# CBSE | DEPARTMENT OF SKILL EDUCATION CURRICULUM FOR SESSION 2021-2022

### **MULTI-MEDIA (Sub. Code 821)**

JOB ROLE: ANIMATOR 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 & XII opting for Skills subject along with general education subjects.

Theory	50 marks
Practical	50 marks
Total Marks	100 marks

The unit-wise distribution of Periods and marks for Class XI & XII is given on the next page.

## **CBSE | DEPARTMENT OF SKILL EDUCATION**

### MULTI-MEDIA (Sub. Code 821)

**CLASS – XI (SESSION 2021-2022)** 

Total Marks: 100 (Theory-50 + Practical-50)

	TERM	UNITS	for The	HOURS ory and ctical	MAX. MARKS for Theory and Practical
	Employability Skills				
		Unit 1: Communication Skills-III	-	10	
4	Term I	Unit 2: Self-management Skills- III		10	05
Part A		Unit 3: ICT Skills- III	10		
à	Unit 4: Entrepreneurial Skills- III		15		
	Term II	Unit 5: Green Skills- III	05		05
		Total	50		10
	Subject Specific Skill		Theory	Practical	
В		Unit 1: Introduction to Animation	20	20	20
Part B	Term I	Unit 2: Principles of Animation	20	20	
ä	Term II	Unit 3: Introduction to 2D Animation	60	70	20
		Total	100	110	40
	Practical Work				
J	Practical Examination				15
Part C	Written Test				10
à	Viva Voce				10
		Total			35
tD	Project W Portfolio	/ork/Field Visit/ Practical File/Student			10
Part D	Viva Voce				05
		Total			15
		GRAND TOTAL	2	60	100

#### **4. CONTENTS**

#### DETAILED CURRICULUM/TOPICS FOR CLASS XI

#### Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-III	10
2.	Unit 2: Self-management Skills-III	10
3.	Unit 3: Information and Communication Technology Skills-III	10
4.	Unit 4: Entrepreneurial Skills-III	15
5.	Unit 5: Green Skills-III	05
	TOTAL DURATION	50

## **NOTE:** Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

#### Part-B – SUBJECT SPECIFIC SKILLS

- Introduction to Animation
- Principles of Animation
- Introduction to 2D Animation

UNIT 1: INTRODUCTION TO ANIMATION			
Learning Outcome	Theory	Practical	
1. Describe the history of animation	<ol> <li>Evolution of animation, with examples</li> <li>History of animation</li> </ol>	<ol> <li>Visit to a Studio to understand the animation industry and its evolution</li> <li>Demonstration of the use of animation</li> </ol>	
2. Identify various traditional methods of animation	<ol> <li>Various traditional methods of animation (e.g. hand drawn animation)</li> </ol>	<ol> <li>Identification of traditional methods of animation</li> <li>Demonstrate the knowledge of hand drawn animation and Claymation (animation using clay)</li> </ol>	
<ol> <li>Identify modern methods of Animation         <ul> <li>e.g. Stop Motion</li> <li>Animation</li> </ul> </li> </ol>	<ol> <li>Methods of animation         <ul> <li>modern animation and traditional animation</li> <li>Meaning of Stop Motion Animation</li> </ul> </li> </ol>	<ol> <li>Differentiation of modern animation and traditional animation</li> <li>Demonstration of the procedure adopted for Stop Motion Animation</li> </ol>	
4. Identify the various elements involved process of computer Animation (2D and 3D Animation)	<ol> <li>Concepts of computer animation</li> <li>Advantages of computer animation (2D Animation using Adobe Flash and for 3D Animation using Autodesk MAYA) over traditional animation methods</li> </ol>	<ol> <li>Differentiation of 2D and 3D animation</li> <li>Demonstration of Digital animation approaches (frame by frame, shape and motion tweening)</li> <li>Identification of pivot point locations of nodes, groups and other 3D animation</li> </ol>	

5. Demonstrate the knowledge of production pipeline	<ol> <li>Concept of production pipeline</li> </ol>	1. Demonstration of steps involved in the animation production pipeline
6. Describe the process of preproduction and story-boarding	<ol> <li>Concepts of pre- production and story- boarding activities</li> </ol>	<ol> <li>Explanation of preproduction activities</li> <li>Development of a short storyboard</li> </ol>

UNIT 2: PRINCIPLES OF ANIMATION		
Learning Outcome	Theory	Practical
<ol> <li>Identify the principles of animation</li> </ol>	<ol> <li>Twelve principles on which animation is established:         <ul> <li>Squash and Stretch</li> <li>Exaggeration</li> <li>Anticipation</li> <li>Ease in and Out</li> <li>Arcs</li> <li>Overlapping Action and Follow- through</li> <li>Pose to Pose and Straight-Ahead Animation</li> <li>Reference and Planning</li> <li>Timing</li> <li>Staging</li> <li>Appeal</li> <li>Personality</li> </ul> </li> <li>Application of each of the above mentioned principles</li> </ol>	<ol> <li>Demonstration of the twelve basic principles of animation</li> <li>Enlisting the advantages and limitations of different animation techniques</li> <li>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</li> </ol>

Learning Outcome		Theory	Practical		
1.	Demonstration the concept of 2D Animation using Adobe Flash	<ol> <li>Basics of 2D animation</li> <li>Concept of production, preproduction and post-production</li> </ol>	<ol> <li>Demonstration of making of storyboard image</li> <li>Demonstration of the phases pre-production, production and post-production</li> </ol>		
2.	Demonstration different types of 2D Animation using Adobe Flash	<ol> <li>Path animation and stop- motion animation</li> <li>Frame composition</li> <li>Camera blocking</li> <li>Situation using different frame composition: MS- Mid Shot; Cu- Close Up Shot; ECu- Extreme Close Up Shot; WS- Wide Shot; EWS- Extreme Wise Angle Shot; WEV- Worm Eye View; BEV – Birds Eye View</li> </ol>	<ol> <li>Demonstration of the process of different 2D animation</li> <li>Demonstration of the details on functionality</li> <li>Explain the situation of using each of the frame composition (MS, Cu, ECu, WS, EWS, WEV, BEV, DA)</li> <li>Explain the reason of camera blocking and animation timing</li> </ol>		
3.	Describe the basic process of 2D animation using Adobe Flash	<ol> <li>Work cycle of 2D animation</li> <li>The process of creating a torsion</li> </ol>	<ol> <li>Differentiation of between 2D and 3D animation</li> <li>Demonstration of creating a torsion</li> </ol>		
4.	Demonstrate the application of Adobe Flash Animation	<ol> <li>Process of limited animation or cut out animation</li> <li>Email as a mode of capturing conversations</li> <li>Meetings as a mode of capturing Conversations</li> </ol>	1. Demonstration of creation of flash cartoon		