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Name...

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FIFTH SEMESTER U.G. (CUCBCSS—UG) DEGREE [SPECIAL] EXAMINATION, NOVEMBER 2020

B.C.A.

BCA 5B 10—PRINCIPLES OF SOFTWARE ENGINEERING

(2017 Admissions)

Time : Three Hours   Maximum : 80 Marks

Section A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. List out all framework activities in software engineering.

2. What do you mean by performance testing ?

3. Define alpha testing.

4. ——————— is a quality management technique that translates the needs of the customer into technical requirements for software.

5. What is called forward engineering ?

6. Give the seven tasks of requirement engineering.

7. ——————— are the different people or devices that use the system or product within the context of the function and behavior that is to be described.

8. What are the non- functional requirements of software ?

9. ——————— is a reorganization technique that simplifies the design of a component without changing its function or behavior.

10. A ——————— describes how a user interacts with the system by defining the steps required to accomplish a specific goal.

(10 × 1 = 10 marks)

Section B

Answer at least **five** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 15.

11. Write a note on Feature Driven Development (FDD).

12. What do you know about component based development ?

Turn over

13. How will you negotiate requirements ?

14. Briefly write down about refactoring.

15. What are the testing strategies required for object oriented software ?

16. Why do you need architecture patterns during design ?

17. Write a short note on stress testing.

18. Illustrate the package diagram with an example.

(5 × 3 = 15 marks)

Section C

*Answer at least **five** questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

19. Draw an activity diagram for hospital management system.

20. Describe the specialized process models in detail.

21. Explain the extreme programming in agile development process.

22. Illustrate the waterfall life cycle model along with pros and cons.

23. What do you know about type checking ? Give an example.

24. What are the steps required for understanding the software requirements ?

25. Describe about software testing strategies required for conventional software.

26. Differentiate forward engineering and reverse engineering.

27. What are the exception handling techniques in modern programming language ?

(5 × 5 = 25 marks)

Section D

*Answer any **three** questions.*
Each question carries 10 marks.

28. Suppose you are going to develop temperature controlling software for nuclear power plant. What type of lifecycle model you prefer for developing the software ? Why ? Explain the life cycle model in detail.

29. Draw the use case diagram and class diagram for library management system.

30. Explain the validating testing techniques for software.

31. Write the guidelines for documentation of software.

32. How will you elicit the requirements ? Explain.

(3 × 10 = 30 marks)

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FIFTH SEMESTER U.G. DEGREE (SPECIAL) EXAMINATION NOVEMBER 2020

(CUCBCSS—UG)

BCA

BCA 5B 09—WEB PROGRAMMING USING PHP

Time : Three Hours   Maximum : 80 Marks

Section A

Answer **all** *questions.*

Each question carries 1 *mark.*

1. What is meant by client side scripting ?

2. How will you create a prompt window using JavaScript ?

3. How do we convert a user input into floating-point format in JavaScript ?

4. Give the formal structure of a foreach loop in PHP.

5. What is an associative array ?

6. How do pg_fetch_array() and pg_fetch_assoc() functions differ ?

7. What is the purpose of an HTML5 output element ?

8. How do we create arrays in JavaScript ?

9. How do we create an interface for uploading files using HTML5 ?

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

(10 × 1 = 10 marks)

Section B

Answer at least **five** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 15.

11. Explain arrays in PHP with examples.

12. Distinguish between GET and POST methods in PHP.

Turn over

13. Give the general structure of a user-defined function in PHP.

14. Give the formal syntax of setcookie() function in PHP. Also explain each of its formal parameters.

15. Explain on Click JavaScript event with an example.

16. Compare static and dynamic web pages.

17. Explain how connection to a PostgreSQL DBMS is established.

18. Write any four rules regarding naming of variables in PHP.

<div align="right">(5 × 3 = 15 marks)</div>

Section C

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

19. What are scripting languages ? Compare client-side scripting and server-side scripting. Give examples for both the types of scripting languages.

20. Write a note on data types in PHP.

21. List and explain any four super global arrays in PHP.

22. Write a PHP script to read a set of comma separated integers through a text area from user and print the average of the integers. The user is free to input any number of integers within the limit of the text area.

23. Write a PHP script to test whether a string input is a palindrome. The script should ignore case differences when comparing the characters. That is, uppercase and lowercase differences should be ignored.

24. An on-line job portal requires the applicants to upload their resumes to the portal's website. The resumes should be in PDF format with size less than or equal to 500 KB. Write the fragment of PHP/HTML code for implementing the above scenario.

25. Explain any *four* string handling functions in PHP with illustration.

26. Explain various logical operators available in PHP.

27. List and explain any four CSS functions.

<div align="right">(5 × 5 = 25 marks)</div>

Section D

Answer any **three** *question.*
Each question carries 10 *marks.*

28. Employees of an organization has to register online for a training program. The registration procedure requires the employee to fill in details including employee id and the name and date of birth of the employee.

    (a) Create a php front end for reading the employee details.   (4 marks)

    (b) On submitting the form the details should be inseted in to a databse table named "Registrations". Assume suitable data types for the attributes.

  No need to write code for table creation. Make suitable assumptions.

                                                      (6 marks)

29. Explain session handling using cookies with a suitable example.

30. Explain various branching and looping statements in PHP with illustrations.

31. Explain any five built-in JavaScript functions with illustration.

32. Explain any five CSS functions with illustration.

                                                 (3 × 10 = 30 marks)

FIFTH SEMESTER U.G. DEGREE [SPECIAL] EXAMINATION NOVEMBER 2020

(CUCBCSS—UG)

B.C.A.

BCA 5B 08—COMPUTER ORGANISATION AND ARCHITECTURE

(2017 Admissions)

Time : Three Hours   Maximum : 80 Marks

Section A

*Answer **all** questions.*
Each question carries 1 mark.

1. How many data select lines are required to select eight inputs ?

2. If A and B are inputs of a half adder, the carry is given by ————————.

3. When both inputs of JK flip-flops are tied together we get ————————.

4. The basic SR flip-flop can be constructed from cross coupling of which basic logic gates:

5. How many bits are used to specify an address in a 16 bit memory reference instruction ?

6. Specify the instructions that transfers the memory word specified by a effective address to AC.

7. What are the basic component of a micro-programmed control unit ?

8. ———————— specifies a rule for interpreting or modifying the address field of the instruction before the operand is actually referenced.

9. ———————— method updates main memory with every memory write operations together with cache memory is updated in parallel.

10. What is baud rate ?

(10 × 1 = 10 marks)

Turn over

Section B

Answer at least **five** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 15.

