**Lesson Plan**

Name of the Faculty : Miss. Deepika

Discipline : Computer Engg.

Semester : 3rd

Subject : MULTIMEDIA APPLICATIONS

Lesson Plan : 15 Weeks (From July-November 2018)

Workload (Theory/Practical) per week (in hours): Theory-03, Practicals-06

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Week | Theory | | Practical | | |
| Lecture Day | Topic(Including assignment/test) | Practical Day | | Topic  (3 Hours Lab) |
| 1st | 1st | **Unit-I(Introduction to Multimedia Systems**) |  | |  |
| Introduction to Multimedia Systems, Concept of Multimedia, History of Multimedia. | 1st | | Installation of various multimedia software like Photoshop, Flash, Director or any open source software . |
| 2nd | Multimedia hardware and software-various classes, components. |
| 3rd | Quality criteria and specifications of different capturing devices. |
| 2nd | 4th | Communication devices, Storage devices, Display devices. | 2nd | | Installing and use of various multimedia devices   * Scanner * Digital camera, web camera * Mike and speakers |
| 5th | Elements of Multimedia and different multimedia file formats. |
| 6th | Applications of multimedia – benefits and problems. |
| 3rd | 7th | Revise Unit-I | 3rd | | Installing and use of various multimedia devices   * Touch screen * Plotter and printers * DVD * Audio CD and Video CD |
| 8th | **Unit-II(Content and Project Planning, Designing and development)** |
| Planning steps and process, Concept of data compression. |
| 9th | Text encoding, Audio encoding techniques. |
| 4th | 10th | Types of images, Capturing images using camera/scanner, coding techniques for Moving Images. | 4th | | Reading and writing of different format on CD/DVD |
| 11th | Editing , Editing of images audio, text, video and graphics, navigation and user interface designing. |
| 12th | Use of various codes like bar code, QR code in multimedia applications. |
| 5th | 13th | Revise Unit-II | 5th | | Transporting audio and video files. |
| 14th | Test of Unit-II |
| 15th | **Unit-III(Using Image Processing Tools)** |
| Photo-shop workshop. |
| 6th | 16th | Image editing tools. | 6th | | Using various features of Flash. |
| 17th | Specifying and adjusting colors. |
| 18th | Using gradient tools. |
| 7th | 19th | Selection and move tools. | 7th | | Using various features of Photo-shop/GIMP. |
| 20th | Transforming path drawing and editing tools. |
| 21th | Using channels, layers. |
| 8th | 22th | filters and actions | 8th | | Making multimedia presentations combining, Flash, Photo-shop, such as department profile, lesson presentation, games and project presentations. |
| 23th | Revise Unit-III |
| 24th | Test of Unit-III |
| 9th | 25th | **Unit-IV(Multimedia Authoring Tools)** | 9th | Generation and recognition of bar code & QR code using pre built application/mobile applications. | |
| Types of Authoring programmes – Icon based, Time based |
| 26th | Story boarding/scripting and object oriented working in macromedia flash. |
| 27th | Exploring interface using selection of PEN tools. |
| 10th | 28th | Working with drawing and painting tools. | 10th | Revise Practical No. 1,2,3 | |
| 29th | Applying colour viewing and manipulating time line. |
| 30th | Animating, processing, guiding layers |
| 11th | 31th | Importing and editing sound in Flash | 11th | Revise Practical No. 4,5,6 | |
| 32th | Importing and editing sound in Flash video clips in flash |
| 33th | Revise Unit-IV |
| 12th | 34th | Test of Unit-IV | 12th | Revise Practical No. 7,8 | |
| 35th | Revise Whole syllabus(Briefly) |
| 36th | Test of whole Syllabus |
| 13th | 37th | **Three Weeks Of Sessional Test** | 13th | **Three Weeks Of Sessional Test** | |
| 38th |
| 39th |
| 14th | 40th | 14th |
| 41th |
| 42th |
| 15th | 43th | 15th |
| 44th |
| 45th |

**Lesson Plan**

Name of the Faculty : Miss. Deepika

Discipline : Computer Engg.

