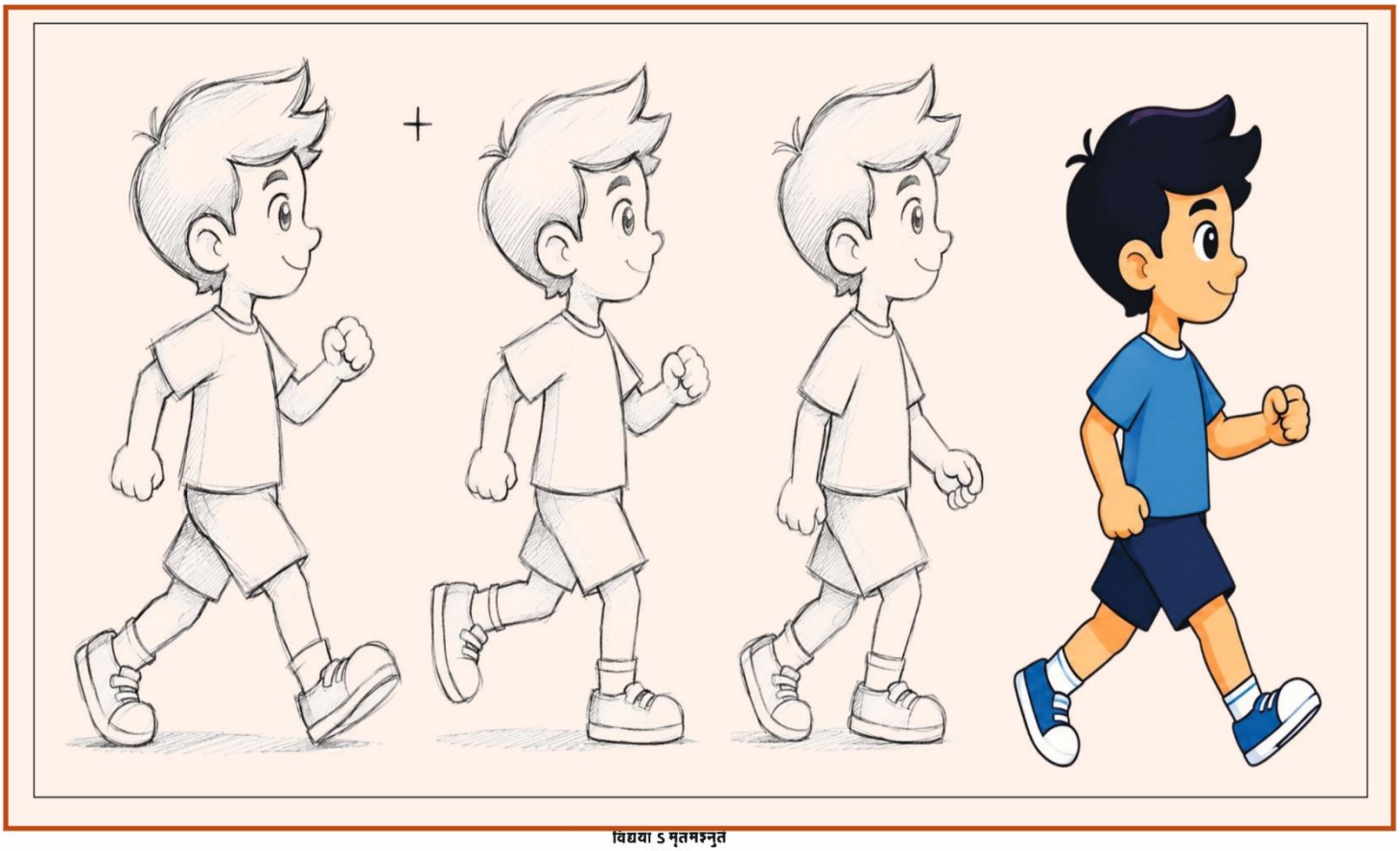
LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

JOB ROLE : ANIMATOR

(Qualification Pack Code: MES/Q0701)

Sector: Media and Entertainment

Classes XI and XII



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NCERT

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(A constituent unit of NCERT, under Ministry of Education, Government of India)

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PREFACE

The PSS Central Institute of Vocational Education (PSSCIVE), Bhopal, was entrusted with the responsibility of developing learning outcome-based curricula, student workbooks, teacher handbooks, and e-learning resources for job roles across various sectors with significant employment potential. We express our sincere gratitude to the Department of School Education and Literacy, Ministry of Education, Government of India, for its financial support and cooperation in achieving the objective of providing quality curricula and courseware to States and other stakeholders under the Project Approval Board (PAB)-approved project.

