E 4272 (Pages : 2) Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2016

First Semester

Vocational Course—OPERATING SYSTEM AND COMPUTER NETWORKS

(For Vocational Subjects : Computer Applications of B.Sc. Physics—Model II)

[2013 Admission onwards]

Time : Three Hours Maximum Marks : 60

## Part A (Short Answer Questions)

*Answer* **all** *questions briefly.*
*Each question carries* 1 *mark.*

1. Define Operating System. Give two examples.
2. Why is a user program not allowed to carry out a direct read/write operations from/to a disk sector ?
3. What are the steps involved in "Booting" ?
4. What role does a process priority play in a process scheduling ?
5. When the memory wastage is within the partition itself, what is it called ?
6. What is the significance of virtual address ?
7. Differentiate between "downloading" and "uploading" of information.
8. In what manner is e-mail service similar to postal mail service ? In what manner the two are different from each other ?

(8 × 1 = 8)

## Part B (Brief Answer Questions)

*Answer any* **six** *questions.*
*Each question carries* 2 *marks.*

9. List the various functins performed normally by an operating system.
10. What is the objective of process management module of an operating system ?
11. What is meant by process priority ? What are the different types of priorities ?
12. State the different scheduling method.
13. Write a note on variable partition memories.
14. What is CPU scheduling ?
15. List the advantages and disadvantages of virtual memory.

**Turn over**

16. What is e-mail ? Why it is preferred by many, to paper mail, telephone, and fax services ?
17. Describe URL.
18. Give the features of outlook express.

(6 × 2 = 12)

## Part C (Descriptive/Short Essay Type Questions)

*Answer any* **four** *questions.*
*Each question carries* 4 *marks.*

19. What are the min features of Unix ?
20. Differentiate between short term, medium term and long term scheduler.
21. What is dynamic allocation problem ? Explain different methods used to solve their problem.
22. Explain the demand paging system of implementing virtual memory.
23. Describe any one protocol used in Ethernet.
24. What is Netscape Navigator ? Explain its features and applications.

(4 × 4 = 16)

## Part D (Long Essay Type Questions)

*Answer any* **two** *questions.*
*Each question carries* 12 *marks.*

25. Describe UNIX kernal data structures.
26. Explain pre-emptive and non-pre-emptive scheduling. Which circumstances they are preferred ? How does the operating system implement these ?
27. Differentiate between uniprogramming and multiprogramming memory models. What are their relative merits and demerits and fields of application ?
28. Describe the ISO-OSI model and explain the function of each layer in it.

(2 × 12 = 24)