Semester : 5th

Subject : VISUAL BASIC

Lesson Plan : 15 Weeks (From July-November 2018)

Workload (Theory/Practical) per week (in hours): Theory-03, Practicals-06

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Week | Theory | | Practical | | |
| Lecture Day | Topic(Including assignment/test) | Practical Day | | Topic  (3 Hours Lab) |
| 1st | 1st | **Unit-I(Introduction to Visual Basic)** |  | |  |
| Introduction to Visual Basic. | 1st | | Exercise on opening projects like standard Exe, Active-X EXE and Active-X control. |
| 2nd | Features and applications of VB. |
| 3rd | Concept of integrated development environment (IDE). |
| 2nd | 4th | Components of IDE | 2nd | | Exercise on all the menus of opening window of VB. |
| 5th | Project application like standard Exe |
| 6th | Active X controls. |
| 3rd | 7th | Advantages of VB. | 3rd | | Exercise on all basic controls. |
| 8th | Various tools used in VB. |
| 9th | Types of projects in VB. |
| 4th | 10th | Concept of event driven programming. | 4th | | Exercise on design form like calculators, traffic lights. |
| 11th | Revise Unit-I |
| 12th | Test of Unit-I |
| 5th | 13th | **Unit-II(VB Structure)** | 5th | | Exercise on small application using appropriate commands. |
| Variable declaration types. |
| 14th | User defined data types – scope and life of a variable. |
| 15th | Arrays, constructors, control flow statements, Procedures and functions. |
| 6th | 16th | Revise Unit-II | 6th | | Exercise on menus. |
| 17th | Test of Unit-II |
| 18th | **Unit-III(Designing the User Interface)** |
| Design aspects of VB forms. |
| 7th | 19th | Elements of user Interface. | 7th | | Writing programs using arrays. |
| 20th | Properties of controls – textbox, label, command button |
| 21th | Properties of controls – check box, list box, picture, image shape timer. |
| 8th | 22th | Designing forms and displaying messages using above controls, control arrays. | 8th | | Exercise on creating reports. |
| 23th | Revise Unit-III |
| 24th | Test of Unit-III |
| 9th | 25th | **Unit-IV(Menus and Common Dialogue Control)** | 9th | Exercise on Data base connectivity. | |
| Creating menus at design time using menu design window. |
| 26th | Control menus and runtime. |
| 27th | Create shortest keys for popup menus |
| 10th | 28th | Common dialogue control. | 10th | Exercise on creating own active X, component. | |
| 29th | Revise Unit-IV |
| 30th | Test of Unit-IV |
| 11th | 31th | **Unit-V(Display date, time, string type conversion and Printing Information)** | 11th | Revise Practical 1,2 | |
| Display date, time, string type conversion |
| 32th | Data reports and environments. |
| 33th | Display tabular data in report form. |
| 12th | 34th | Fundamentals of printing. | 12th | Revise Practical no.3,4 | |
| 35th | Printing with print form method. |
| 36th | Revise Unit-V |
| 13th | 37th | Test of Unit-V | 13th | Revise practical no 5,6 | |
| 38th | **Unit-VI(Data Base Programming)** |
| Connecting with database, using DAO |
| 39th | Connecting with database, using RDO |
| 14th | 40th | Connecting with database, using ADO | 14th | Revise practical no.7,8 | |
| 41th | Revise Unit-VI |
| 42th | **Unit VII(Working with inbuilt controls)** |
| Working with inbuilt Active X, Windows common control. |
| 15th | 43th | creating own Active X through Active X control, Active X EXE. | 15th | Revise practical no.9,10 | |
| 44th | Difference between EXE and DLL. |
| 45th | Test of Unit-VI,VII |