S.D.E.

B.C.A. (2004 Course Sem- II : SUMMER - 2019

SUBJECT : DIGITAL COMPUTER DESIGN & COMPUTER ORGANISATION

Day : Thursday
Date : 02/05/2019

Time : 10.00 AM TO 1.00 PM
Max. Marks : 80

S-2019-4959

N.B.

1) Attempt any **FIVE** questions from Section – I and any **TWO** questions from Section – II.
2) Figures to the right indicate **FULL** marks.
3) Answers to both the sections should be written in SAME answer book.

SECTION – I

Q.1 What is shift register? Explain various types of shift register with diagram. **(10)**

Q.2 Explain in detail instruction cycle. **(10)**

Q.3 Explain the terms: **(10)**
a) Subroutines
b) Complement of Function

Q.4 What is micro-operation? Explain types of micro operations. **(10)**

Q.5 Discuss in brief machine language and assembly language. **(10)**

Q.6 Define 1's and 2's complement with suitable examples. **(10)**

Q.7 Write short notes on any **TWO:** **(10)**
a) Memory unit
b) Digital computer
c) Assembler

SECTION – II

Q.8 What is Boolean algebra? Discuss various basic identities of Boolean algebra. **(15)**

Q.9 With graphic symbol, algebraic function, truth table, explain different logic gates. **(15)**

Q.10 Explain various instructions of assembly language with its format and purpose of each instruction. **(15)**

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