HINDU COLLEGE OF ENGINEERING, SONEPAT

LECTURE PLAN

SEMESTER/CLASS IT 6TH **SESSION** **JAN. - JUNE 2018**

SUBJECT: WEB TECHNOLOGIES **SUBJECT CODE** : IT-302-B

SESSIONAL MARKS: 25 **THEORY MARKS: 75** **DURATION OF EXAMS: 3 HOURS**

NAME OF TEACHER : Ms. SHALLU KHATTER **DEPARTMENT** : CSE/IT

OBJECTIVES OF CONCERNED SUBJECT:

Web technologies subject provides insight about the markup language like HTML, client side scripting like JavaScript, Server side scripting like ASP, JSP, Java Servlet and .Net .

OUTCOME OF CONCERNED SUBJECT:

Students will be able to design a website using HTML and JavaScript and learn about other various web technologies for website development.

Required No. of lecture	Lecture Dates	TOPICS	TEXT/REFERENCE BOOKS
1-2	8/1/2018-9/1/2018	Introduction to the Internet, The world wide web The idea of hypertext and hypermedia	1
3-4	11/1/2018-12/1/2018	How the web works-HTTP, HTML and URLs	1
5	15/1/2018	How the browser works-MIME types, plugins and helper applications	1
6-8	16/1/2018-19/3/2018	The standards-HTML, XML, XHTML and the W3C	1
9-11	23/1/2018-29/1/2018	Hypertext markup language: The anatomy of an HTML document; Marking up for structure and style: basic page markup, absolute and relative links, ordered and unordered lists	3
12-14	30/1/2018-2/2/2018	Embedding images and controlling appearance, table creation and use frames, nesting and targeting.	3
15-17	5/2/2018-8/2/2018	Descriptive markup: Meta tags for common tasks, semantic tags for aiding search, the doubling code and RDF.	3

18	12/2/2018	**REVISION—UNIT-1**	
19-21	13/2/2018-16/2/2018	Separating style from structure with style sheets: Internal style specifications within HTML External linked style specification using CSS, page and site design considerations	4
22-25	19/2/2018-27/2/2018	Client side programming: Introduction to the JavaScript syntax, the JavaScript object model, Event handling, Output in JavaScript	5
26-28	1/3/2018-13/32018	Forms handling, miscellaneous topics such as cookies, hidden fields, and images; Applications.	5
29	15/3/2018	**REVISION—UNIT-2**	
30-31	16/3/2018-19/3/2018	Server side programming: Introduction to Server Side Technologies CGI/ASP/JSP., Programming languages for server Side Scripting, Configuring the server to support CGI, applications	2
32-33	20/3/2018-26/3/2018	Input/ output operations on the WWW, Forms processing, (using PERL/VBSCRIPT/JavaScript)	2
34	27/3/2018	**REVISION—UNIT-3**	
35-37	29/3/2018-2/4/2018	Other dynamic content technologies: introduction to ASP & JSP, Delivering multimedia over web pages	2
39-40	3/4/2018-5/4/2018	The VRML idea, The Java phenomenon-applets and servlets, issues and web development	2
41	6/4/2018	Introduction to Microsoft .NET Technology and its comparison with the competing Technologies	2
42	8/4/2018	**REVISION—UNIT-4**	
		Revision for Final exam	

TEXT/REFERENCE BOOKS:

1. Beginning XHTML by Frank Boumpery, Cassandra Greer, Dave Raggett, Jenny Raggett, Sebastian Schnitzenbaumer& ted Wugofski, 2000, WROX press (Indian Shroff Publ. SPD) 1st edition.
2. Web Technologies by Achyut S Godbole, AtulKahate, 2003, T.M.H
3. HTML,XHTML,CSS AND XML by example Teodoru Gugolu
4. HTML & CSS: The Complete Reference, Fifth Edition Book by Thomas Powell
5. JavaScript 2.0-The Complete Reference,Second Edition. Thomas Powell. Fritz Schneider. McGraw-Hill/Osborne

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 : 06 – 09 March, 2018** **Minor Test II : 17 -20 April, 2018**	**15 Marks**
4.	**Major test (University Examination)**	**75 Marks**

Attendance Record – Candidate should attend at least75% 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.**

HINDU COLLEGE OF ENGINEERING, SONEPAT

LECTURE PLAN

SEMESTER/CLASS IT-6TH **SESSION** **JAN. - JUNE 2018**

SUBJECT : SOFTWARE TESTING

SUBJECT CODE : IT-304B
SESSIONAL MARKS: 25 **THEORY MARKS: 75** **DURATION OF EXAMS: 3 HOURS**

NAME OF TEACHER : Ms. Kiran **DEPARTMENT : Computer Science**

OBJECTIVES OF CONCERNED SUBJECT:

Software testing and its various techniques.