PSSCIVE firmly believes that the vocationalisation of education in the country must be rooted in strong philosophical, cultural, and sociological traditions while effectively addressing the aspirations of learners and the evolving skill requirements of industry. Accordingly, the curricula have been designed to develop professional, managerial, entrepreneurial, and communication competencies that enable learners to meet the needs of society and the world of work.

In pursuance of its commitment to strengthening skill education in the country, PSSCIVE has undertaken the development of learning outcome-based curricula through the active involvement of its faculty members and distinguished experts from diverse fields. This initiative is being carried out through the collaborative efforts of academicians, industry professionals, policymakers, representatives of partner institutions, vocational education and training experts, and experienced teachers. Through a series of consultations, expert group meetings, workshops, and extensive review of reference materials, comprehensive National Curricula are developed for various job roles in different sectors.

The success of these curricula depends largely on their effective implementation. It is expected that administrators, planners, managers of vocational education and training systems, school leaders, and teachers will make concerted efforts to create appropriate learning facilities, establish meaningful linkages with industry and the world of work, and provide a conducive environment for the successful delivery of the curriculum.

The PSSCIVE remains steadfast in its commitment to bringing about meaningful reforms in skill education through learner-centric curricula, innovative pedagogical resources, and high-quality courseware that equip learners with the knowledge, skills, and competencies required for lifelong learning and gainful employment.

Dr Deepak Paliwal
Joint Director
PSS Central Institute of Vocational Education

21 September 2026

ABOUT THE CURRICULUM

The learning outcome-based curriculum for the job role of Animation has been designed to equip students of Classes XI and XII with the knowledge, skills, attitudes, and values required for higher education, employment, entrepreneurship, and lifelong learning in the Animation, Visual Effects (VFX), Gaming, Multimedia, and Digital Media industries. The curriculum follows a competency-based approach wherein learning is organized around clearly defined learning outcomes that students are expected to achieve at the end of each unit.

The curriculum integrates 'Employability Skills' and 'Vocational Skills' to ensure holistic development of learners. While employability skills focus on communication, self-management, information and communication technology, entrepreneurship, and green skills, vocational skills provide industry-oriented competencies in animation production, digital content creation, 2D and 3D animation, modelling, texturing, rigging, motion, video editing, and sound editing. It emphasizes experiential learning through demonstrations, practical exercises, projects, field visits, industry interactions, and collaborative activities. Students are encouraged to develop creativity, critical thinking, problem-solving ability, teamwork, and professional work habits essential for success in the creative media sector. Upon successful completion of Classes XI and XII, students will be able to:

1. Use digital tools and software applications effectively.
2. Create 2D and 3D animation assets using industry-standard workflows.
3. Perform modelling, texturing, rigging, lighting, and rendering tasks.
4. Apply animation principles to develop motion-based digital content.
5. Work collaboratively on animation projects and production assignments.
6. Demonstrate awareness of sustainable practices and green skills.
7. Pursue higher education, self-employment, internships, or entry-level careers in animation, multimedia, gaming, VFX, and digital media industries.

Teachers play a pivotal role in transforming this curriculum into meaningful learning experiences. The success of this curriculum depends not only on the effective delivery of content but also on the ability of teachers to inspire creativity, innovation, critical thinking, and professional work habits among learners. Teachers are encouraged to adopt learner-centred and project-based approaches, integrate industry practices into classroom instruction, and provide continuous guidance and feedback to students. Students are encouraged to actively participate in sketching, modelling, animation sequence, and projects to build a professional portfolio and develop confidence needed for future academic and career opportunities.

