

*This question paper contains 4 printed pages.]*

**5468**

*Your Roll No. ....*

**B.A. Prog./I**

**J**

**(A)**

**COMPUTER APPLICATIONS**

**Paper CS-I**

**Computer Fundamentals and Software Packages**

**(Admission of 2004 and onwards)**

*Time : 3 Hours*

*Maximum Marks : 45*

*(Write your Roll No. on the top immediately  
on receipt of this question paper.)*

*Attempt all questions.*

1. (a) What is a Mainframe Computer ? 1
- (b) Describe the key characteristics of second generation  
of computers. 2
- (c) What is a Microprocessor ? 1

[P.T.O.]

- (d) What is a System Bus ? Name the various units of a system bus. 2
- (e) Describe the steps of an Instruction Cycle ? 2
2. Perform the following conversions : 4
- (a)  $(24.25)_{10} = (??)_2$
- (b)  $(5112)_{10} = (??)_8$
- (c)  $(101011100)_2 = (??)_{16}$
- (d)  $(84)_8 = (??)_{10}$
3. (a) What is WORM disc ? 2
- (b) What are mass storage devices ? How are they useful in storing large amount of data ? 2
- (c) Differentiate between Impact and Non-impact printers ? Give examples of both. 2
- (d) Differentiate between uniprogramming and multiprogramming. 1

4. (a) Explain the life cycle of a process with the help of a diagram. 3
- (b) Give examples of preemptive and non-preemptive scheduling. 1
- (c) What is virtual reality ? Explain its characteristics ? 3
- (d) What is software piracy and how it can be avoided ? 2
5. (a) What is an assembler ? 1
- (b) What do you understand by digital signature ? How are digital signatures used while sending a document across network ? 3
6. Give the full form of following abbreviations : 2
- (a) EEPROM
- (b) OCR
- (c) GUI
- (d) CD-ROM

7. Write short notes on any two giving examples : 5
- (a) Pointing Devices
  - (b) Boot Sector Virus
  - (c) Data compression
8. (a) Why are antivirus softwares important ? 1
- (b) What do you understand by user identification and user authentication ? What are the different ways of authenticating user identity ? 3
- (c) Explain the concept of software installation and uninstallation. 2