BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE) B.Tech.Sem - VI Information Technology: WINTER- 2022 SUBJECT: OPERATING SYSTEM

Day: Thursday Time: 10:00 AM-01:00 PM Date: 24-11-2022 Max. Marks: 60 W-13418-2022 N.B.: 1) All questions are **COMPULSORY**. 2) Figures to the RIGHT indicate FULL marks. 3) Assume suitable data if necessary. 4) Use of non-programmable **CALCULATOR** is allowed. Q.1 What is operating system? Explain various function and objectives. (10)Write an evaluation of operating system and explain architecture of any one operating system. Q.2 Discuss concept of process and explain multithreading. (10)What is Linux process? Explain Linux thread management in detail. What is deadlock? Write principles of deadlock and discuss deadlock (10) Q.3 prevention mechanism. OR Explain synchronization and mutual exclusion in detail. (10)What is paging? Explain segmentation in detail. Q.4 OR Explain difference between fixed and dynamic partitioning in detail. Explain I/O management and disk scheduling in detail. (10)Q.5 OR What is file sharing? Explain Linux virtual file system in detail. (10)What is NACH operating system? Explain in detail. **Q.6** OR What is embedded operating system? Write characteristics of embedded operating system.

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