11. Implement a full adder with two half adders and an OR gate.

12. What are the difference between synchronous counter and asynchronous counter ?

13. What are the two major types of control organizaton ?

14. What do you meant by instruction cycle ? What are the four phases of instruction cycle ?

15. What do you mean by Microcode ?

16. Write a short note on CPU.

17. What are the two different types of main memory ?

18. What do you mean by handshaking ?

(5 × 3 = 15 marks)

Section C

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

19. Explain the working of full subtractor with diagrams and truth table.

20. Describe about the bidirectional shift register.

21. Write a short note on universal register.

22. Explain about the various register transfer take place during the fetch phase.

23. Discuss about the AND instruction.

24. Write a note on Control Memory.

25. Explain about the stack organization.

26. Write a note on Direct Memory Access.

27. Explain about the role of cache memory.

(5 × 5 = 25 marks)

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FIFTH SEMESTER U.G. DEGREE [SPECIAL] EXAMINATION NOVEMBER 2020

(CUCBCSS—UG)

B.C.A.

BCS 5D 01—INTRODUCTION TO COMPUTERS AND OFFICE AUTOMATION

(2017 Admissions)

Time : Two Hours   Maximum : 40 Marks

Part A

All questions to be attended.
Each question carries 1 mark.

1. What are the different classifications of a Laptop ?

2. Name the unit which stores the instructions, data and intermediate results in a computer

3. Name the application used to create multiple letters, envelope and name tag using the information stored in a file or spreadsheet or database.

4. What is the name used for creating shortcuts for words, phrases, and even images ?

5. Name the intersection of row and column in Excel.

6. Name the interactive graphical representation of the data in Excel.

7. Name the package which is used to create presentations.

8. Name the model which is a distributed application structure that partitions tasks or workloads between the providers of a resource or service.

9. Name a commonly used Output device.

10. Expand WAN.

(10 × 1 = 10 marks)

Part B

All questions can be attended and overall ceiling.
*Answer **all** questions.*
Each question carries 2 marks.

11. What are the distinguishing characters of a LAN ?

12. What are Templates ?

Turn over

13. How do you create formulas in Excel ?

14. Define Wordart.

15. Give some advantages of Client-server model.

(5 × 2 = 10 marks)

Part C

All questions can be attended and overall ceiling.
Answer any **five** *questions.*
Each question carries 4 marks.

16. What are Output devices ? Write a short note on any two commonly used output devices.

17. Differentiate System software and Application Software.

18. Define Mail merge. What are the different steps to create a Mail merge document ?

19. Differentiate Autocorrect and Autotext.

20. What are the different steps to create a Pivot Table ? Explain.

21. Write a short note on Linking and Consolidation in Excel.

22. Write a short note on Creating, Manipulating and Enhancing slides in Powerpoint.

23. How do you insert recorded sound effect in Powerpoint presentation ? Explain.

(5 × 4 = 20 marks)

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Reg. No...............................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

BCA

BCA 5B 08—ANDROID PROGRAMMING

(2014 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer **all** *questions.*

Each question carries 1 mark.

1. XML stands for ————.

2. The expansion of ADT is ————.

3. The ———— resources are used to style and localize Android UIs without changing the source code.

4. Android uses a concept called ———— for abstracting data into services.

5. Android's ———— utility class helps to identify the URI types.

6. When an intent carries a component name with it, it is called an ———— intent.

7. The use of ———— is to start an activity that displays a list of items.

8. The ———— control is a subclass of TextView.

9. The ———— control displays a list of items vertically.

10. The ———— callback is invoked after your fragment is associated with its activity.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*

Each question carries 2 marks.

11. What is toast in android ?

12. What is the role of Resource Manager ?

Turn over

13. Name two types of Intent supported by Android.

14. What is the purpose of an emulator ?

15. Mention the key methods for implementing the content providers.

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*

Each question carries 4 marks.

16. Explain the function of an Adapter.

17. Explain the method onUnbind().

18. What are android cursors ?

19. Explain the use of getStringArray() method.

20. What are the advantages of a mobile database ?

21. What do you mean by a service is started and service is bound ?

22. Explain the Plurals resource type.

23. What are the available intents in android ?

(5 × 4 = 20 marks)

Part D

Answer any **five** *questions.*

Each question carries 8 marks.

24. Explain android software stack with a diagram.

25. Explain various methods in Fragment class.

26. Discuss the various attributes of Button control.

27. Explain Frame Layout Manager.

28. Explain with an example how will you create a database in SQLite ?

29. Explain Broadcast Receivers and Content Providers with its syntax.

30. Explain the anatomy of an ActionBar.

31. Explain two ways to get a handle to the preferences.

(5 × 8 = 40 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 09—JAVA PROGRAMMING

(2014 Admissions)

Time : Three Hours   Maximum : 80 Marks

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. ———————— is the default Layout Manager.

2. ———————— is a method used by applet to display text and messages.

3. ———————— is a keyword used in exception handling to execute a piece of code always.

4. ———————— is an interface by which a thread can be created.

5. The class used to create a textbox in Java is ————————.

6. Multiple inheritance is achieved in Java by ————————.

7. ———————— is a keyword used for invoking the base class constructor.

8. ———————— methods can be called without creating the objects.

9. The method used by a Thread class for forcefully leaving the CPU is ————————.

10. The code obtained after compilation in Java is called ————————.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 *marks.*

11. Give the syntax and an example for declaring one dimensional and two dimensional arrays in Java.

12. What is the purpose of continue statement in Java ?

Turn over

13. What is the purpose of Math class ?

14. What is the purpose of the keyword *finally* ?

15. What is a Vector class in Java ?

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. Write short notes on the characteristics of Java.

17. Explain various types of literals used in Java.

18. Explain Date class with its constructors.

19. What is the purpose of this keyword ?

20. Explain single inheritance in Java with an example.

21. What are uncaught exceptions ?

22. Explain accept() method in socket programming.

23. Explain the JDBC components.

(5 × 4 = 20 marks)

Part D

Answer any **five** *questions.*
Each question carries 8 marks.

24. Explain various looping constructs in Java with syntax and examples.

25. Explain method overriding with an example.

26. Explain the user defined packages with an example.

27. With a diagram, explain the life-cycle of a thread.

28. Differentiate throw and throws in Java.

29. Explain the event classes and event listeners in AWT.

30. Explain with example the layout managers BorderLayout and GridLayout.

31. Write a program to illustrate the use of Font class.

(5 × 8 = 40 marks)

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FIRST SEMESTER B.Com./B.B.A. DEGREE EXAMINATION NOVEMBER 2020

(CBCSS)

B.C.A.

BBA 1B 01—MANAGEMENT THEORY AND PRACTICES

(2019 Admissions)

Time : Two Hours and a Half

Maximum : 80 Marks

Section A

Answer at least **ten** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 30.

