GANPAT UNIVERSITY

B. Tech. Semester: IV (CE/IT/EC/MC/ME/BM&I/Civil/EE)

Regular Examination April – June, 2015

2OS401: Introduction to Computer Technology

Time: 3 Hours   Total Marks: [70]

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Answer both sections in separate answer sheets and write to the point.

Section – I

Que.1 (A) **Define following terms:** [6]
Computer, Program, Motherboard, Software, Compiler, Memory.

(B) Draw the block diagram of computer. Briefly explain input, output, and [6] process.

OR

Que.1 (A) What is Super computer? List out different applications and characteristics of [6] computer.

(B) Give classification of computers and discuss any two types of computer. [6]

Que.2 (A) Convert following binary values into decimal values with proper [6] representation.

(i) $(1100110)_2$ (ii) $(01011.11)_2$ (iii) $(1011.001)_2$

(B) Convert following decimal values into binary values with proper [5] representation.

(i) $(100)_{10}$ (ii) $(128)_{10}$ (iii) $(21)_{10}$

OR

Que.2 (A) Define gray code and convert following binary numbers into gray code with [6] proper representation.

(i) $(1100100)_2$ (ii) $(1001011)_2$ (iii) $(1101)_2$

(B) Calculate multiplication of following binary numbers with proper [5] representation.

(i) 10101 * 11101 (ii) 11101 * 110101

Que.3 (A) What is pointing device? Discuss different types of mouse with its merits and [6] demerits.

(B) List different input and output devices. Explain working of laser printer and [6] write its advantages.

Que.4 (A) Define OCR (Optical Character Recognition). Explain Working of OCR and [6] write its benefits.

(B) Show the memory hierarchy. Explain Cache memory and write its advantages. [6]

OR

Que.4 (A) List out networking devices and explain any two. [6]

(B) What is flow chart? Explain flow chart using proper example. [6]

Que.5 (A) Write short notes on Low level Language and High Level languages. [6]

(B) Explain transmission mode in details. [5]

OR

Que.5 (A) Define SDLC? Explain all Phases of SDLC in detail. [6]

(B) Define computer security? Explain Principles of security. [5]

Que.6 (A) Define Topology? Explain Mesh and Bus topology in detail. [6]

(B) Explain coaxial cable in brief. [6]

END OF PAPER