MEDIA (CODE NO. 821)

JOB ROLE: ANIMATOR

(QUALIFICATION PACK: Ref Id. MES/Q0701)
SESSION 2019-2020
CLASS XI

1. Introduction

An Animator is an artist who creates multiple images, which when displayed in rapid sequence give an illusion of movement called animation. An Animator needs to refer to the concept of artwork prepared by animation artists to produce a sequence of 2D or 3D images by producing multiple images called frames, which when sequenced together rapidly create an illusion of movement. The images can be made up of digital or hand-drawn pictures, models or puppets. An Animator has the responsibilities of developing animation as per client requirement and work with editors to composite the various layers of animation.

2. Course Objectives

- 1. Apply effective oral and written communication skills to interact with people and customers;
- 2. Identify the principal components of a computer system;
- 3. Demonstrate the basic skills of using computer;
- 4. Demonstrate self-management skills;
- 5. Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities;
- 6. Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection;
- 7. Demonstrate the knowledge of uses and applications of Animation;
- 8. Demonstrate the knowledge of principles of Animation
- 9. Demonstrate the knowledge of basics compositing
- 10. Demonstrate the knowledge of various features of 2D Animation
- 11. Demonstrate the knowledge of the concept of 3D production pipeline
- 12. Demonstrate the concept of bouncing balls and various other steps of animation
- 13. Demonstrate the knowledge of project setting and animation rendering

3. Curriculum

This course is a planned sequence of instructions consisting of Units meant for developing employability and Skills competencies of students of Class XI opting for Skills subject along with general education subjects.

Theory	60 marks
Practical	40 marks
Total Marks	100 marks

CLASS XI (SESSION 2019-2020)				
	Units	No. of Periods for Theory and Practical 260		Max. Marks for Theory and Practical 100
Part A	Employability Skills			
	Unit 1: Communication Skills – III	1	0	
	Unit 2: Self-management Skills – III	1	0	
	Unit 3: Information and	10		10
	Communication Technology Skills – III			
	Unit 4: Entrepreneurial Skills – III	15		
	Unit 5: Green Skills – III	05		
	Total	50		
Part B	Skills	Theory	Practical	
	Unit 1: Introduction to Animation	20	20	
	Unit 2: Principles of Animation	20	20	50
	Unit 3: Introduction to 2D Animation	60	70	
	Total	100	110	60
Part C	Practical Work			
	Practical Examination			15
	Written Test			10
	Viva Voce			05
	Total			30
Part D	Project Work/Field Visit			
	Practical File/Student Portfolio			10
	Total			10
	Grand Total			100

4. CONTENTS

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PART A: EMPLOYABILITY SKILLS

	Units		
1.	Communication Skills -III		
2.	Self-management Skills- III		
3.	Information and Communication Technology Skills- III		
4.	Entrepreneurial Skills -III		
5.	Green Skills -III		
	Detailed curriculum of Employability Skills is available separately		

PART B: SKILLS

	Units
1.	Introduction to Animation
2.	Principles of Animation
3.	Introduction to 2D Animation

UN	UNIT 1: INTRODUCTION TO ANIMATION				
Learning Outcome		Theory	Practical		
Describe the history of animation		Evolution of animation, with examples History of animation	 Visit to a Studio to understand the animation industry and its evolution Demonstration of the use of animation 		
2.	Identify various traditional methods of animation	1. Various traditional methods of animation (e.g. hand drawn animation)	 Identification of traditional methods of animation Demonstrate the knowledge of hand drawn animation and Claymation (animation using clay) 		
3.	Identify modern methods of Animation – e.g. Stop Motion Animation	 Methods of animation modern animation and traditional animation Meaning of Stop Motion Animation 	 Differentiation of modern animation and traditional animation Demonstration of the procedure adopted for Stop Motion Animation 		
4.	Identify the various elements involved process of computer Animation (2D and 3D Animation)	 Concepts of computer animation Advantages of computer animation (2D Animation using Adobe Flash and for 3D Animation using Autodesk MAYA) over traditional animation methods 	 Differentiation of 2D and 3D animation Demonstration of Digital animation approaches (frame by frame, shape and motion tweening) Identification of pivot point locations of nodes, groups and other 3D animation 		
5.	Demonstrate the knowledge of production pipeline	1. Concept of production pipeline	Demonstration of steps involved in the animation production pipeline		
	6. Describe the process of preproductio n and story-boarding	Concepts of pre- production and story-boarding activities	 Explanation of preproduction activities Development of a short storyboard 		

