

**UNIVERSITY COLLEGE TATI (UCTATI)****FINAL EXAMINATION QUESTION BOOKLET**

COURSE CODE	: BCS 1333
COURSE	: OPERATING SYSTEM
SEMESTER/SESSION	: 1 - 2023/2024
DURATION	: 3 HOURS

Instructions:

1. This booklet contains 5 questions. Answer ALL questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise up your hands and ask the invigilator.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO
THIS BOOKLET CONTAINS 4 PRINTED PAGE INCLUDING COVER PAGE

QUESTION 1

- a) Define the meaning of Operating System. (2 marks)
- b) Define **TWO (2)** key functions of a kernel in an Operating System. (4 marks)
- c) Operating systems primarily are resource managers. Explain how operating systems manage the resources? Give **TWO (2)** reasons on it. (4 marks)

QUESTION 2

- a) Justify the purpose of the user interface in the Operating System. (2 marks)
- b) State **THREE (3)** characteristics of graphical user interface (GUI). (3 marks)
- c) Clarify method involved in process management in the Operating System. (6 marks)
- d) Explain about file management and provide process task on the file management concept. (8 marks)

QUESTION 3

- a) Express the role and command for the MS-DOS application. (4 marks)
- b) Describe **TWO (2)** forms of **batch file** modes. (2 marks)
- c) Revise about **batch file** in DOS system. (2 marks)
- d) Complete Table 1 below to liberal the action to be perform on each command. (4 marks)

Table 1

Command	Action to be performed
▪ DIR	i) _____
▪ COPY	ii) _____
▪ DEL or ERASE	iii) _____
▪ FORMAT	iv) _____

e) Show the example of usage for the following MS-DOS manipulation commands below.

Write a complete command with its estimated output.

- i) MD (2 marks)
- ii) CD (2 marks)
- iii) PROMT (2 marks)
- iv) TREE (2 marks)
- v) REN (2 marks)

f) List **FOUR (4)** DOS error messages. (4 marks)

QUESTION 4

- a) Identify the objective of Windows as the used of OS diversities nowadays. (4 marks)
- b) Explain the history of Linux. Give **THREE (3)** samples of the Linux. (5 marks)
- c) Describe **TWO (2)** advantages of using LINUX parallel to another Operating System. (2 marks)
- d) Explain about MAC OS. (4 marks)
- e) State **FOUR (4)** scheduling algorithms in Operating System. (4 marks)
- f) Describe the scheduling queues in Operating System. (6 marks)
- g) State **FOUR (4)** examples based on real situation on the scheduling algorithm. (4 marks)

QUESTION 5

- a) Elaborate methods to retain the security area on the operating system and how many stages involved? (6 marks)
- b) List **FOUR (4)** attacks in security towards the operating system. (4 marks)
- c) Explain the importance of password validation in operating system and provide the best way to intensity the password proficiencies. (3 marks)
- d) List **THREE (3)** security ways when entering the Operating System. (3 marks)

----- **END OF QUESTIONS** -----