1. 'Management is a process'. Explain.

2. What is derivative plan ?

3. What is Kaizen ?

4. List out the functions of management.

5. What is delegation of authority ?

6. Why do you mean by organisation structure ?

7. What is line and staff organization ?

8. What do you mean by 'policy' and 'rules' ?

9. What is contingency approach ?

10. Explain MBE.

11. What is unity of command ?

12. What is informal organisation ?

13. What is resistance to control ?

14. What do you mean by functional organisation ?

15. Define Organising.

(10 × 3 = 30 marks)

Turn over

Section B

Answer at least **five** *questions.*
Each question carries 6 marks.
All questions can be attended.
Overall Ceiling 30.

16. Discuss the bases of departmentation.

17. What are the various tools used for the implementation of Kaizen ?

18. What is Bureaucratic management ? Explain its features.

19. What are the principles of effective delegation ?

20. What are the limitations of planning ?

21. Who are the different types of stakeholders ?

22. Briefly discuss the essentials of an effective control system.

23. Differentiate between single use plan and standing plan.

(5 × 6 = 30 marks)

Section C

Answer any **two** *questions.*
Each question carries 10 marks.

24. Explain CSR towards different stakeholders.

25. Define span of control. Discuss the importance and factors influencing it.

26. Critically evaluate Neo-classical approach to management.

27. Define Staffing. Discuss the importance and functions of staffing.

(2 × 10 = 20 marks)

D 10558

Name..

Reg. No....................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

BCA

BCA 5B 08—JAVA PROGRAMMING

(2019 Admissions)

Time : Two Hours
Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer atleast **eight** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. What is modularity ?

2. What is an abstraction ? Explain.

3. Explain Comments and Keywords in Java.

4. What use of continue Statement in Java ?

5. What is Method Overloading in Java ? Explain.

6. What is an abstract class ? Explain.

7. What are the different advantages of using Threads ?

8. Why we use Java finally block ? Explain.

9. What is AWT ? Explain.

10. How many types of applets are there in Java ? What are they ? Explain any one.

11. How do you pass parameters to an APPLET in Java ? Explain.

12. Why we use Synchronization ? Explain.

(8 × 3 = 24 marks)

Turn over

Section B (Short Essay Type Questions)

Answer atleast **five** *questions.*

Each question carries 5 *marks.*

All questions can be attended.

Overall Ceiling 25.

13. Explain Java Runtime environment.

14. What is throws ? What are the difference between throws and throw ? Explain with examples.

15. Explain packages and import statements with suitable examples. How it is used ? What are the different advantages using of packages in Java ?

16. List the basic principles object oriented programming. Explain each with suitable example.

17. How to create a thread in Java ? Explain each with suitable examples.

18. What is User Defined Exception in Java ? Why use User Defined/custom exceptions ? Explain.

19. In Java Programing what is Statement Interface ? What are the different commonly used methods of Statement interface ?

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any **one** *question.*

The question carries 11 *marks.*

20. (a) Explain Structure of the AWT in detail. List of commonly used controls while designed GUI using AWT. Explain each.

    (b) Write a Java program to draw five concentric circles.

(6½ + 4½ = 11 marks)

21. (a) Explain Threads Daemon Threads, Thread States and Thread Problems with example.

    (b) Explain with a program, how will you create the thread by implementing runnable interface.

(5½ + 5½ = 11 marks)

[1 × 11 = 11 marks]

D 10557

Name.....................................

Reg. No..............................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5B 07—COMPUTER ORGANISATION AND ARCHITECTURE

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)

*Answer at least **eight** questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. Define universal gates.

2. Define decoders.

3. Define multiplexer.

4. Define cache memory.

5. Define accumulator.

6. Define handshaking.

7. What is edge triggering ?

8. Define multiprocessing.

9. Define I/O bus.

10. What is interrupt ?

11. Define micro-operation.

12. Define register.

(8 × 3 = 24 marks)

Turn over

Section B (Short Essay Type Questions)

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. Explain half and full adder in detail.

14. What is write-through method in cache organization.

15. Write a note on data transfer instructions.

16. Write a short note on direct mapping.

17. Differentiate between synchronous and asynchronous data transfer.

18. Write a note on SR flip flop.

19. What you meant by I/O controllers ?

$(5 \times 5 = 25$ marks$)$

Section C (Essay Type Questions)

Answer any **one** *question.*
The question carries 11 marks.

20. Define addressing modes. Give the details of different addressing modes.

21. Explain different modes data transfer to and from peripherals.

$(1 \times 11 = 11$ marks$)$

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Name...

Reg. No...................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5D 04—INTRODUCTION TO DATA ANALYSIS USING SPREAD SHEET

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer at least **eight** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. How to start Microsoft Excel ?

2. What is Ribbon in Microsoft Excel ?

3. What is a cell ? How to copy the contents of one cell to another in Microsoft Excel ?

4. What is a pivot table ?

5. What PivotTable layouts are available in Excel 2013 ?

6. How do PivotTable slicers work ?

7. How to filter the data in pivot ?

8. What is a pivot table calculated field ?

9. What is Freezing in MS Excel ?

10. How to aggregate data in a PivotTable ?

11. How to get multiple tables into the PivotTable Field List ?

12. How to rename a worksheet in Microsoft Excel ?

(8 × 3 = 24 marks)

Section B (Short Essay Type Questions)

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. Explain Cut, Copy and Paste using MS Excel.

14. Explain Page Layout and Print Options in MS Excel.

Turn over

15. How to apply conditional formatting to a PivotTable ?

16. How to use the Report Filter section of the PivotTable ?

17. What are data tables ? Explain two types of data tables in MS Excel.

18. Write short note on Report Layouts.

19. How to insert pictures in Excel worksheets ?

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any **one** *question.*
The question carries 11 *marks.*

20. Difference between Excel 2003, 2007, 2010 and 2013 - Explain.

21. How to create dashboards in Excel ?

(1 × 11 = 11 marks)

D 10561

Name...

Reg. No....................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5D 01—INTRODUCTION TO COMPUTERS AND OFFICE AUTOMATION

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer at least **eight** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. What is the use of chart in Excel ?

2. What is client server model ?

3. Write a short note on network.

4. Write a short note about operating system.

5. What is the use of pivot table in Excel ?

6. Write a short note about template.

7. How to add table to our documents ?

8. What are the basic steps for printing a document ?

9. Explain Assembly Language.

10. Define LAN.

11. How to add charts in MS Power point ?

12. Differentiate Laptop and Net book.

(8 × 3 = 24 marks)

Section B (Short Essay Type Questions)

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. Explain the types of computers.

