SE – 345

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.

P.T.O.

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. Answer **any three** questions, **each** question carries **fifteen** marks. **(3×15=45)**

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. Answer **any one** question, **each** question carries **ten** marks. **(1×10=10)**

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**
