

Atal Bihari Vajpai-
Indian Institute of Information Technology and Management
Morena Link Road-Gwalior-474 010

IPG-IV Semester (Jan-15-Apr-15)

Course: System Analysis and Design

Faculty-in-Charge: Dr. Anurag Srivastava

Syllabus

Concepts and Information System Environment: System definition, characteristics of a system, organization, interaction, interdependence, integration, elements of a system, outputs and inputs, processors, control, feedback, boundaries and interface, types of system.

SDLC and System analyst: SDLC models, Role of the Systems Analyst, Organizational Style and its Impact on Information Systems, Feasibility and Managing Analysis and Design Activities.

Information Requirements Analysis: Sampling and Investigating Hard Data, Interviewing using Questionnaires, Decision-Maker Behavior and Office Environment, Prototyping.

Analysis Process: Data Flow Diagrams, Data Dictionaries, Process Specifications and Structured Decisions, Semi structured Decision Support Systems, Systems Proposal.

Essentials of Design and Automated Tools: Designing Effective Input and Output, File or Database, User Interface, Data-Entry Procedures, CASE definitions, Types of CASE tools, Benefits and Limitations of CASE tools, CASE support in SDLC, Software Maintenance.

Reference Books:

1. **System Analysis and Design in a Changing World**
MIS Series John W. Satzinger, Robert B. Jackson, and Stephen D. Burd.
2. **Systems Analysis and Design, Sixth Edition**
Gary B. Shelly, Thomas J. Cashman, and Harry J. Rosenblatt (Paperback - Mar 16, 2005)
3. **Systems Analysis and Design**
Alan Dennis, Barbara Haley Wixom, and Roberta M. Roth (Hardcover - Oct 14, 2005)
4. **Systems Analysis and Design (6th Edition)**
Kenneth E. Kendall and Julie E. Kendall (Hardcover - Mar 1, 2004)

Evaluation:

Component	Duration	Weightage (%)
Minor Test 1	One Hour	20
Minor Test 2	One Hour	20
Assignment / Seminar / Project + Class Performance		15+5
Major Test	Two Hour	40
	Total	100

Notices: Course notices, if any, will be displayed on the Institute Notice Boards only.