Course Code: 040020202   **Course:** UNIX Internals and Shell Programming

Assessment:

The weightage of CIE and University examination shall be as per the University regulations.

 ➢ Composition of CIE shall be

Assessment Code	Assessment Type	Duration of each	Occurrence	Each of marks	Weightage in CIE of 40 marks	Remarks
A1	Quiz	45 Minutes	1	20	5 X 1 = 5	Quiz 1 : Based on Unit 2
A2	Unit Test	1.5 Hours	2	30	6 x 2 = 12	Test 1 : After completion of Unit 1, 2 & 3 Test 2 : Based on Unit 4 & 5
A3	Presentation **OR** UNIX Utility creation through System Call	15 Days	1	50	6 X 1 = 6	Presentation : From All Units Utility : From Unit 1 & 2
A4	Internal Exam	3 Hours	1	60	17 x 1 = 17	As per Schedule by Examination Committee
A5	Practical Quiz	1 Hour	1	20	4 x 1 = 4	P Quiz 1: Based On Unit 3 & 4
A6	Practical Internal Exam	2 Hours	2	30	6 x 2 =12	P Internal1: After completion of Unit 1,2, & 3 P Internal2: As per Schedule by Examination Committee

Assessment Type Classification:

Assessment Code :	A1	Coverage of Content :	Unit 2
Assessment Type :	Quiz 1	Tentative Date :	First Week of March
Kind of Question Format :	All twenty questions are multiple choice (including true/false) if It will take as on 1) Multiple Choice (20 questions) [Each question having .5 marks.] 2) Find error/Code arrangement /Code correction (4 questions) [Each question having 1.5 marks.] 3) One word/Character answer or Matching (8 questions) [Each question having .5 marks.]		
Assessment :	Offline		
To Measure :	To get knowledge of operating system fundamental and utilization of UNIX basic commands and filtering utilities.		
Outcome :	Understand UNIX architecture and get familiar with UNIX environment. (CO1) Work with UNIX utilities and to develop shell scripts. (CO2)		
Bonus / Penalty Criteria :	If students will get mark in quiz more than 60% marks then they will get 2 marks as bonus but not exceed 20.		

Assessment Code :	A2	Coverage of Content :	Unit 1,2 and 3
Assessment Type :	Unit Test 1	Tentative Date :	16 February 2015
Kind of Question Format :	As per single section of External paper format. Q.1 [A] – One word or definition type questions. [1 Marks for each] **[04]** Q.1 [B] – Short questions or Error/Output. [2 Marks for each] **[06]** Q.2 [A] & [B] Practical Question [5 Marks for each.] **[10]** Q.3 Long questions (attempt any 2 out of 3) [5 Marks for each.] **[10]**		
Assessment :	Handwritten		
To Measure :	Ability to develop shell script using UNIX commands and files handling program using system call.		
Outcome :	Understand UNIX architecture and get familiar with UNIX environment. (CO1) Work with UNIX utilities and to develop shell scripts. (CO2) Understand data structure, algorithms and system calls that provide the user interface to the file system. (CO3)		
Bonus / Penalty Criteria :	# Improvement Criteria		

Assessment Code :	A2	Coverage of Content :	Unit 4 & 5
Assessment Type :	Unit Test 2	Tentative Date :	4 th April 2015
Kind of Question Format :	As per single section of External paper format. Q.1 [A] – One word or definition type questions. [1 Marks for each] **[04]** Q.1 [B] – Short questions or Error/Output. [2 Marks for each] **[06]** Q.2 [A] & [B] Practical Question [5 Marks for each.] **[10]** Q.3 Long questions (attempt any 2 out of 3) [5 Marks for each.] **[10]**		
Assessment :	Handwritten		
To Measure :	Gets knowledge for concept of process management & memory management and to generate the skill that developing system programming for process management using system calls.		
Outcome :	Understand the context of process with system calls that manipulates and control process context. (CO4) Understand memory management, including swapping and paging system in UNIX operating system. (CO5)		
Bonus / Penalty Criteria :	# Improvement Criteria		

 # Improvement Criteria – Student will get 20% marks on total marks of Unit Tests as bonus if he/she is improving their performance in continues Unit Test as per following condition:
Suppose Unit Test-1 marks is X and Unit Test-2 marks is Y then

