

- 17) Explain machine dependent optimization.
- 18) Explain address modification using instruction as data.
- 19) Explain conditional macro with an example.
- 20) Explain pseudo-op and machine-op with an example.

## SECTION - C

| III. | An  | SW | er any three questions, each question carries fifteen marks. (3×15=4        | 15) |
|------|-----|----|---|-----|
|      | 21) | a) | Explain data formats used in IBM 360 systems.                               | 8   |
|      |     | b) | Explain General machine structure of IBM 360/370 with a neat block diagram. | 7   |
|      | 22) | a) | Explain detailed pass-1 assembler flow chart.                               | 8   |
|      |     | b) | Explain binary search with an example.                                      | 7   |
|      | 23) | a) | Explain simple one pass macroprocessor with flow chart.                     | 8   |
|      |     | b) | Explain ALA, MDT, MNT with an example.                                      | 7   |
|      | 24) | a) | Explain detailed pass-1 flow chart of loader.                               | 8   |
|      |     | b) | Describe four types of cards used in direct linking loader.                 | 7   |
|      | 25) | a) | Explain the structure of a compiler with a block diagram.                   | 8   |
|      |     | b) | Explain syntax phase with an example.                                       | 7   |
|      |     |    | SECTION - D   |     |
| IV.  | An  | SW | er any one question, each question carries ten marks. (1×10=1               | 0)  |
|      | 26) | a) | Explain formal system.  | 5   |
|      |     | b) | Explain Time sharing OS.  | 5   |
|      | 27) | a) | Explain data bases used in pass-1 and pass-2 of an assembler.               | 5   |
|      |     | b) | Explain: (a) macro language (b) macro processor.                            | 5   |

## VI Semester B.C.A. Examination, September 2020 (CBCS) (F + R) (2016 – 17 & Onwards) COMPUTER SCIENCE BCA 602 – System Programming

Time: 3 Hours Max. Marks: 100

Instruction : Answer all Sections.

## SECTION - A

I. Answer any ten questions, each question carries two marks. (10×2=20)

- 1) Define: (a) System Software (b) Application Software.
- 2) Mention any two differences between compiler and interpreter.
- 3) Define: (a) Register operand (b) Storage operand.
- 4) Explain: (a) USING (b) DROP.
- 5) Write the format of MOT.
- 6) Differentiate DC and DS.
- 7) Differentiate AIF and AGO.
- 8) Define macro.
- 9) What is binder?
- 10) What is loader? Mention its functions.
- 11) What is token? Give an example.
- 12) Explain identifier table.

## SECTION - B

II. Answer any five questions, each question carries five marks. (5×5=25

- 13) Explain micro flow chart for ADD instruction.
- 14) Explain interchange sort with an example.
- 15) What are the functions of a macroprocessor?
- 16) Explain "Compile and go" loader.

