

2020/TDC/ODD/SEM/
EBCA-101/186

(2)

TDC Odd Semester Exam., 2020
held in July, 2021

COMPUTER APPLICATION

(1st Semester)

Course No. : EBCA-101

(System Programming)

Full Marks : 35
Pass Marks : 12

Time : 2 hours

*The figures in the margin indicate full marks
for the questions*

Answer **five** questions, selecting **one** from each Unit

UNIT—I

1. (a) Describe the general machine architecture for IBM 360/370 machine in terms of memory and registers. 5
- (b) What are the differences between INDEX EQU5 and INDEX DC F S? 2

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(Turn Over)

2. (a) Explain the major components of system programming. 5
- (b) Why is it must that the operand field of EQU pseudo be evaluated in Pass I phase? 2

UNIT—II

3. Describe the data structure of assembly language in assembler Pass I and Pass II in detail. 7
4. (a) What are the features of assembly language required to build a two-pass assembler? 2
- (b) Write an assembly language program for IBM 360/370 machine to compute the following function : 5

A 2 B 2 C 1

UNIT—III

5. (a) What are the basic tasks that any macroprocessor can perform? 4
- (b) Distinguish between positional arguments and keyword arguments. 3

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(Continued)

(3)

6. (a) What is MOT? 2
(b) Write an assembly language program with nested macro call. 5

UNIT—IV

7. Why is the direct linking loader more popular as a loading scheme as compared to 'compile and go loader' and 'absolute loader' schemes? Explain in detail. 7
8. (a) Explain the database specification of Pass I of a direct linking loader. 4
(b) Describe the function of each of the RLD, ESD and T T cards. 3

UNIT—V

9. Discuss, in detail, different phases of a compiler process. 7
10. (a) What are the data structures used in lexical analysis phases? 3
(b) Write the algorithm for lexical analysis phases. 4

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