Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

B.Voc. (Web Technologies and Multimedia) (Sem.–3)

OPERATING SYSTEM

Subject Code : BVWM304-19
M.Code : 78642
Date of Examination : 19-12-22

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. **Write briefly :**

   a) Differentiate between Program and Process.

   b) Differentiate between Application and System Programs.

   c) Explain in brief about Time sharing systems.

   d) Differentiate between Pre-emptive and Non-preemptive scheduling algorithms.

   e) What do you mean by context switching? Explain in brief.

   f) Differentiate between Internal and External Fragmentation.

   g) Why page size is always power of 2.

   h) Define the term Disk Bandwidth.

   i) Define the term file. List various attributes of a file.

   j) Define the term Protection and Security.

SECTION-B

2. Define a Thread? Give the benefits of multithreading. What resources are used when a thread is created?

3. Write a detailed note on following scheduling schemes :

   (a) Multi-processor Scheduling

   (b) Thread scheduling

4. Write a detailed note on segmentation scheme of memory management.

5. Write a detailed note on following terms in reference to Protection and security

   (a) Authentication

   (b) Firewall

6. Write a detailed note on following terms in reference to Inter-process communication

   (a) Pipe

   (b) Socket

SECTION-C

7. Write a detailed note on Application Programs and System Programs.

8. Write a detailed note on various disk scheduling algorithms with a suitable example.

9. What is the Directory Structure in OS? Explain in detail the most common schemes for defining the logical structure of a directory.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.