated with arrays in PHP?

25. Explain various string functions with examples in PHP.

26. Explain the purpose of the super global array $_COOKIE[]

27. What is validation in webpages? List any four of them.

(6 x 5 = 30 Marks)

Part – D
Answer *any Three* questions
Each question carries Eight mark.

28. Explain the information passing mechanisms between pages in PHP.

29. Explain the PHP functions for MYSQL operations.

30. Write a detailed note on various database statements.

31. Write a program to perform student registration form with all validations.

32. Explain OOP terminologies in PHP.

(3 x 8 = 24 Marks)

10.   Which of the following is a bitwise operator in java?

        a) !   b) +   c) &   d) &&

11.   Which is a method provided by java.lang.Math?

        a.round( )   b.ceil( )   c. abs( )   d.All of the above

12)   join( ) is a method associated with

        a) exception   b) debugging

        c) thread   d) program compilation

                                                (12 x 1=12 Marks)

PART B
Answer all questions.
Each question carries *two* marks

13   Describe the *extends* keyword in java with the help of example.

14   What is the use of import statement? Give example.

15   What is BufferedReader class in java. Give example for it use.

16   Write a java program showing the use of do-while loop.

17   Describe the use of parseInt( ) method with example.

18   Write a program showing the use of paint( ) method in applet.

19   What is JVM? What is its significance?   (7x2 =14 Marks)

PART C
Answer any *six* questions.
Each question carries *five* marks

20   Explain constructor overloading in java with example .

21   Explain how an object is passed to a method in a java program.

22   Explain the use of static block in java with an example?

23   Explain the structure of an applet in java with example.

24   Show any two uses of the keyword *final* with example.

25   What is the use of *abstract* keyword in java. Give example.

26   Discuss the use of the keyword *throws* in java with example.

27   Explain method overriding in java with example.

                                                (6x5 =30 Marks)

10.	Which of the following is a bitwise operator in java?

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(12 x 1=12 Marks)

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27	Explain method overriding in java with example.

(6x5 =30 Marks)

PART D
Answer any *three* questions.
Each question carries *eight* marks

28   Explain the multi level inheritance in java with example.

29   Explain the dynamic method dispatch in java with example.

30   Discuss the different steps of connection for JDBC in a java program to handle database tables.

31   Write a java program to define a class Student with instance variables Rollno, mark1 and mark2 and a method FindTotalMarks( ) to calculate the total marks of each student. Instantiate three student objects with different values of rollnos and marks from the Student class and print total marks of each of these objects.

32   Explain method overloading with example.

(3x8 =24 Marks)

PART D
Answer any *three* questions.
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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Computer Science Degree Examination, November 2019

BCSS5B08 – Computer Organization & Architecture

(2017 Admission onwards)

Time: 3 hours   Max. Marks: 80

PART A
Answer all questions.
Each question carries *one* mark.

1. What are Registers ?

2.   Define instruction Cycle

3. What are major parts of CPU ?

4. What is micro program ?

5. What you mean by addressing mode ?

6. What is hit ratio ?

7. What is cache memory ?

8. What is pipelining ?

9. What is SIMD?

10. What do you mean by physical address ?

11. What is DMA?

12. What is multiplexer ?

                                                        (12x1=12 Marks)

PART B
Answer all questions.
Each question carries *two* marks

13. List the features of RISC machines ?

14. What is the purpose of the program counter ? Explain with an examlpe

15. How floating point numbers are represented in memory

16. Differentiate volatile and non- volatile memory ?

17. What is parallel processing ? Explain

18. What is memory interleaving ?

19. What is asynchronous data transfer ?

                                                        (7x2=14 Marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Computer Science Degree Examination, November 2019

BCSS5B08 – Computer Organization & Architecture

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

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(12x1=12 Marks)

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Computer Science Degree Examination, November 2019

BCSS5B08 – Computer Organization & Architecture

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(7x2=14 Marks)

PART C
Answer any *six*.
Each question carries *five* marks

20. Explain the bus structure of CPU

21. How are instructions executed Explain

22. What are the addressing mode? List the different types of addressing modes.

23. Explain the organization of RAM.

24. Explain daisy chaining process of prioritizing interrupts.

25. Write notes on micro programmed control.

26. Distinguish between programmed I/O and interrupt initiated I/O.

27. Explain Booths algorithm for multiplication.

(6x5=30 Marks)

PART D
Answer any *three*.
Each question carries *eight* marks

28. Explain in detail the technique behind DMA

29. Using a neat block diagram explain the steps involved in the basic Operational concept.

30. How are instructions classified ? Explain.

31. Explain the virtual memory address translation with necessary tables and diagrams.

32. Describe the Flynn's classification of parallel computer.

(3x8=24 Marks)