

CSE 206B SYSTEM PROGRAMMING
B. Tech. Semester – IV (Computer Science and Engg.)

L T P Credits
4 - - 04

Sessional Marks: 25
Theory Marks:75
Duration of Exams: 3 Hours

Books :

Text Book:

1. Donovan J.J., Systems Programming, New York, Mc-Graw Hill, 1972.
2. Dhamdhare, D.M., Introduction to Systems Software, Tata Mc-Graw Hill, 1996.

Reference Book:

1. Aho A.V. and J.D. Ullman Principles of compiler Design Addison Wesley/ Narosa

LECTUREWISE PROGRAMME : (from 08.01.18 to 27.04.18)

Introduction of the subject (08.01.18)	1
UNIT- I	
(09.01.18 to 4.02.18)	
Evolution of Components Systems Programming	1
Assemblers, Loaders, Linkers	2
Macros, Compilers. Software tools	2
Text editors, Interpreters and program generators	2
Debug Monitors, Programming environment	2
UNIT-II	
(5.02.18 to 26.02.18)	
Assembler and Compilers: Description of single pass and two pass assemblers	3
Use of data structures like OPTAB and SYMTAB, etc.	2
Various phases of compiler lexical, syntax and semantic analysis, intermediate code generation, code optimization techniques, code generation	3
Case study : LEX and YACC	3
UNIT- III	
(27.02.18 to 27.03.18)	
Macroprocessors: Macro language and macro-processor	2
macro instructions, features of macro facility, macro instruction arguments	2
conditional macro expansion, macro calls with macro instruction defining macros	2
Linkers and Loaders: Concept of linking, different linking schemes, concept of loading and various loading schemes	4
UNIT – IV	
(28.03.18 to 27.04.18)	
Editors: Line editor, full screen editor and multi window editor,	2
Case study MS-Word, DOS Editor and vi editor.	4
Debuggers: Description of various debugging techniques.	3

Home Assignments: 4 –5 assignments are given during the semester.

Evaluation Procedure

1.	Surprise Quiz/ Tutorial Test	5 Marks
2.	Assignment / Project / Performance in the Class	5 Marks
3.	Minor Tests (Two tests having equal weightage) Minor Test I : 14-16 Feb, 2018 Minor Test II : 4 -6 April, 2018	15 Marks
4.	Major test (University Examination)	75 Marks

Award of Grades Based on Absolute Marks: The University is following the system of grading based on absolute marks (after applying moderation if any). Following grading will be done based on the % of marks obtained in all the components of evaluation part of the subject.

A+ (90% - 100 %), A (80% - 89%), B+ (70% - 79%), B (62% - 69%), C+ (55% - 61%), C (46% - 54%), D (40% - 45%), F (Less than 40 %)

For F grade, a candidate shall be required to appear in the major test of concerned course only in the subsequent examination(s) to obtain the requisite marks/grade.

Attendance Record – Candidate should attend at least 75% attendance of the total classes held of the subject

Chamber consultation hour: Any vacant period.

Note:

1. In the semester examination, the examiner will set 08 questions in all selecting two from each unit (1 & 2 from unit I, 3 & 4 from unit II, 5 & 6 from unit III and 7 & 8 from unit IV). The students will be required to attempt only 5 questions selecting at least one question from each unit. All questions will carry equal marks.
2. The use of scientific calculator will be allowed in the examination. However, programmable calculator and cellular phone will not be allowed.
3. The use of properties (water, air, steam etc) tables, heat transfer tables, charts is permitted

Neetu Verma