COURSE CODE: BCS-011 BACHELOR OF COMPUTER APPLICATIONS PROGRAMME CODE: BCAOL COMPUTER BASICS AND PC SOFTWARE

Total Marks-100

Time Duration-180 Minutes

Note: Attempt questions from all Sections as instructed.

Section-I (Short Answer Type Questions) $(5\times4=20)$

Note: Attempt any five questions. Each question carries 4 marks.

- 1. Convert the following hexadecimal numbers to its equivalent binary:
- i) $(A5)_{16}$
- ii) (F2)₁₆
- 2. Define a flowchart. Draw a flowchart to find the sum of all the ten integers given as input.
- 3. List all the five generations of computers along with the "Switching Circuits"/"Electronic Component" used by them.
- 4. What is a looping statement in a programming language? Explain with an example.
- 5. Define an operating system. Briefly explain important components of an operating system.
- 6. Define a Browser. How does it work?
- 7. Write and explain important components of an e-mail.

Section-II (Medium Answer Type Questions) $(5\times10=50)$

Note: Attempt any five questions. Each question carries 10 marks.

8. What is data communication? Explain data communication process with the help of a diagram.

- 9. Define a subroutine in a programming language. Explain the steps of its execution. Write a simple subroutine to find the square of a given number.
- 10. What is a search engine? Explain various components of it. If you wish to search for 'Central Universities of India", how you will search them? Mention its process.
- 11. What is an Application Software? Mention at least four application softwares along with their purpose. How is an application software is different from system software?
- 12. What is WIKI? Explain the characteristics of WIKI. How is it useful for students?
- 13. What is RAM? How is it different from ROM and Cache memory? Explain.
- 14. What is e-Learning? Explain the e-Content development process in e-Learning.

Section-III (Long Answer Type Questions) $(2 \times 15 = 30)$

Note: Attempt any two questions. Each question carries 15 marks.

- 15. Explain various layers in TCP/IP model with the help of a diagram.
- 16. Define Open Source Software. Give any two examples of open source software. Also, explain the main features of open source development model.
- 17. Explain any three of the following:
- a) LAN and WAN
- b) Disk Management
- c) Utility Software
- d) Object Oriented Programming Languages