14. How to use mail merge feature for labels and envelopes ? Discuss in detail.

Turn over

15. Define a Macro. Write down the step to record a new macro.

16. Explain some functions in excel.

17. Briefly explain table menu in MS Word.

18. Explain various Programming languages.

19. Explain the method of checking spelling and grammar mistakes in word.

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any **one** *question.*
The question carries 11 *marks.*

20. Explain pivot table. How it is created and formatted ? What is its Application ?

21. Explain various input and output devices.

(1 × 11 = 11 marks)

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Name..

Reg. No...................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5D 02—WEB DESIGNING

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A

Answer at least **eight** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. How will you fetch images to a Web page in HTML ?

2. Name the predefined or built-in objects in JavaScript.

3. Mention any *four* advantages of an HTML editor.

4. Explain onload event with an example in JavaScript.

5. How to open a Web page in an HTML editor ?

6. What is the purpose of <meta> tag ?

7. How will you generate horizontal ruler and blank spaces in HTML document ?

8. Explain onkeydown and onkeyup events.

9. What do you mean by positioning property in CSS ? Mention their names.

10. What are the advantages of using JavaScript ?

11. Which are the places where you can place the JavaScript in HTML document ?

12. What is FrontPage ?

(8 × 3 = 24 marks)

Turn over

Section B

13. Explain the basic structure of an HTML document.

14. How will you create hyperlinks in HTML ? Give an example program.

15. Explain the creation of ordered lists in HTML.

16. Explain onclick event in JavaScript with an example.

17. Explain the creation of textbox in HTML.

18. How will you pass parameters to a function in JavaScript ? Give example.

19. Explain the alert() dialog box with example.

(5 × 5 = 25 marks)

Section C

20. Explain different operators used in JavaScript.

21. Explain the advantages of using CSS while designing a Web page.

(1 × 11 = 11 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5D 03—INTRODUCTION TO PROBLEM SOLVING AND C-PROGRAMMING

(2019 Admissions)

Time : Two Hours   Maximum : 60 Marks

Section A

Answer at least **eight** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. Briefly explain the basic structure of C Programs.

2. When do we use #include directive ?

3. Which are the categories of C character set ? Give egs of each.

4. What is a variable? What are the rules for creating a variable in C ?

5. What are shorthand assignment operators ? Give example.

6. Explain getchar() and putchar() functions.

7. Write the syntax and the flowchart of simple if statement.

8. Write a program to find whether a number is even or odd.

9. What are entry controlled loop and exit controlled loop ?

10. How one dimensional array is declared and initialized ?

11. Explain how strings are read from terminal ?

12. Define structure and Union.

(8 × 3 = 24 marks)

Turn over

Section B (Short Essay Type Questions)

*Answer at least **five** questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. What are the rules to be followed in writing a C program ?

14. Write a program to calculate the average of a set of N numbers.

15. Explain any five C operators with examples.

16. Explain the syntax of switch statement with an example.

17. Write a program to print nth Fibonacci number.

18. Write a program to multiply two matrices.

19. Write a program to check whether the inputting string is a palindrome or not.

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

*Answer any **one** question.*
The question carries 11 marks.

20. An electric power distribution company charges its domestic consumers as follows :

Consumption units	Rate of Charge :
0 — 200	Rs. 0.50 per unit.
201 — 400	Rs. 100 plus Rs. 0.65 per unit excess of 200.
401 — 600	Rs. 230 plus Rs. 0.80 per unit excess of 400.
601 and above	Rs. 390 plus Rs. 1.00 per unit excess of 600.

Write a program to read the customer number and power consumed and prints the amount to be paid by the customer.

21. Explain various looping constructs in C with examples.

(1 × 11 = 11 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5B 10—PRINCIPLES OF SOFTWARE ENGINEERING

(2019 Admissions)

Time : Two Hours   Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer at least **eight** *questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. Define Software Engineering.

2. What do you mean by Formal methods model ?

3. What is an agile process ?

4. What is business process ?

5. Explain the term Reverse Engineering.

6. Explain the function of code restructuring.

7. What do you mean by Requirements Elicitation ?

8. What are Use case diagrams ?

9. Explain the term modularity.

10. What do you mean by Exception handling ?

11. What is Validation testing ?

12. Explain Data abstraction.

(8 × 3 = 24 marks)

Section B (Short Essay Type Questions)

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. Explain the software engineering process framework.

14. Explain the incremental Process model.

Turn over

15. Explain software design concepts.

16. Compare Scrum and DSDM.

17. Explain Business Process Reengineering

18. Explain QFD.

19. Explain the strategic approach to software testing.

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any **one** *question.*
The question carries 11 *marks.*

20. Explain Software Development Life Cycle. Discuss the Waterfall model.

21. Explain the different types of System tests.

(1 × 11 = 11 marks)

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Name...

Reg. No....................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CBCSS—UG)

B.C.A.

BCA 5B 09—WEB PROGRAMMING USING PHP

(2019 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)

*Answer at least **eight** questions.*
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 24.

1. What do you mean by image opacity ?

2. Describe meter in HTML5.

3. Differentiate Static web page and Dynamic web page.

4. An event takes place and is conveyed to the Web browser and thence to the document. Describe what it means to handle an event ?

5. Explain the use of Break and continue statement in JavaScript.

6. What is script tag ? Explain.

7. What is the use of echo and print ? Explain its difference.

8. What is cookies ? Explain.

9. Which function is used to returns a part of a string ? Explain its syntax and parameters in PHP.

10. What are the different features of PostgreSQL ?

11. Explain the use of pg_fetch_array() function with example.

12. What is AJAX ? What is its use ? Explain.

(8 × 3 = 24 marks)

Section B (Short Essay Type Questions)

*Answer at least **five** questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. Explain CSS ID and class.

14. Describe different attributes in HTML 5.

Turn over

15. Explain the events onLoad, onBlur and onClick in JavaScript with example programs.

16. Explain do...while construct used in PHP. Write a program to print first five prime numbers using it.

17. Explain any five PHP Array Functions with suitable examples.

18. Discuss the if else statement and the conditional operators with suitable example.

19. Write a PHP code to connect to database.

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any **one** *question.*
The question carries 11 *marks.*

20. (a) Explain different Built-in Global Functions in JavaScript with suitable examples.

    (b) Explain different basic data types.

21. How do you create a query in PHP ? How do you fetch the dataset ? Discuss the four fetching functions in detail with example program.

(1 × 11 = 11 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCS 5D 03—INTRODUCTION TO PROBLEM SOLVING AND C PROGRAMMING

(Common for B.Sc., CS, IT and BCA)

[2017 Admissions]

Time : Two Hours   Maximum : 40 Marks

Part A

Answer **all** *questions.*
Each question carries 1 mark.

1. ——————— is the operator used to obtain remainder during division.

2. ——————— is the string function to concatenate two strings.

