

No. of Printed Pages : 5 **BCS-011/BCS-111**

**BACHELOR OF COMPUTER  
APPLICATIONS (Revised) (BCA)**

## Term-End Examination

**June, 2025**

**BCS-011/BCS-111 : COMPUTER BASICS AND  
PC SOFTWARE**

*Time : 3 Hours*

*Maximum Marks : 100*

*Weightage : 75%*

**Note :** Question No. 1 is compulsory and carries 40 marks. Attempt any **three** questions from the rest.

1. (a) Do the following conversions : 10
- (i) (124.5) Decimal to Binary
- (ii) (110101101010) Binary to Hexadecimal

- (iii) (CBA) Hexadecimal to Binary
- (iv) (574) Octal to Decimal
- (v) (10101) Binary to Decimal
- (b) Explain the various types of computers on the basis of the technology used. 4
- (c) Explain the purpose of memory of the computer. Explain its need and types. 6
- (d) Explain the working of the following EXCEL functions : 7  
COUNTIF, LEFT, HLOOKUP,  
MATCH, CONCATENATE, NOW, SUM
- (e) Why do computer systems need anti-virus softwares ? Which techniques do anti-virus programs use to identify viruses ? 6
- (f) What are IP addresses ? Explain the structure of IP address with suitable block diagram. Also, explain the term DNS and its utility. 7

2. (a) Explain software project management and the various project management activities. 8
- (b) Draw a flowchart that takes ' $n$ ' numbers and produces the smallest of those numbers as output. 6
- (c) How does data get transmitted via guided and unguided media ? Explain *two* modes from each category. 6
3. (a) What are optical memories and how are they more useful ? Explain briefly any *four* types of optical disks. 8
- (b) What is cloud computing ? Explain the various cloud services and how they benefit organizations ? Describe the key features and benefits of cloud based solutions. 6

- (c) What is collaboration in the context of Web Applications ? What is Wiki ? Explain its various characteristics and the activities for which it is used. 6
4. (a) Explain Internet Protocol addressing with the help of an example. 4
- (b) What are utility softwares ? Explain briefly the following utility softwares : 10
- (i) Disk Defragmenter
- (ii) CHKDSK
- (iii) Data Compression
- (iv) Disk Management
- (c) What are Malwares ? Explain any *three* Malwares, in brief, with the help of an example of each. 6
5. (a) What are Operating Systems ? What kind of services do operating systems provide to users and programs ? 6

(b) “CPU is a complex IC chip having millions of transistors.” Describe the structure of the CPU and explain its components with the help of a diagram. 8

(c) What is Mail Merge ? Explain the various steps of mail merge with the help of an example. 6

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