Enroll No. _____

Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous)

Affiliated to Saurashtra University, Rajkot

SEMESTER END EXAMINATION NOVEMBER – 2016

Bachelor of Computer Application

16UCACC02 – COMPUTER FUNDAMENTAL AND BASIC NETWORKING

Duration of Exam – 3 hrs ***Semester – I*** ***Max. Marks – 70***

Part A (10x1= 10 marks)

Answer **ALL** questions

1. Which input device is known as pointing device?
2. Describe data units starting from Bit to TB. (e.g. 1000 grams = 1 Kilo Gram)
3. Which material (layer) is use in making of HDD for data writing and reading?
4. What material is used in Laser Printers for printing?
5. $(10111)_2$ = (_____)$_{10}$
6. $(61)_8$ = (_____)$_{10}$
7. What is Computer Network?
8. Name different network services.
9. OSI reference model was developed by _____.
10. What is the PDU of Presentation Layer?

Part B (5X5 = 25 marks)

Answer **ALL** questions

11a. Explain Block Diagram of Computer.

OR

11b. Explain any 2 input devices with figure (with its parts description).

12a. Describe any 2 output device.

OR

12b. Give differences of RAM vs. ROM.

13a. Subtract by 1's complement method.
$(11100)_2 - (11001)_2$

OR

13b. Subtract by 1's complement method.
$(100011)_2 - (100001)_2$

14a What are Peer-to-Peer & Client-Server network models?

OR

14b Describe: Application Services and Message Services.

15a Explain the main difference of TCP vs. UDP.

OR

15b Give predefined Mnemonics for top-down and bottom-up layers of OSI reference model. Make and write your own "meaningful" Mnemonics for top-down and bottom-up layers.

<u>Part C</u> (5X7 = 35 marks)

Answer **<u>ALL</u>** questions

16a. Write Characteristics of Computer.

OR

16b. Describe what is Scanner with its types? Explain OMR, OCR, MICR.

17a. Explain all different Primary Storages.

OR

17b. Write a short note on Printers: DMP, Laser, Ink-Jet.

18a. i. $(361)_8$ = (_____)$_2$
ii. $(D39)_{16}$ = (_____)$_8$

OR

18b. i. $(AA)_{16}$ = (_____)$_2$
ii. $(10110)_2$ = (_____)$_{16}$

19a Describe Computer Network Topologies: BUS, Ring, Star.

OR

19b Explain LAN, MAN and WAN with examples.

20a Explain top 3 layers of OSI reference model in detail.

OR

20b Explain bottom 4 layers of OSI reference model in detail.