3. The built-in function for finding exponent of a number is ————————.

4. C programs are converted into machine language using ————————.

5. ——————— is the format specifier used to display a character value in printf() function.

6. The horizontal tab space is represented by ————————.

7. Strings are terminated by a ——————— character.

8. ——————— is the built-in function for finding the square root of a number.

9. 0x4ab is an example for ——————— literal.

10. ——————— is the string function to copy one string to another.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 marks.

11. How will you give comments in C ?

12. What is a reserved keyword ?

13. What do you mean by base address of an array ? What is the starting base address ?

Turn over

14. What is the purpose of break statement ?

15. How will you create infinite loops in C ?

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. Explain various data types in C.

17. Explain switch case structure with its syntax.

18. Explain do... while loop in C.

19. Explain logical and assignment operators in C.

20. Explain the concept of union with an example.

21. How will you initialize one dimensional and two dimensional arrays in C ?

22. Explain with an example, how will you create and access a structure in C.

23. Explain the concept of array of structures.

(5 × 4 = 20 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCS 5D 02—INTRODUCTION TO WEB DESIGNING
(Common for B.Sc. CS, IT and BCA)

(2017 Admissions)

Time : Two Hours   Maximum : 40 Marks

Part A

*Answer **all** questions.*
Each question carries 1 mark.

1. What does HTML stands for ?

2. Which tag is used to insert java script statements in HTML ?

3. What is internet ?

4. What is <p> tag ?

5. What is client side scripting ?

6. What is <marquee> tag ?

7. What are global variables ?

8. How comments are added in java script ?

9. JavaScript is a case-sensitive language.

    (A) True.   (B) False.

10. For largest level of heading which tag is used ?

    (a) <h1>.   (b) <h6>.

    (c) <Heading>.   (d) <head>.

(10 × 1 = 10 marks)

Part B

*Answer **all** questions.*
Each question carries 2 mark.

11. What is the difference between static and dynamic web pages ?

12. List any *four* form controls.

Turn over

13. What are variables in java script ? Explain with example.

14. List any *four* event handling function used in java script.

15. Explain the differences between HTML and DHTML.

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*

Each question carries 4 marks.

16. Explain switch statements used in java script with suitable example.

17. Explain how <table> tag is used in HTML. Explain with an example.

18. Explain how while and do-while loop differ in java script.

19. Explain the logical and relational operators used in java script.

20. What is an array ? Explain how arrays are used in java script.

21. Explain if-else statement in java script with example.

22. What is function ? Explain the syntax of function in java script with example.

23. What is hyper link ? Explain how hyperlinks are added in web page.

(5 × 4 = 20 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCS 5D 01—INTRODUCTION TO COMPUTERS AND OFFICE AUTOMATION

[Common for B.Sc. C.S., I.T. and B.C.A.]

(2017 Admissions)

Time : Two Hours
Maximum : 40 Marks

Part A

Answer all questions.
Each question carries 1 mark.

1. Formulas in MS Excel start with ————————.

   a) %
   b) =
   c) +
   d) —

2. WAN stands for ————————.

   a) Wide Area Network.
   b) Wireless Access Network.
   c) Wide Access Network.
   d) Wi-Fi Access Network.

3. "Auto fill" is a unique feature of ————————.

   a) MS Word.
   b) MS Excel.
   c) MS Power Point.
   d) All of these.

4. Which one can be used as watermark in a word document ?

   a) Text
   b) Image
   c) Both A and B
   d) None.

5. Which function in MS Excel checks whether a condition is true or not ?

   a) SUM
   b) COUNT
   c) IF
   d) AVERAGE

Turn over

Fill up the blanks :

6. The ———————— feature of MS Excel quickly completes a series of data.

7. The spelling dialog box in MS Power point can be involved by choosing spelling from ———————— menu.

8. Magnetic disk is an example for ———————— device.

9. C++ is an example for ————————.

10. Operating system is an example for ———————— software.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*

Each question carries 2 marks.

11. Mention applications of MS Excel.

12. Explain the procedure for setting margin in MS Word.

13. What is a clip art in MS word ?

14. Explain the procedure of inserting animated pictures in MS Power point.

15. What is conditional formatting in MS Excel ?

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*

Each question carries 4 marks.

16. Explain the concept of client server computing.

17. Explain different types of computers.

18. How can we format an Excel cell ?

19. What is auto content wizard in MS Power point and how this can be created ?

20. Explain application and creation of pivot table in MS Excel.

21. What is transition effect in MS Power point and explain the steps for this.

22. Explain how to work with tables in MS Word.

23. Explain the steps for replacing text in MS Word.

(5 × 4 = 20 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 10—PRINCIPLES OF SOFTWARE ENGINEERING

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer **all** *questions.*
Each question carries 1 mark.

1. Requirements Gathering is an example of a ——————— pattern.

2. The weak process produce ——————— product.

3. Expansion of SRS.

4. ——————— is the attribute of software that allows a program to be intellectually manageable.

5. ——————— is a set of design steps that allows a DFD with transform flow characteristics to be mapped into a specific architectural style.

6. The end product of requirements elicitation is ———————.

7. The mistakes while coding is called ———————.

8. ——————— are conducted at the developer's site by some potential customers.

9. Testing focuses on an individual software component is called ——————— testing.

10. During, ——————— the project is initiated and adaptive cycle planning is conducted.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 marks.

11. What is the work product ?

12. Define Prototyping.

Turn over

13. Define *Adaptive Software Development*.

14. Define Scrum.

15. What is requirement elicitation ?

16. Explain about approaches of requirements modelling.

17. Define stake holder.

18. Define data object.

(8 × 2 = 16 marks)

Part C

Answer any **six** *questions.*
Each question canies 4 marks.

19. Adaptive software development components ?

20. Differentiate between technical and non technical feasibility studies ?

21. Define testing principals ?

22. Define coding principles ?

23. Explain about quality function deployment.

24. What is system testing ? What are the different types of system testing ?

25. What are the elements of requirement models ?

26. What is activity diagram ? Draw activity diagram for access camera surveillance via the internet—display camera views function ?

27. What is class diagram ? Draw an example for any class diagram.

(6 × 4 = 24 marks)

Part D

Answer any **three** *questions.*
Each question carries 10 marks.

28. Explain spiral model with neat diagram ?

29. Explain the steps in requirement engineering ?

30. What are the principals that guide process ?

31. What is the role of management in software development ?

(3 × 10 = 30 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 09—WEB PROGRAMMING USING PHP

(2017 Admissions)

Time : Three Hours   Maximum : 80 Marks

Part A

Write short answer on **all** *questions.*
Each question carries 1 mark.