OUTCOME OF CONCERNED SUBJECT:

In depth knowledge about Software testing.

Lecture No.	Lecture Dates	TOPICS	TEXT/REFERENCE BOOKS
1-4	8/1/18-12/1/18	What is software testing and why it is so hard?, Error, Fault, Failure, Incident, Test Cases, Testing Process, Limitations of Testing,	A
5	13/1/18	Functional Testing	A
6	15/1/18	No absolute proof of correctness, Overview of Graph Theory.	A
7-8	16/1/18-17/1/18	Boundary Value Analysis, Equivalence Class Testing, Decision Table Based Testing, Cause Effect Graphing Technique	A
9-11	18/1/18-23/1/18	Structural Testing: Path testing, DD-Paths, Cyclomatic Complexity, Graph Metrics,	A
12-13	24/1/18-25/1/18	Testing Activities: Unit Testing, Levels of Testing	A
14	29/1/18	Data Flow Testing, Mutation tests .	A
15-20	30/1/18-3/2/18	Integration Testing, System Testing, Debugging, Domain Testing	B
21-24	5/2/18-8/2/18	Reducing the number of test cases: Prioritization guidelines, Priority category, Scheme, Risk Analysis,	B
25-27	12/2/18-16/2/18	Regression Testing, and Slice based testing	B
28-30	19/2/18-21/2/18	Object Oriented Testing: Issues in Object Oriented Testing, Class Testing, GUI Testing.	B

		.	
31-32	26/2/18-27/2/18	Object Oriented Integration and System Testing	A
33	14/3/18	Testing Tools: Static Testing Tools, Dynamic Testing Tools, and Characteristics of Modern Tools and Implementation with example.	A
34-35	15/3/18-16/3/18	Advanced topics in software testing: web based testing, Client server testing.	B
36-40	16/3/18	Automated test cases generation, Regular expression.	B
41	26/3/18	FSM based testing.	B

TEXT/REFERENCE BOOKS:

A. K.K. Aggarwal & Yogesh Singh, Software Engineering , New Age International Publishers, New Delhi, 2003

B. Boris Beizer, Black-Box Testing – Techniques for Functional Testing of Software and Systems , John Wiley & Sons Inc., New York, 1995.

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 : 06 – 09 March, 2018** **Minor Test II : 17 -20 April, 2018**	**15 Marks**
4.	**Major test (University Examination)**	**75 Marks**

Attendance Record – Candidate should attend at least75% attendance of the total classes held of the subject

Chamber consultation hour: Any vacant period.

Note:

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HINDU COLLEGE OF ENGINEERING, SONEPAT

LECTURE PLAN

SEMESTER/CLASS IT 6TH **SESSION** **JAN. - JUNE 2018**

SUBJECT: PRINCIPLES OF PROGRAMMING LANGUAGES **SUBJECT CODE** : IT-308B

SESSIONAL MARKS: 25 **THEORY MARKS: 75** **DURATION OF EXAMS: 3 HOURS**

NAME OF TEACHER : Mr. ASHU BANSAL **DEPARTMENT** : CSE/IT

OBJECTIVES OF CONCERNED SUBJECT: To Teach Students about common features of any Programming Languages like Type Checking and Conversion, Different Data Types, Data Structures, Sequence Control, Subprograms, Functions, Memory Management, Information Hiding and Parameter Transmission Schemes. To study Different types of languages like Procedural Languages, Structural Languages, Object Oriented Languages etc.

OUTCOME OF CONCERNED SUBJECT: Students will able to understand what are the different constructs available in programming languages, which are the important features of a good programming language. It will helpful for them to understand the basic of any Programming Language they want to study.

