BCA

(Please write your Exam Roll No.) Exam Roll No. .....

# SUPPLEMENTARY EXAMINATION

FIRST SEMESTER [BCA] SEPTEMBER-2014

**Paper Code: BCA107** **Subject: Introduction to Computers & IT**

**Time : 3 Hours** **Maximum Marks :75**

***Note: Attempt any five questions including Q.no.1 which is compulsory. Select one question from each Unit.***

Q1 Attempt the following:- (2.5x10=25)

(a) Distributed Computing
(b) RAM
(c) EBCDIC Codes
(d) Decision Transmission Modes
(e) Data Transmission Modes
(f) Telnet
(g) Pseudo code
(h) CPU
(i) Client Server Architecture
(j) WWW

## UNIT-I

Q2 List the key hardware and software technologies used in building computer of each of the five generations. (12.5)

Q3 (a) Draw and explain the block diagram of computer. (5)
(b) Explain the Classification of Computer. Also provide example for each classification of Computer. (7.5)

## UNIT-II

Q4 Write the algorithm and draw a flowchart for finding the sum of first 100 integers. (12.5)

Q5 (a) What are High Level Languages? List the various types of Translators required for conversion of these high level language. (5)
(b) What do we understand by the term Operating System? Explain the various functions of an Operating System. (7.5)

## UNIT-III

Q6 (a) Write short note on Gray Code. (5)
(b) Perform the following:- (7.5)
(i) Add 1011, 11000 and 111 —— 101010
(ii) Find 2's compliment of 100111100 — 011000100
(iii)Binary Subtraction on 1100, 1010 0010

Q7 (a) Write short notes on ASCII and BCD Codes. (5)
(b) Perform the following:- (7.5)
(i) $(1100011)_2=(?)_8$ (ii) $(45C)_{16}=(?)_2$ (iii) $(11000011111)_2=(?)_{16}$.

## UNIT-IV

Q8 (a) Explain briefly the various Services of Internet. (5)
(b) Draw and explain the various Network Topologies that exist in a Communication Network. (7.5)

Q9 (a) Discuss the basic elements of a Communication System. (5)
(b) Draw and explain the various layers of an OSI Model. (7.5)

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