1. Name any 2 types of selectors in CSS.

2. List any 2 basic HTML data types.

3. What is the use of <script> tag ?

4. What is the purpose of parseInt() function in JavaScript ?

5. What is strcmp() in PHP?

6. Mention two ways of getting output in PHP.

7. List 2 methods by which we can pass information from a Web page to a server in PHP.

8. Give different types of arrays in PHP.

9. What is the use of the function pg_last_error()?

10. Name the function that sends a request to execute a prepared statement with given parameters, and waits for the result in PostgreSQL.

(10 × 1 = 10 marks)

Part B

Write a paragraph on **all** *questions.*
Each question carries 2 marks.

11. What do you mean by a scripting language ? Give an example.

12. Name the different types of operators in PHP.

13. Differentiate write and writeln in JavaScript.

14. Explain the concept of HTML elements with an example.

15. Mention different constructors for creating a Date object in JavaScript.

Turn over

16. Explain the use of pg_fetch_object() with an example.

17. How does AJAX works ?

18. How will you display the table structure in PostgreSQL ?

(8 × 2 = 16 marks)

Part C

Write short essay on any six questions.
Each question carries 4 marks.

19. Explain the use of image opacity property in CSS.

20. Explain the onChange event in JavaScript with an example program.

21. Explain break and continue in PHP with examples.

22. Explain with an example how to create functions in PHP.

23. What are the advantages of using CSS while designing a Web page ?

24. Explain alert pop-up box with an example.

25. Explain the concept of arrays in JavaScript.

26. Explain the clause SELECT INTO in PostgreSQL with syntax and example.

27. Explain the features of PostgreSQL.

(6 × 4 = 24 marks)

Part D

Write essays on any three questions.
Each question carries 10 marks.

28. Explain <keygen> element and <progress> element in HTML with examples.

29. Explain the following :

    a) $_POST.

    b) Session management.

30. Explain with example programs various loops in PHP.

31. With example programs, explain different operators used in JavaScript.

32. Illustrate with example programs the use of pg_fetch_row() and pg_fetch_array() functions.

(3 × 10 = 30 marks)

D 10102   (Pages : 2)   Name..

Reg. No...................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

BCA

BCA 5B 08—COMPUTER ORGANISATION AND ARCHITECTURE

(2017 Admissions)

Time : Three Hours   Maximum : 80 Marks

Part A

Write short answer on **all** *questions.*
Each question carries 1 mark.

1. What is a register ?

2. What is a NOT gate ?

3. Name *two* universal gates.

4. What is negative logic ?

5. What is the feature of an asynchronous counter ?

6. What do you mean by an instruction code ?

7. What is the purpose of a micro program sequencer ?

8. What is the use of DMA ?

9. What do you mean by priority interrupt ?

10. What is hardwired control ?

(10 × 1=10 marks)

Part B

Write a paragraph on **all** *questions.*
Each question carries 2 marks.

11. What is a logic gate ?

12. What is a ripple carry adder ?

13. Mention *four* types of shift registers.

14. Why decade counter is called so ?

Turn over

15. What is the use of IR and TR registers ?

16. What do you mean by virtual memory ?

17. What is the disadvantage of strobe method in asynchronous data transfer ?

18. What do you mean by cache hit ratio ?

(8 × 2 =16 marks)

Part C

Write short essay on any **six** *questions.*
Each question carries 4 marks.

19. Explain the NAND gate with logic design and truth tables.

20. Explain decoders with block diagram and truth table.

21. Explain the concept of full adder.

22. Explain the concept of de-multiplexers.

23. Explain with block diagram, the concept of T flip flop.

24. Explain various memory reference instructions.

25. Explain three-address and two-address instruction formats.

26. Explain the organization of a memory stack.

27. What are the differences between a central computer and a peripheral device ?

(6 × 4 = 24 marks)

Part D

Write essays on any **three** *questions.*
Each question carries 10 marks.

28. Explain half subtractor and full subtractor with block diagrams and truth tables.

29. Explain in detail the D flip-flop.

30. Explain with concept and working of Ring counter.

31. Explain various addressing modes with syntax and examples.

32. Explain the design of accumulator logic.

(3 × 10 = 30 marks)

D 10101

Name..

Reg. No......................................

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 07—JAVA PROGRAMMING

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Write short answer on **all** *questions.*
Each question carries 1 *mark.*

1. Which exception is thrown when an array element assignment is made to an array of incompatible type ?

2. Name the graphics methods used to draw circle and rounded rectangles.

3. Mention the event listeners for handling mouse events.

4. List the two ways by which we can create a thread.

5. Which are the different types of applet ?

6. What is finalize() ?

7. What is the purpose of the keyword *static* ?

8. What is Statement interface in Java ?

9. Name the methods for accessing and displaying text in TextField.

10. Which is the built-in variable to get how many elements are there in an array ?

(10 × 1 = 10 marks)

Part B

Write a paragraph on **all** *questions.*
Each question carries 2 *marks.*

11. What makes Java platform independent ?

12. What is the purpose of FileOutputStream ?

13. What do you mean by source in an event ?

Turn over

14. What is Encapsulation ?

15. What do you mean by method signature in Java ?

16. What are ByteStream classes ?

17. What is a daemon thread ?

18. What is purpose of the keyword *final* when used with class and methods ?

(8 × 2 = 16 marks)

Part C

Write short essay on any **six** *questions.*
Each question carries 4 marks.

19. Differentiate procedural oriented languages and object oriented languages.

20. Explain how threads can be created by implementing the Runnable interface.

21. Explain the concept of method overloading.

22. Explain the usage of *finally* with example.

23. Explain the Font class in Java.

24. Explain different states of a thread.

25. Explain Frame class and its methods.

26. Illustrate with example the narrowing and widening in data type conversions.

27. Explain inner classes in Java.

(6 × 4 = 24 marks)

Part D

Write essays on any **three** *questions.*
Each question carries 10 marks.

28. Explain decision making statements in Java with syntax and examples.

29. Explain the following. A) Interfaces ; and B) Throw and Throws.

30. Explain the AWT controls Checkbox and Choice with constructors and examples.

31. Illustrate the use of the following keywords with example program.

      A) Import ; and B) Extends.

32. Explain the steps in establishing a successful JDBC connection. Illustrate with an example program to fetch and display the details stored in EMP table.

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCS 5D 03—INTRODUCTION TO PROBLEM SOLVING & PROGRAMMING

[Common for B.Sc. Computer Science, IT and BCA]

(2014 Admissions)

Time : Two Hours   Maximum : 40 Marks

Part A

Answer **all** *questions*
Each question carries 1 mark.

1. Every C program's execution begins from ———————

2. The ——————— format identifier is used for printing double digit in scientific form.

3. ——————— construct in C is an example of exit-control loop.