Lecture No.	Lecture Dates	TOPICS	TEXT/REFERENCE BOOKS
1	08/01/2018	Syntactic and semantic rules of a Programming language	A
2	11/01/2018	Characteristics of a good programming language	A
3	12/01/2018	Programming language translators compiler & interpreters	A
4	15/01/2018	Virtual Computers & Binding times;	A
5-6	18/01/2018, 19/01/2018	Introduction to procedural, Non-procedural, Structured, functional and object oriented programming language, Comparison of C & C++ programming languages.	A,B,C
7-8	25/01/2018, 29/01/2018	Elementary data types – data objects, variable & constants	A
9-11	01/02/2018, 02/01/2018, 05/02/2018	Data types, Specification & implementation of elementary data types	A
12-13	08/02/2018, 09/02/2018	Declarations ,type checking & type conversions , Assignment & initialization	A
14	12/02/2018	Numeric data types, enumerations, Booleans & characters	A,B
15-16	15/02/2018, 16/02/2018	Specification & implementation of structured data types, Declaration & type checking of data	A,B

		structure	
17-18	19/02/2018, 26/02/2018	Vector & arrays, records Character strings, variable size data structures	A,B
19-20	01/03/2018, 05/03/2018	Union, pointer & programmer defined data objects, sets, Files.	A
21-22	12/03/2018, 15/03/208	Implicit & explicit sequence control ,sequence control within expressions, sequence control within statement,	A
23-24	16/03/2018, 19/03/2018	Subprogram sequence control: simple call return ,recursive subprograms, Exception & exception handlers, co routines, sequence control	A,B
25	26/03/2018	Names & referencing environment	A,C
26	30/03/2018	Static & dynamic scope, block structure, Local data & local referencing environment	A,C
27	02/04/2018	Shared data (dynamic & static scope); Parameters& parameter transmission schemes.	A,B
28-29	05/04/2018, 06/04/2018	Major run time elements requiring storage ,programmer and system controlled storage management & phases	A,B
30	09/04/2018	Static storage management , Stack based storage management	A,B
31	10/04/2018	Heap storage management , variable & fixed size elements.	A
32	13/04/2018	Evolution of data type concept, abstraction, encapsulation & information hiding	A
33	16/04/2018	Subprograms ,type definitions, abstract data types	A,B

TEXT/REFERENCE BOOKS:

A. Programming languages Design & implementation by T.W. .Pratt, 1996, Prentice Hall Pub.

B. Programming Languages – Principles and Paradigms by Allen Tucker & Robert Noonan, 2002, TMH

C. Programming languages concepts by C. Ghezzi, 1989, Wiley Publications.

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)**	**15 Marks**

	Minor Test I : 06 – 09 March, 2018 **Minor Test II : 17 -20 April, 2018**	
4.	**Major test (University Examination)**	**75 Marks**

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HINDU COLLEGE OF ENGINEERING, SONEPAT

LECTURE PLAN

SEMESTER/CLASS 6th /IT **SESSION** **JAN. - JUNE 2018**

SUBJECT: Parallel Computing **SUBJECT CODE** : IT-310 B

SESSIONAL MARKS: 25 **THEORY MARKS: 75** **DURATION OF EXAMS: 3 HOURS**

NAME OF TEACHER : Sonia Juneja Department : CSE/IT Deptt..

OBJECTIVES OF CONCERNED SUBJECT:

To develop the basic understanding of parallel computing environment

OUTCOME OF CONCERNED SUBJECT: The students have learned the different aspects of Parallel Computing

Lecture No.	Lecture Dates	TOPICS	TEXT/REFERENCE BOOKS
1	08.01.2018	Parallel Computing: Introduction	Parallel Computing By M.R. Bhujade
2	09.01.2018	Performance of Parallel Architectures	Parallel Computing By M.R. Bhujade
3	10.01.2018	Architectural Classification Schemes	Parallel Computing By M.R. Bhujade
4	12.01.2018	Parallel Computers	Parallel Computing By M.R. Bhujade
5	15.01.2018	Performance Metrics For Processors	Parallel Computing By M.R. Bhujade
6	16.01.2018	Parallel Programming Models	Parallel Computing By M.R. Bhujade
7	17.01.2018	Parallel Algorithms	Parallel Computing By M.R. Bhujade
8	19.01.2018	Distributed Processing	Parallel Computing By M.R. Bhujade
9	23.01.2018	Pipeline Processing : Pipeline Performance	Parallel Computing By M.R. Bhujade
10	24.01.2018	Pipeline Processing : Pipeline Performance	Parallel Computing By M.R. Bhujade
11	29.01.2018	Arithmetic Pipelines	Parallel Computing By M.R. Bhujade
12	30.01.2018	Pipelined Instruction Processing	Parallel Computing By M.R. Bhujade
13	31.01.2018	Pipelined Instruction Processing	Parallel Computing By M.R. Bhujade
14	2.02.2018	Pipeline Stage Design	Parallel Computing By M.R. Bhujade
15	5.02.2018	Hazards	Parallel Computing By M.R. Bhujade

