

B.C.A. (Part—I) Semester—I Examination
1ST1 : COMPUTER FUNDAMENTALS

Time : Three Hours]

[Maximum Marks : 60

Note :—(1) All questions are compulsory.
(2) All questions carry equal marks.

1. (a) Describe the classification of computer. 6
- (b) State the generations of computer in detail. 6

OR

2. (a) Draw a well labelled block diagram of computer and explain the function of each block in detail. 8
- (b) State the characteristics of computer and enlist its applications. 4
3. (a) Explain the working of keyboard in detail. 6
- (b) Describe the types of impact printers in detail. 6

OR

4. (a) Describe MICR and OCR as input devices. 6
- (b) Explain any two output devices. 6
5. (a) Give the comparison of RAM and ROM. 6
- (b) State the advantages of secondary memories. 6

OR

6. (a) Describe ROM family in detail. 6
- (b) Explain the following :
 - (i) CD
 - (ii) DVD
 - (iii) Flash memory. 6
7. (a) Describe the procedure of conversion of binary to octal number system with suitable example. 6
- (b) Explain the following :
 - (i) BCD code
 - (ii) ASCII code
 - (iii) EBCDIC code. 6

OR

8. (a) Do as directed :
- (i) $(27)_{10} = (?)_2$
 - (ii) $(BCA)_{16} = (?)_2$
 - (iii) $(15)_8 = (?)_2$. 6
- (b) Explain floating point representation of number with suitable example. 6
9. (a) Define the following terms :
- (i) Interpreter
 - (ii) Assembler
 - (iii) Compiler. 6
- (b) State the features and approaches of structured programming. 6
- OR**
10. (a) Draw a flowchart to calculate the factorial of given number. 6
- (b) Define the following terms :
- (i) Execution
 - (i) Testing
 - (iii) Debugging. 6