4. An array is a collection of data elements of same ———————.

5. ——————— symbol is used as Bitwise AND operator in C.

6. What will be the output of the following C code ?

   # include < stdio. h >

   int main()

   int i = 2, j ;

   j = ++i + i ;

   printf (" % d\ n " j) ;

   }

        A)   6.   B)   5.

        C)   4.   D)   None of the above.

7. Which of the following is a not a valid data type in C ?

        A)   char.   B)   string.

        C)   int.   D)   double.

8. What will be the default storage class for local variables in C ?

        A)   Auto.   B)   Local.

        C)   Register.   D)   None of the above.

Turn over

9. What will be the output of the following C program code ?

```
# include < stdio. h >

int main()

{

    int a = 10, b = 10 ;

    if(a = 5)

        b-- :

        printf("a = %d. b = %d", a, b) ;

}
```

A)   a = 10, b = 9.   B)   a = 10, b = 8

C)   a = 5 , b = 9.   D)   a = 5, b = 8.

10. Which of the following are themselves as collection of different data types ?

A)   Char.   B)   String.

C)   Structure.   D)   All of the above.

(10 × 1 = 10 marks)

Part B

Answer all questions.
Each question carries 2 marks.

11. Explain the ways of compiling C program in Linux.

12. What are the different logical operators in C ?

13. What is an if..else construct in C ? Give an example.

14. Explain the way of declaring and initializing one dimensional array in C.

15. Give any two string handling functions in C.

(5 × 2 = 10 marks)

Part C

Answer any five questions.
Each question carries 4 marks.

16. What is an algorithm ? Explain the different measures for evaluating the efficiency of the algorithm.

17. Explain the arithmetic and relational operators in C.

18. Explain the differences between entry-controlled loop and exit-controlled loop construct in C with suitable examples.

19. Explain the differences between arrays within structures and structures within arrays with examples.

20. Write a C program to find the largest among N numbers.

21. Explain the function and syntax of conditional operator (? :) in C with examples.

22. Explain the use of *goto* statement in C. Also give its limitations.

23. Write a C program to create structure *Employee* with *Eno, name, salary, DOJ* and read at least 5 employee's details and display those employees whose salary is more than Rs. 20,000.

$(5 \times 4 = 20$ marks$)$

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCS 5D 02—INTRODUCTION TO WEB DESIGNING

[Common for B.Sc. Computer Science, I.T. and B.C.A.]

(2014 Admissions)

Time : Two Hours
Maximum : 40 Marks

Part A

Answer **all** *questions.*

Each question carries 1 *mark.*

1. ———————— HTML tag is used for starting descriptive list.

2. DOM stands for ————————.

3. ———————— are powerful mechanism for adding styles to web documents.

4. JavaScript is a ———————— language.

   A. Object Oriented.   B. High Level.

   C. Object Based.   D. Assembly Language.

5. The function definitions in JavaScript begins with ————————.

   A. Identifier and Parentheses.

   B. Return type and Identifier.

   C. Return type, Function keyword, Identifier and Parentheses.

   D. Identifier and Return type.

6. When an empty statement is encountered, a JavaScript interpreter ————————.

   A. Ignores the statement.

   B. Prompts to complete the statement.

   C. Throws an error.

   D. Shows a warning.

Turn over

7. Which of the following is the correct HTML tag for adding a background colour ?

    A. <background>yellow<Background>.

    B. <body bg color = "yellow">.

    C. <body color = "yellow">.

    D. <body bg ="yellow">.

8. Which HTML tag will add rows to the tables ?

    A. <tr> and </tr>.   B. <th> and </th>.

    C. <td> and </td>.   D. None of these

9. Say True *or* False : In order to write and execute HTML code one need to have Internet connection.

10. Say True *or* False : The style rules are stored in a separate file external to all the Web Pages is known as embedded types of style sheet.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 marks.

11. What is the basic structure of HTML ?

12. What is CSS ?

13. What is Script language ?

14. Explain the use of <FONT> tag.

15. Explain how will you link different pages on a Web.

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. Describe the various advantages and limitations of HTML.

17. What is Form ? Explain the elements of form.

18. What is <IMG> tag ? Explain the different attributes used in <IMG> tag.

19. What do you mean by FRAME ? How these can be created in web page.

20. Give an account on JavaScript operators.

21. Explain the various data types in JavaScript.

22. Write a JavaScript code for detecting mouse click event.

23. What is HTML Editor ? Explain the different types of HTML editors.

(5 × 4 = 20 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCS 5D 01—INTRODUCTION TO COMPUTERS AND OFFICE AUTOMATION

[Common for B.Sc. Computer Science, I.T. and B.C.A.]

(2014 Admissions)

Time : Two Hours　　　　　　　　　　　　　　　　　　　Maximum : 40 Marks

Part A

Answer **all** *questions.*

Each question carries 1 mark

1. What is the benefit of the Networking ?

    A.　File Sharing.　　　　　　　　B.　Easier access to Resources.

    C.　Easier Backups.　　　　　　　D.　All of the Above.

2. A set of rules that govern all aspects of information communication is called :

    A.　Server.　　　　　　　　　　　B.　Internet.

    C.　Protocol.　　　　　　　　　　D.　OSI Model.

3. The contents of the Clipboard remain the same until :

    A.　Cut other text.　　　　　　　B.　Shut down your computer.

    C.　Copy the other text.　　　　　D.　All of the above.

4. Which language does MS-Word use to create Macros ?

    A.　Visual Basic.　　　　　　　　B.　Access.

    C.　Visual C++.　　　　　　　　　D.　C++.

5. Which enable us to send the same letter to different persons ?

    A.　Mail merge.　　　　　　　　　B.　Macros.

    C.　Both (a) and (b).　　　　　　　D.　None of the above.

6. What does a red wavy line in MS-Word indicates ?

Turn over

7. Font size is measured in :

    A. Inches.   B. Centimeters.

    C. Points.   D. Picas.

8. ——————— Option will help us to assign timing for the slide :

    A. Transition.   B. Rehearse timing.

    C. Record Narration.   D. Animation.

9. Give an example for a Graphical User Interface Operating System.

10. Which of the following section does not exist in a slide layout ?

    A. Titles.   B. Lists.

    C. Charts.   D. Animations.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 marks.

11. What is the need of an Operating System ?

12. What are the Input-Output devices ?

13. How do you spell check and grammar in MS-Word ?

14. How do you take printout of a document ?

15. What is Animation ?

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. Explain System and Application software.

17. What is an Operating System ? What are its functions ?

18. Write short notes on :

    (i) Table handling.

    (ii) Find and replace data.