Learning Outcome	Theory	Practical
1. Identify the principles of animation	1. Twelve principles on which animation is established:	 Demonstration of the twelve basic principles of animation Enlisting the advantages and limitations of different animation techniques Demonstration of the uses of a combination of these 2,3 or 4 principles to get the necessary feel and action in a shot and scene

UNIT 3: INTRODUCTION TO 2D ANIMATION				
Learning Outcome	Theory	Practical		
1. Demonstration the concept of 2D Animation using Adobe Flash	1. Basics of 2D animation 2. Concept of production, preproduction and post-production	 Demonstration of making of storyboard image Demonstration of the phases pre-production, production and post-production 		
2. Demonstration different types of 2D Animation using Adobe Flash	 Path animation and stop-motion animation Frame composition Camera blocking Situation using different frame composition: MS-Mid Shot; Cu- Close Up Shot; ECu-Extreme Close Up Shot; WS- Wide Shot; 	 Demonstration of the process of different 2D animation Demonstration of the details on functionality Explain the situation of using each of the frame composition (MS, Cu, ECu, WS, EWS, WEV, BEV, DA) Explain the reason of camera blocking and animation timing 		

UNIT 3: INTRODUCTION TO 2D ANIMATION				
Learning Outcome	Theory	Practical		
	Angle Shot; WEV-			
	Worm Eye View; BEV			
	– Birds Eye View			
3. Describe the basic	1. Work cycle of 2D	1.	Differentiation of between 2D	
process of 2D	animation		and 3D animation	
animation using	2. The process of	2.	Demonstration of creating a	
Adobe Flash	creating a torsion		torsion	
4. Demonstrate	1. Process of	1.	Demonstration of creation of	
the application of	limited animation or		flash cartoon	
Adobe Flash	cut out animation			
Animation	2. Email as a mode of			
	capturing			
	conversations			
	3. Meetings as a mode			
	of capturing			
	conversations			

5. TEACHING ACTIVITIES

The teaching and training activities have to be conducted in classroom, laboratory/ workshops and field visits. Students should be taken to field visits for interaction with experts and to expose them to the various tools, equipment, materials, procedures and operations in the workplace. Special emphasis should be laid on the occupational safety, health and hygiene during the training and field visits.

CLASSROOM ACTIVITIES

Classroom activities are an integral part of this course and interactive lecture sessions, followed by discussions should be conducted by trained teachers. Teachers should make effective use of a variety of instructional or teaching aids, such as audio-video materials, colour slides, charts, diagrams, models, exhibits, hand-outs, online teaching materials, etc. to transmit knowledge and impart training to the students.

PRACTICAL WORK IN LABORATORY/WORKSHOP

Practical work may include but not limited to hands-on-training, simulated training, role play, case based studies, exercises, etc. Equipment and supplies should be provided to enhance hands-on learning experience of students. Only trained personnel should teach specialized techniques. A training plan that reflects tools, equipment, materials, skills and activities to be performed by the students should be submitted by the teacher to the Head of the Institution

6. ORGANISATION OF FIELD VISITS/EDUCATIONAL TOURS

In field visits, children will go outside the classroom to obtain specific information from experts or to make observations of the activities. A checklist of observations to be made by the students during the field visits should be developed by the teachers for systematic collection of information by the students on the various aspects. Principals and Teachers should identify the different opportunities for field visits within a short distance from the school and make necessary arrangements for the visits. At least three field visits should be conducted in a year.

7. LIST OF EQUIPMENT AND MATERIAL

The list given below is suggestive and an exhaustive list should be prepared by the teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

- 1. 3-Hole Punched Paper
- 2. Adobe After Effects
- 3. Adobe Flash
- 4. Adobe Photoshop
- 5. Adobe Premiere Pro
- 6. Art Gum Eraser
- 7. Autodesk Maya
- 8. Brushes
- 9. Computer System
- 10. Demonstration Charts
- 11. Digital Camera

- 12. Drawing Pencil Sets
- 13. Drawing sheets
- 14. Flipbook
- 15. Internet Connection
- 16. Marker/Chalk
- 17. Non-Photo Blue Pencils
- 18. Paints
- 19. Printer
- 20. Scanner
- 21. Watercolors, Markers, and Pastels
- 22. Whiteboard