16	6.02.2018	Dynamic Instruction Scheduling	Parallel Computing By M.R. Bhujade
17	7.02.2018	Dynamic Instruction Scheduling	Parallel Computing By M.R. Bhujade
18	9.02.2018	Memory System Used in Pipelined Processors	Parallel Computing By M.R. Bhujade
19	13.02.2018	Memory System Used in Pipelined Processors	Parallel Computing By M.R. Bhujade
20	16.02.2018	Pipeline Scheduling Theory	Parallel Computing By M.R. Bhujade
21	19.02.2018	Pipeline Scheduling Theory	Parallel Computing By M.R. Bhujade
22	20.02.2018	High Performance Processor Designs	Parallel Computing By M.R. Bhujade
23	26.02.2018	High Performance Processor Designs	Parallel Computing By M.R. Bhujade
24	27.02.2018	Branch prediction	Parallel Computing By M.R. Bhujade
25	28.02.2018	Branch prediction	Parallel Computing By M.R. Bhujade
26	2.03.2018	Revision class for minor –I	Parallel Computing By M.R. Bhujade
28	5.03.2018	Revision class for minor –I	Parallel Computing By M.R. Bhujade
29	12.03.2018	Synchronous Parallel Processing : Example-SIMD Architecture and Programming Principles	Parallel Computing By M.R. Bhujade
30	13.03.2018	Example-SIMD Architecture and Programming Principles	Parallel Computing By M.R. Bhujade
31	14.03.2018	SIMD Parallel Algorithms	Parallel Computing By M.R. Bhujade
32	16.03.2018	SIMD Parallel Algorithms	Parallel Computing By M.R. Bhujade
33	19.03.2018	Data Mapping and Memory in Array Processors	Parallel Computing By M.R. Bhujade
34	26.03.2018	Data Mapping and Memory in Array Processors	Parallel Computing By M.R. Bhujade
35	27.03.2018	Case Studies of SIMD Parallel Processors	Parallel Computing By M.R. Bhujade
36	28.03.2018	Case Studies of SIMD Parallel Processors	Parallel Computing By M.R. Bhujade
37	30.03.2018	Interconnection Networks : Introduction to Permutations	Advanced Computer Architecture by Kai Hwang
38	2.04.2018	Introduction to Permutations	Advanced Computer Architecture by Kai Hwang
39	3.04.2018	Elementary Permutations used in Interconnection Networks	Advanced Computer Architecture by Kai Hwang

40	4.04.2018	Elementary Permutations used in Interconnection Networks	Advanced Computer Architecture by Kai Hwang
41	6.04.2018	Network Classifications	Advanced Computer Architecture by Kai Hwang
42	9.04.2018	Network Classifications	Advanced Computer Architecture by Kai Hwang
43	10.04.2018	Complete(Nonblocking) Networks: Cross Bars and other Commonly Used Interconnection Networks	Advanced Computer Architecture by Kai Hwang
44	11.04.2018	Complete(Nonblocking) Networks: Cross Bars and other Commonly Used Interconnection Networks	Advanced Computer Architecture by Kai Hwang
45	13.04.2018	Complete(Nonblocking) Networks: Cross Bars and other Commonly Used Interconnection Networks	Advanced Computer Architecture by Kai Hwang

TEXT/REFERENCE BOOKS:

1. Parallel Computing By M.R. Bhujade, 2nd Edition 2009 , New Age International Publishers.
2. Computer Architecture : Pipelined and Parallel Processor Design, By M.J.Flynn
3. Advanced Computer Architecture by Kai Hwang

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