D–1015	Sub. Code
	22311

DISTANCE EDUCATION

CERTIFICATE PROGRAMME IN COMPUTER FUNDAMENTAL EXAMINATION, DECEMBER 2025.

COMPUTER FUNDAMENTALS

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. What is digital computer?

2. Define hardware and software.

3. Define speech recognition.

4. What is the purpose of OCR software in optical character recognition?

5. State the role of output devices.

6. Compare impact and non-impact printers.

7. Define cache memory.

8. State the use of buffers.

9. Compare sequential access with direct access devices.

10. Does a hardware functions without the software? Do you agree with the query? Justify your answer.

PART B — (5 × 5 = 25 marks)

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

11. (a) Write a note on history of computer.

Or

(b) Sketch and explain components of computer hardware.

12. (a) Discuss about the input devices.

Or

(b) Write a note on any two-pointing device.

13. (a) Write a note on monitors and its type.

Or

(b) With a neat sketch, explain about cathode ray tube.

14. (a) Discuss about the virtual memory with its advantages and disadvantages.

Or

(b) Explain in detail about any two types of ROM.

15. (a) What is the significance of tracks and sectors in magnetic disk? Explain with a diagram.

Or

(b) Write a note on external hard disk and its uses.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. With a neat sketch explain the types of computers.

17. With a neat sketch explain OCR and barcode reader.

18. Elaborate on various types of printers.

19. Explain in detail about RAM and its type.

20. Explain in detail about various types of application software.

D–1016	Sub. Code
	22312

DISTANCE EDUCATION

CERTIFICATE PROGRAMME IN COMPUTER FUNDAMENTALS EXAMINATION, DECEMBER 2025.

DIGITAL LOGIC FUNDAMENTALS

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Write the names of various number systems.

2. What is meant by excess three code?

3. Prove the theorem of Boolean algebra x + 1 = 1.

4. What are called combinational circuits?

5. Give an example for simplification using sum of products.

6. What is the use of Don't care condition in K-map?

7. Write the truth table of three input full adder.

8. What is the function of demultiplexer?

9. Define flip flop.

10. What are called error detection codes?

PART B — (5 × 5 = 25 marks)

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

11. (a) Explain the use of complements in number system.

Or

(b) Write about numeric and character codes.

12. (a) Explain any five basic theorems of Boolean algebra.

Or

(b) Outline the basic logic gates with truth table.

13. (a) Discuss about two level implementation of combinational circuit.

Or

(b) Explain the working of Half adder.

14. (a) Draw the block diagram of a 4-to-1-line multiplexer and explain the operation by means of a function table.

Or

(b) Explain the working of RS flip flop with logic circuit.

15. (a) Write about binary counters.

Or

(b) Explain fixed point and floating point representations.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Convert the following :

    (a) $(747)_{10}$ to octal and hexadecimal

    (b) (B65F)16 to decimal and binary

    (c) $(175.165)_8 = (?)_{10}$.

17. State and prove Demorgan's theorem.

18. Simplify the following Boolean expression using K-map

    F = A'C + A'B + AB'C + BC.

19. Explain the following :

    (a) Decoders

    (b) Memory unit.

20. Discuss briefly the 4-bit input shift register with timing diagram.

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D–1017

Sub. Code
22313

DISTANCE EDUCATION

CERTIFICATE PROGRAMME IN COMPUTER FUNDAMENTALS EXAMINATION, DECEMBER 2025.

APPLICATION PROGRAMS

(CBCS 2020 – 2021 Academic Year Onwards)

Time : Three hours Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What is the difference between cut and copy option in MS-Word?

2. How will you insert Header in MS-Word?

3. How will you edit a cell in MS-EXCEL?

4. How will you print a part of your worksheet?

5. What is the purpose of auto fill option in MS-EXCEL?

6. What are the different views in PowerPoint?

7. How will you add graphs in your PowerPoint presentation?

8. Write down the procedure to create a table in MS-ACCESS.

9. Name any two data types supported in MS-ACCESS.

10. What do you mean by Query?

PART B — (5 × 5 = 25 marks)

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

11. (a) Write about bulleting and numbering in WORD.

Or

(b) Explain the steps for spelling and grammar check.

12. (a) Explain the steps for recording and running macros in MS-EXCEL.

Or

(b) How will you link worksheets in EXCEL?

13. (a) How will you insert and delete rows and columns to a worksheet?

Or

(b) Write about sort and filter option in MS-EXCEL.

14. (a) Explain the purpose of various design templates in PowerPoint.

Or

(b) Explain the steps for slide animation.

15. (a) How will you change the structure of a Access table? Explain.

Or

(b) Write short notes on MS-ACCESS form controls.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Describe the steps to do Mail merge in MS-WORD.

17. How will you edit cells using commands and functions in MS-EXCEL? Explain.

18. Explain the procedure to create a chart in EXCEL.

19. How will you add animation to your PowerPoint presentation? Explain the steps.

20. Explain the following MS-ACCESS commands with suitable example :

    (a) Creating a table in design view

    (b) Adding, editing and deleting records.

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