No. of Printed Pages : 4

BEY–020

B. SC. (APPLIED SCIENCE–ENERGY) (BSCAEY)

Term-End Examination

June, 2025

BEY-020 : COMPUTER BASICS AND PC SOFTWARE

Time : 3 Hours *Maximum Marks : 70*

Note : *There are two Sections in this paper. All the questions of Section A are compulsory. Attempt any* ***three*** *questions from the four questions given in Section B.*

Section—A

1. (a) Convert the following decimal numbers to binary : 4

   (i) 49

   (ii) 2.375

Downloaded from www.IGNOUBABA.com

(b) Explain the concept of seek time and latency time in the context of hard disk. 4

(c) What is the need of operating system in a computer ? Explain the concept of time sharing and multiprogramming in the context of operating system. 5

(d) Draw a flowchart to find the product of first n natural numbers. 4

(e) Describe the different components of a Local Area Network (LAN). 4

(f) What is Domain Name System (DNS) ? Explain its use with the help of an example. 4

Section—B

2. (a) List the different components of CPU. Also, explain the function of each of these components. 5

(b) Explain the data organisation on a hard disk with the help of a diagram. How is the data organisation of hard disk different from data organisation of CD-ROM ? 6

Downloaded from www.IGNOUBABA.com

(c) Explain the characteristics of the following Input/Output devices : 4

(i) Printer

(ii) Keyboard

3. (a) What is an Object Oriented Language ? Define the following concepts of an object-oriented language : 6

(i) Encapsulation

(ii) Inheritance

(iii) Polymorphism

(b) What are Perverse Software ? Explain any *two* types of Perverse Software. 5

(c) What is a one-dimensional array in the context of a programming language ? Explain with the help of an example. 4

4. (a) What is the meaning of Network Topology ? Explain the Bus Topology with the help of a diagram. Also list the advantages and disadvantages of Bus Topology. 7

Downloaded from www.IGNOUBABA.com

(b) Explain the following terms in the context of networking and internet : 8

(i) Browser

(ii) Search engine

(iii) Social networking

(iv) Blog

5. Explain any *five* of the following with the help of an example or diagram if needed : 15

(a) TCP/IP model

(b) Modem and its use

(c) Mail merge feature of MS-Word

(d) Features of spreadsheet software

(e) Process management in the context of an operating system

(f) Memory hierarchy

(g) Universal Serial Bus (USB)

(h) Integrated Circuits

× × × × ×

Downloaded from www.IGNOUBABA.com