1) **X<Y.**
2) **Y>=15**
3) **Absent in any one Unit Test is not allowed.**

Assessment Code :	A3	Coverage of Content :	All Units
Assessment Type :	Presentation	Tentative Date :	Before First Week of March to First Week of April
Kind of Question Format :	**Presentation on System Call**		
Assessment :	Summative		
To Measure :	Presentation Skill, Knowledge, Analysis		
Outcome :	Understand data structure, algorithms and system calls that provides user interface to the file system. (CO3) Understand the context of process with system calls that manipulates and control process context. (CO4) Understand memory management, including swapping and paging system in UNIX operating system. (CO5) Study various Interprocess communication methods. (CO6)		
Bonus / Penalty Criteria :	Penalty: If student will miss submission date then they can submit within very next 2 days with penalty of 25% less marks. But after two days consider as 0 marks.		
Submission Time:	Tentative 20 days after given.		

OR

Assessment Code :	A3	Coverage of Content :	All Units
Assessment Type :	Developing UNIX Utility using System Call	Tentative Date :	Before First Week of March to First Week of April
Kind of Question Format :	Utility given by teacher		
Assessment :	Summative		
To Measure :	Capability of writing and developing utility with scope of existing utility.		
Outcome :	Understand UNIX architecture and get familiar with UNIX environment. (CO1) Work with UNIX utilities and to develop shell scripts. (CO2) Understand data structure, algorithms and system calls that provides user interface to the file system. (CO3) Understand the context of process with system calls that manipulates and control process context. (CO4) Understand memory management, including swapping and paging system in UNIX operating system. (CO5) Study various Interprocess communication methods. (CO6)		
Bonus / Penalty Criteria :	Penalty: If student will miss submission date then they can submit within very next 2 days with penalty of 25% less marks. But after two days consider as 0 marks.		
Submission Time:	Tentative 20 days after given.		

Assessment Code :	A4	Coverage of Content :	All Syllabus
Assessment Type :	Internal Exam	Tentative Date :	28 April 2015

Kind of Question Format :	As per external paper format		
Assessment :	Summative		
To Measure :	To get knowledge of UNIX internal with implementation of system calls.		
Outcome :	Understand UNIX architecture and get familiar with UNIX environment. (CO1)		
	Work with UNIX utilities and to develop shell scripts. (CO2)		
	Understand data structure, algorithms and system calls that provides user interface to the file system. (CO3)		
	Understand the context of process with system calls that manipulates and control process context. (CO4)		
	Understand memory management, including swapping and paging system in UNIX operating system. (CO5)		
	Study various Interprocess communication methods. (CO6)		
Bonus / Penalty Criteria :	NIL		

Assessment Code :	A5	Coverage of Content :	Unit 3 & 4
Assessment Type :	Practical Quiz	Tentative Date :	Last Week of March
Kind of Question Format :	Shell script & Command queries.		
Assessment :	On line		
To Measure :	Ability to develop system programming for file management with process handling in context of UNIX command.		
Outcome :	Understand data structure, algorithms and system calls that provides user interface to the file system. (CO3)		
	Understand the context of process with system calls that manipulates and control process context. (CO4)		
Bonus / Penalty Criteria :	NIL		

Assessment Code :	A6	Coverage of Content :	Unit 1,2 & 3
Assessment Type :	Practical Internal 1	Tentative Date :	Last Week of February
Kind of Question Format :	Shell script & System program using Files.		
Assessment :	On line		
To Measure :	To get the programming concept of shell, developing skill of script and system program using Operating system file concept.		
Outcome :	Understand UNIX architecture and get familiar with UNIX environment. (CO1)		
	Work with UNIX utilities and to develop shell scripts. (CO2)		
	Understand data structure, algorithms and system calls that provides user interface to the file system. (CO3)		
Bonus / Penalty Criteria :	NIL		

Assessment Code :	A6	Coverage of Content :	Unit 4,5 & 6
Assessment Type :	Practical Internal 2	Tentative Date :	13 or 18 April

Kind of Question Format :	Shell script and system program (based on IPC or process)
Assessment :	On line
To Measure :	To get the system programming concept of process and interprocess communication in UNIX.
Outcome :	Understand the context of process with system calls that manipulates and control process context. (CO4)
	Understand memory management, including swapping and paging system in UNIX operating system. (CO5)
	Study various Interprocess communication methods. (CO6)
Bonus / Penalty Criteria :	NIL

Month	First Week	2nd Week	3rd Week	Last Week
January			Allocated SCP	
February			Unit Test 1	Practical Internal - 1
March	Quiz – 1		Submission of SCP,	Practical Quiz
April	Unit Test 2		Internal Practical – 2	Internal Theory