		OGRAMMING	
(Effective fre	om the academ	OGRAMMING System (CBCS) scheme Dic year 2017 - 2018)	
	SEMESTER	HE VEST /HIT TOTAL	
Subject Code	17CS744		
Number of Lecture Hours/Week	3	IA Marks	40
Total Number of Lecture Hours	40	Exam Marks	60
	CREDITS -	Exam Hours	03
Module – 1	CREDITS -	- 03	
Introduction Invest	, ·		Teachin
Introduction: UNIX and ANSI Stand C++ Standards, Difference between The POSIX 1 FIRS Standards	lards: The ANS	II C Stand 1 5	Hours
C++ Standards, Difference between The POSIX A Plantage The Posix A Plant	ANSI C and	C++ The Poster a	/ISO 8 Hours
The POSIX 1 FIPS Standard, The X The POSIX APIs, The UNIX and	Open Standar	ds INIX and DOGRA	ards,
The POSIX APIs, The UNIX and Common Characteristics.  Module - 2	POSIX Deve	clopment Environment	APIs:
UNIX Files and ADI DU			
UNIX and POSIX File Types,	The UNIX and	d POSIX File System	TI
UNIX and POSIX File Attributes, Program Interface to Files, UNIX Ko Stream Pointers and File Descriptors, UNIX File Apper Company	Inodes in UN	IX System V Application	The 8 Hours
Stream Pointers and File Descriptors, UNIX File APIs: General File APIs, APIs, Device File APIs File APIs,	ernel Support f	for Files, Relationship of	tion
UNIX File APIs: General File API	Directory Files	Hard and Symbolic Lin	I C
	File and Reco	rd Locking, Directory B	iks.
UNIX Processes and Decomposition			
Introduction, main function, Process T Environment List, Memory Layout of a	The Environn	nent of a UNIX Process	: 8 Hours
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## Question paper pattern:

The question paper will have ten questions.

There will be 2 questions from each module.

Each question will have questions covering all the topics under a module.

The students will have to answer 5 full questions, selecting one full question from each module.

## Text Books:

1

1. Unix System Programming Using C++ - Terrence Chan, PHI, 1999.

2. Advanced Programming in the UNIX Environment - W.Richard Stevens, Stephen A. Rago, 3nd Edition, Pearson Education / PHI, 2005.

## Reference Books:

- Advanced Unix Programming- Marc J. Rochkind, 2nd Edition, Pearson Education, 2005.
- 2. The Design of the UNIX Operating System Maurice.J.Bach, Pearson Education / PHI, 1987.
- 3. Unix Internals Uresh Vahalia, Pearson Education, 2001.

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