DISTANCE EDUCATION

CERTIFICATE PROGRAMME IN COMPUTER
FUNDAMENTALS EXAMINATION - MAY 2021

COMPUTER FUNDAMENTALS

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours   Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1.   What is computer?

2.   Define RAM.

3.   What do you mean by program?

4.   What are the drawbacks of second generation computers?

5.   List out the different types of high level programming
      languages.

6.   Name any two compiler.

7.   Specify the purposes of flow chart.

8. How do you write Pseudo code?

9. What is system analysis?

10. Write the features of spreadsheets software.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Explain the various types of computers.

Or

(b) Describe any four applications of a computer.

12. (a) What is assembly language? Explain with example program.

Or

(b) Give a brief account on procedural languages.

13. (a) Write the differences between compiler and interpreter.

Or

(b) Elaborate the steps involved in rapid application development.

14. (a) How programs are developed? What are functions available in system development?

Or

(b) Explicate the various phases in SDLC.

15. (a) Illustrate the various types of application software.

Or

(b) Illuminate the features of word processing software.

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SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the functions of primary memory.

17. Discuss the different generation of programming languages.

18. Give a brief account on object oriented programming.

19. Elaborate the various phases involved in system analysis and design.

20. Illustrate the functions of an operating system.

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DISTANCE EDUCATION

CERTIFICATE COURSE IN COMPUTER FUNDAMENTALS
EXAMINATION- MAY 2021

Certificate Programme in Computer Fundamentals

DIGITAL LOGIC FUNDAMENTALS

(CBCS 2020-21 Academic Year onwards)

Time : Three hours   Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1.   What do you mean by Number System?

2.   Specify any two applications of Hexadecimal Number System.

3.   List any two Boolean algebra functions.

4.   What is meant by combinational circuits?

5.   Mention the use of K-Map.

6.   What is McKluskey method?

7.   What is flip-flop? Draw the logical symbol of flip-flop.

8.   Write the limitation of the Half adder.

9.   List the applications of multiplexer.

10.   Specify the uses of error detection codes.

PART B — (5 × 5 = 25 marks)

Answer ALL questions, Choosing either (a) or (b).

11. (a) Convert the following decimal numbers into binary and octal :

(i) 970

(ii) 42.

Or

(b) Write the various uses of complements in detail.

12. (a) List and explain the Boolean laws.

Or

(b) Simplify the following.

Y=(AB'(C+BD)+A'B')C.

13. (a) Simplify the BOOLEAN expression using K-map :
F = A'C + A'B + AB'C + BC.

Or

(b) Write the functions of Encoder and Decoder with a neat diagram.

14. (a) Draw and explain the functionalities of Multiplexer.

Or

(b) Describe the logical design of JK flip flop.

15. (a) Write the functionalities of Ripple Counters.

Or

(b) Write a short note on Fixed Point Representations

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PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Convert the following decimal fractions into binary, octal and hexadecimal : 10.125.

17. Simplify the following Boolean function using K-Map $F = \sum m\ (1, 3, 7, 11, 15) + \sum d\ (0, 2, 5)$ implement the result with logical circuit.

18. State and elaborate the concepts of Half Adder and Full Adder.

19. Give a brief account on Memory Units.

20. Elaborate the different types of Registers in detail.

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DISTANCE EDUCATION

CERTIFICATE COURSE IN COMPUTER FUNDAMENTALS

EXAMINATION - MAY 2021

Certificate Programme in Computer Fundamentals

APPLICATION PROGRAMS

(CBCS 2020-21 Academic Year onwards)

Time : 3 hours   Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1.   How do you find and replace the word in document?

2.   How can you insert page number in word document?

3.   What is the use of undo and redo operations in Excel?

4.   Define workbook.

5.   How to add clip art in Excel?

6.   Write a uses of MS-power point.

7.   Mention the steps to adding an image from a file in Power Point.

8.   What is Query?

9.   Define database.

10.   How do you create a design view in Access?

PART B — (5 × 5 = 25 marks)

Answer ALL the questions.

11.   (a)   Expound the Find and Replace, Cut, Copy and Paste options in word.

Or

(b)   Enumerate the list of menus available in a Word document.

12.   (a)   Describe the feature of Electronic Spreadsheet.

Or

(b)   How do you insert a row and a column to an Excel sheet?

13.   (a)   Describe any three types of charts to be inserted in Excel.

Or

(b)   Write a note on creation of Charts in MS-Power Point.

14.   (a)   What are the four options that are offered while creating a Power Point presentation?

Or

(b)   Explain the various objects in MS-ACCESS.

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15. (a) Discuss the procedure to merging an Access table with a Word letter.

Or

(b) How do you sort the records in MS Access? Discuss it.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. How do you create a table in a document? Describe it with an example.

17. Explicate the various mathematical, statistical and date functions available in MS-EXCEL with its usage.

18. How will you enhance and Present a Power Point presentation? Discuss in detail.

19. Illuminate in detail the advantages of MS-Access.

20. Explain about the form creating in design view and various form controls in Access.

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