

**2019**

**MSc**

**2<sup>nd</sup> Semester Examination**

**COMPUTER FUNDAMENTAL**

**PAPER – COS-204(M1)**

**Full Marks : 25**

**Time : 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.

**{Turn Over}**

1. Answer any **TWO** questions

a) Perform  $(52)_{10} - (27)_{10}$  using 2's complement method.

b) Perform  $(156)_8 + (262)_{10} + (1A)_{16} = (?)_{10}$

c) What are the advantages and disadvantages of machine language? 3+3+(2+2)

2.

a) What is the maximum positive and maximum negative number can be represented using 14 bit representation? 2+2+3+3

b) What is mnemonic?

c) What are the functions of CPU?

d) How fraction numbers are represented in computer?

3.

a) What is algorithm? What are the characteristics of an algorithm? (1+5)+4

b) Write an algorithm/flow chart to find the GCD of two numbers.

4.

a) Define data structure. 2+3+3+2

b) What is the difference between linear data structure and non-linear data structure?

c) Write an algorithm for PUSH operation of stack.

d) Represent 1TB into bits.