

S.No. 2003

12UCA01

(For the candidates admitted from 2012-2013 onwards)

B.C.A. DEGREE EXAMINATION, APRIL/MAY 2018.

First Semester

DIGITAL COMPUTER FUNDAMENTALS AND
COBOL

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Explain briefly about the central processing unit of computers.
2. Discuss AND gate with its truth table.
3. Give the acronym of 'SOP' and 'POS'.
4. What is meant by BCD? Explain briefly.
5. What is a Flowchart? What are the uses of it?
6. Define Literals.
7. What is a SET verb? Bring out its syntax.

8. Define COMPUTE Verb.
9. What is meant by IOCS?
10. Define Merge Verb.

PART B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Convert the binary numbers to its decimal equivalent.
 - (i) $101.001_2 = \underline{\hspace{2cm}}$.
 - (ii) $1010.1111_2 = \underline{\hspace{2cm}}$.

Or

- (b) Explain the types of computer systems.
12. (a) Write short notes on interconnecting gates.

Or
- (b) Explain 'Sum of the Product' in detail.
13. (a) Write short notes on Literals.

Or

- (b) Describe the Structure of COBOL programs.

14. (a) Write short notes on JUSTIFIED clause.

Or

- (b) Explain about ALTER statement.

15. (a) Write notes on sequential files with variable-length records.

Or

- (b) Write short notes on file merging.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain in detail about compliments with example.
17. Explain the functioning of NAND Gate and NOR Gate with diagrams.
18. Discuss Data Movement Verb with its syntax and example.
19. Describe ROUNDED option and ON SIZE ERROR option with example.
20. Write a COBOL program to find the payroll using files assuming all required data items are available.