Reg. No. | | | | | | | | |

G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

UG DEGREE END SEMESTER EXAMINATIONS - APRIL 2025.

(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.C.A.

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
VI	PART - III	CORE	U21CA610	OPERATING SYSTEM (LINUX/UNIX)

Date & Session: 26.04.2025/FN **Time : 3 hours** **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	SECTION – A (10 X 1 = 10 Marks) Answer ALL Questions.
CO1	K1	1.	Which of the following OS operations is responsible for allocating memory to a process? a) Process creation b) Process scheduling c) Memory Allocation d) Process Termination
CO1	K2	2.	Which Interface is a window system with a pointing device to direct I/O? a) CLI b) Batch Interface c) GUI d) I/O Interface
CO2	K1	3.	Which process had finished execution? a) New b) Running c) Terminate d) Ready
CO2	K2	4.	Which scheduling algorithm is designed especially for time sharing systems? a) FCFS b) Round Robin c) SJFS d) Priority Scheduling
CO3	K1	5.	Which maps many user level threads to one Kernel thread? a) Many to Many model b) One to One model c) Many to One model d) One to Many model
CO3	K2	6.	What is resource can't be pre-empted in Dead Lock? a) Mutual Exclusion b) Hold and Wait c) No – pre emption d) Circular wait
CO4	K1	7.	Which is allocating the smallest hole that is enough? a) First Fit b) Best Fit c) Worst Fit d) Last Fit
CO4	K2	8.	Who is manipulating entire process in Demand Paging? a) Pager b) Swapper c) Page Table d) Page fault Trap
CO5	K1	9.	Which of the following is a popular text editor in Linux? a) Notepad b) Microsoft Word c) Vim d) Adobe Acrobat
CO5	K2	10.	Which of the following options is used with the tr command to delete characters? a) -d b) –s c) -c d) –t

Course Outcome	Bloom's K-level	Q. No.	**SECTION – B (5 X 5 = 25 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	11a.	Illustrate the definition of Operating System. **(OR)**
CO1	K3	11b.	Write short note on Microkernel's of system structure with diagram.
CO2	K3	12a.	Identify the concepts of Process Control Block (PCB). **(OR)**
CO2	K3	12b.	Analyze the First Come – First Served scheduling algorithms.
CO3	K4	13a.	Arrange the characterization of Deadlock. **(OR)**
CO3	K4	13b.	Categorize the Multithreading Models with diagram.
CO4	K4	14a.	Distinguish between Logical Address Space and Physical Address Space. **(OR)**
CO4	K4	14b.	Analyze the terms of Page Replacement in shortly.
CO5	K5	15a.	Verify the concepts of Shell Script. **(OR)**
CO5	K5	15b.	Appraise the meaning of Switch statement in shell scripts with suitable syntax.

Course Outcome	Bloom's K-level	Q. No.	**SECTION – C (5 X 8 = 40 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	16a.	Find the various operations of Operating System in detail. **(OR)**
CO1	K3	16b.	Examine the terms of System Call with required diagram and example.
CO2	K4	17a.	Categorize the various operations on Process. **(OR)**
CO2	K4	17b.	Compare Priority Scheduling and Round Robin Scheduling algorithm.
CO3	K4	18a.	Inspect the various functions of Dead Lock Prevention. **(OR)**
CO3	K4	18b.	Illustrate the concepts of Recovery from Dead Lock in detail manner.
CO4	K5	19a.	Justify the concepts of Contiguous memory allocation with neat figure. **(OR)**
CO4	K5	19b.	Appraise the terms of Demand Paging with appropriate diagram.
CO5	K5	20a.	Criticize the different modes of operation in Vi editor with syntax. **(OR)**
CO5	K5	20b.	Interpret the Loops in Shell with neat example.