### 2012

#### M B A

## 1st Semester Examination

# COMPUTER APPLICATIONS IN BUSINESS (THEORY)

PAPER-MBA-108

Full Marks: 50

Time:  $1\frac{1}{2}$  Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Write the answers to Questions of each Half in separate books.

### (First Half)

(Marks: 50)

1. Answer any four questions of the following:  $5\times4$ 

(a) Explain Single User, Multi User and Graphical User Interface Operating System.

- (b) Write Huntington's postulates of Boolean algebra.
- (c) Distinguish between Application Software and System Software.
- (d) Write the differences between compiler and Interpreter.
- (e) Briefly explain, the differences between Primary andSecondary Memory, with examples.
- (f) Prove  $\overline{AB} + A\overline{B} = (\overline{AB} + \overline{AB})$  using truth table.
- 2. Answer any two questions:

10×2

(a) Convert the following

(i) 
$$(11001011)_2 = ()_{10}$$

(ii) 
$$(11101101 \cdot 10101)_2 = ()_8$$

(iii) 
$$(59.99)_{10} = ()_2$$

(iv) 
$$(336 \cdot 36)_{10} = ()_8$$

(v) 
$$(145A\cdot3D7)_{16} = ()_8$$

.5×2

- (b) Solve the following
  - (i) Subtracting  $(1001111\cdot101)_2$  from  $(1110000\cdot01)_2$
  - (ii) Adding (11010111)<sub>2</sub>, (1110001)<sub>2</sub> and (1111111)<sub>2</sub>
  - (iii) Multiply 11112 with 1112
  - (iv) Subtract the following using 2's complement :  $(1010111 \cdot 001)_2 \text{ from } (10110110 \cdot 11)_2$

2+2+3+3

- (c) (i) Differentiate between Multiprogramming and Multiprocessing.
  - (ii) Draw the truth table for three variables x, y and z whose output is  $xy + yz + \overline{yz}$ .
  - (iii) What are the main functions of operating system.

[Internal Assessment: 10 Marks]