19. How do you link and embed object in MS-Word ?

20. How do you create, edit and format worksheets in MS-Excel ?

21. Explain different categories of functions available in MS-Excel with example.

22. How do you create, manipulate and enhance the slides ?

23. Write a note on Animation and Sound in presentation file.

(5 × 4 = 20 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 12—MICROPROCESSOR AND APPLICATIONS

(2014 Admissions)

Time : Three Hours   Maximum : 80 Marks

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. Expand ALU.

2. ———————— determines the number of operations per second the processor can perform.

3. ———————— register is also known as accumulator register.

4. The ———————— controls the flow of data and instructions within the computer.

5. 8086 is a ———————— bit processor.

6. The address bus of 8086 is ———————— bits wide.

7. ———————— bit stored by status register.

8. The external device is connected to a pin called the ———————— pin on the processor chip.

9. ———————— is the small amount of high-speed memory used to work directly with the microprocessor.

10. The index register are used to hold ————————.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 *marks.*

11. Which are the two groups of flag registers ?

12. What is Bus Interface Unit ?

Turn over

13. What is a serial communication interface ?

14. What is the function of DMA ?

15. Which are the components in a microprocessor ?

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. Explain any four data transfer instructions in 8086.

17. Explain software interrupt in 8086.

18. Write short note on control flags in 8086 microprocessor.

19. Discuss on general purpose registers in 8086 microprocessor.

20. Write short note on Bus Interface Unit.

21. Explain INTR interrupt with its actions.

22. Write short note on features of 8259.

23. Write short note on minimum and maximum mode of 8086 processor.

(5 × 4 = 20 marks)

Part D

Answer any **five** *questions.*
Each question carries 8 marks.

24. With a pin diagram, explain 8086 microprocessor.

25. Explain hardware interrupts of 8086.

26. Discuss on various types of addressing modes in 8086 microprocessor.

27. Discuss any four assembler directives.

28. Explain programmable DMA controller 8257.

29. Explain programmable interval timer 8253.

30. Explain the features of Pentium processor.

31. Illustrate with an example the usage of macros.

(5 × 8 = 40 marks)

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 11—COMPUTER ORGANIZATION AND ARCHITECTURE

(2014 Admissions)

Time : Three Hours   Maximum : 80 Marks

Part A

Answer all the questions.
Each question carries 1 mark.

1. ——————— part of an instruction is a group of bits define the operation.

2. The serial information from the keyboard is shifted into ——————— register.

3. The transformation from the instruction code bit to an address in control memory where the routine is located is referred to as a ——————— process.

4. In ——————— addressing mode, the operands are specified implicitly in the definition of the instruction.

5. A CPU can process a number of different programs concurrently, the concept is called ———————.

6. The page replacement algorithm, LRU stands for ———————.

7. The peripheral devices attached to a computer are also called ———————.

8. ——————— technique allows the DMA controller transfer one data word at a time.

9. MIMD stands for ———————.

10. In an instruction pipeline, ——————— conflicts arise when an instruction depends on the result of a previous instruction.

(10 × 1 = 10 marks)

Part B

Answer all questions.
Each question carries 2 marks.

11. What are the functions of a master clock generator in the basic computer system ?

12. What are the common fields found in instruction formats ?

13. Define an address space.

Turn over

14. What is full-duplex transmission ?

15. Define the efficiency of a pipeline.

$(5 \times 2 = 10 \text{ marks})$

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. What are computer registers ? Explain.

17. Briefly explain the program interrupt cycle.

18. What is address sequencing ? Explain.

19. What are the three types of CPU organization ? Explain with example.

20. Explain the memory address map with neat diagram.

21. Explain the organization of associative memory with suitable example.

22. What is strobe control data transfer ? Explain.

23. Explain the MISD architecture and compare with SIMD.

$(5 \times 4 = 20 \text{ marks})$

Part D

Answer any **five** *questions.*
Each question carries 8 marks.

24. What is hardwired control organization ? Explain with block diagram.

25. Explain the design of a control unit.

26. What are addressing modes ? Explain any four addressing modes with example.

27. What is auxiliary memory ? Explain the organization of magnetic disk and optical disk.

28. Explain the mapping techniques in cache memory organization.

29. What is DMA ? Explain the function of DMA controller.

30. What are I/O processors ? Explain with block diagram.

31. What is pipelining ? Explain the principles of linear pipeline and its properties.

$(5 \times 8 = 40 \text{ marks})$

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021

(CUCBCSS—UG)

B.C.A.

BCA 5B 10—COMPUTER NETWORKS

(2014 Admissions)

Time : Three Hours   Maximum : 80 Marks

Part A

Answer **all** *questions.*
Each question carries 1 mark.

1. IEEE 802.3 is popularly known as :

   a) Ethernet.   b) IBM token ring.

   c) FDDI.   d) PDA.

2. Which one does not belong to a frame header ?

   a) Kind.   b) Seq.

   c) Ack.   d) Info.

3. ————————— keep track of all mobile hosts visiting an area.

   a) Foreign agent.   b) Local agent.

   c) Global agent.   d) Mobile agent.

4. When too many packets are present in the subnet, the performance degrades and this situation is called ——————.

   a) Congestion.   b) Routing.

   c) Switching.   d) Pipelining.

Fill up the blanks :

5. SMTP stands for ————————.

6. The encrypted text is known as ————————.

7. The expansion of VPN is ————————.

8. Frame Relay is an example for ——————————.

9. The routing in which every incoming packet is sent out on every outgoing line except the incoming one is called ——————————.

10. In DES, plain text is encrypted in blocks of —————————— bits.

(10 × 1 = 10 marks)

Part B

Answer **all** *questions.*
Each question carries 2 marks

11. What do you mean by flooding ?

12. What is packet switching ?

13. Differentiate private key cryptography and public key cryptography.

14. What is User Datagram Protocol ?

15. What is VRC ?

(5 × 2 = 10 marks)

Part C

Answer any **five** *questions.*
Each question carries 4 marks.

16. Explain the difference static routing and dynamic routing.

17. Write short notes on remote login.

18. Briefly explain the concept of wireless LANs.

19. Explain flow control in data link layer.

20. What is CSMA/CD ?

21. What is Cyclic Redundancy Check ?

22. Write notes on Ethernet.

23. What are the functions of physical layer ?

(5 × 4 = 20 marks)

Part D

Answer any **five** *questions.*
Each question carries 8 marks.

24. Briefly explain the OSI reference model.

25. Explain with an example, the error detection codes.

26. Explain the concept of slotted ALOHA.

27. Explain the functions of transport layer.

28. Explain the concept of 1-persistent CSMA.

29. Explain the architecture and functions of E-mail system.

30. Explain the concept of link state routing.

31. Explain Dynamic Host Configuration Protocol.

$(5 \times 8 = 40 \text{ marks})$