

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA (Integrated) - SEMESTER- 1 EXAMINATION – WINTER 2013**

**Subject Code: 4410601**

**Date: 20/12/2013**

**Subject Name: Fundamentals of Computers**

**Time: 2:30 pm TO 5:00 pm**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) (i) What is OpenOffice.Org? Explain any three major application of it? **04**  
(ii) What is computer virus? Explain any two characteristics of it? **03**  
(b) (i) Define computer. Discuss the various characteristics of a computer. **05**  
(ii) Write the full form of following abbreviations: (a) IBM (b) LSI **02**
- Q.2** (a) What is file in Linux? Explain the three category of it. **07**  
(b) (i) What are application generators? Describe their advantages and disadvantages. **04**  
(ii) What is internal command in DOS and give their examples. **03**
- OR**
- (b) (i) What are CASE tools? Describe their importance in development of a software. **04**  
(ii) What is external command in DOS and give their examples. **03**
- Q.3** (a) What is the difference between manual and computer storage? Explain. **07**  
(b) How the Power-On Self-Test (POST) works. Explain in details. **07**
- OR**
- Q.3** (a) Discuss briefly the evolution of computer storage devices. **07**  
(b) How circuit Boards work. Explain in details. **07**
- Q.4** (a) What is CPU? Describe the function of the distinct parts of this component. **07**  
(b) (i) What is cache memory? Explain working of it. **04**  
(ii) What is an operating system? Discuss various types of operating system. **03**
- OR**
- Q.4** (a) What is ROM? Name various types of ROM and describe their main characteristics. **07**  
(b) (i) What is a port? Explain use of any three ports. **04**  
(ii) What is booting? Explain it with suitable example. **03**
- Q.5** (a) (i) Name the basic input devices of a PC and explain their function in brief. **06**  
(ii) Write down full form: RTC **01**  
(b) What is binary logic? Define AND, OR and NOT logical operations by making truth table. **07**
- OR**
- Q.5** (a) (i) Name the basic output devices of a PC and explain their function in brief. **06**  
(ii) Write down full form: BIOS **01**  
(b) What is computer system? Describe in brief the architecture of a computer system. **07**

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