Vinay Swarup Mehrotra
Professor and Head
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ACKNOWLEDGEMENTS

The PSS Central Institute of Vocational Education (PSSCIVE) expresses its sincere gratitude to the Department of School Education and Literacy (DoSE&L), Ministry of Education, Government of India, for the financial support provided through the project approved by the Project Approval Board (PAB) under the Samagra Shiksha for the development of curricula and textbooks aligned with various job roles across diverse sectors. This support has been instrumental in strengthening skill education by enabling the creation of high-quality, industry-relevant learning resources for students.

The Institute places on record its deep appreciation for the dedicated efforts and valuable contributions of Dr. Deepti Kavathekar, Consultant (Contractual) and Dr. Prerna Nashine, Assistant Professor (Contractual), in the development of the content.

PSSCIVE also gratefully acknowledges the contributions of Ms. Akansha Dubey, Senior Editor (Contractual), Mr. Jitendra Kumar, Graphic Designer (Contractual), and Mr. Mohit Jain, DTP Operator (Contractual), for their support in editing, formatting, graphic design, and typesetting of this curriculum. Their commitment and expertise have significantly contributed to the presentation of the publication.

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1. COURSE OVERVIEW

An Animator is a creative professional who creates a sequence of two-dimensional (2D) or three-dimensional (3D) images, known as frames, that are displayed rapidly to produce the illusion of movement. By transforming artistic concepts, storyboards, and designs into animated visual content, Animators bring characters, objects, environments, and stories to life for films, television, gaming, advertising, education, and digital media platforms.

The Animator course introduces learners to the fundamentals of animation, including the principles of motion, visual storytelling, character animation, compositing, video editing, and sound editing. The course also provides hands-on experience in using industry-standard animation software and tools for creating 2D and 3D animations. Learners will develop both creative and technical competencies required for entry-level roles in the animation and multimedia industry.

2. COURSE OUTCOMES

On successful completion of the course, learners will be able to:

- demonstrate an understanding of the fundamentals and core concepts of animation;
- describe the career opportunities in the animation industry;
- apply the principles of animation to create realistic and engaging motion.
- use various features and tools for creating 2D and 3D animations;
- create basic animation exercises such as bouncing ball, walk cycles, and other foundational animation sequences;
- apply tools and techniques used in 3D animation production;
- use industry-standard animation, video editing, and multimedia software applications;
- develop simple animation projects that demonstrate creative, technical, and problem-solving skills; and
- follow professional work practices, teamwork, and project documentation.

3. COURSE REQUIREMENTS

The learner should have access to:

- A computer system with appropriate hardware specifications for animation and multimedia production.
- Animation, video editing, and audio editing software.
- Internet connectivity for accessing learning resources and digital content, wherever applicable.

4. COURSE DURATION

The course is designed to be delivered over two academic years, providing learners with a balanced blend of theoretical knowledge and practical hands-on experience in animation and multimedia production.

5. TEACHING–LEARNING AND TRAINING ACTIVITIES

The course should be delivered through a combination of classroom instruction, practical training, project work, and field visits. Emphasis should be placed on experiential learning, creativity, problem-solving, and the application of animation concepts using industry-relevant tools and software.

Class	Hours
Class XI	300 Hours
Class XII	300 Hours
Total	**600 Hours**

Classroom Activities

Teaching should include interactive lectures, demonstrations, discussions, presentations, and the use of audio-visual and digital learning resources to develop conceptual understanding of animation and multimedia production.

Practical Training

Practical sessions should provide hands-on experience in 2D and 3D animation, compositing, video editing, sound editing, and rendering. Learners should undertake exercises, simulations, case studies, and projects using appropriate hardware and software. Proper safety, health, and ergonomic practices should be followed during all practical activities.

Project Work

Learners should undertake individual and group projects to apply their knowledge and skills in developing animation products. Projects should encourage creativity, teamwork, planning, documentation, and presentation skills.

Field Visits

Field visits to animation studios, multimedia production houses, educational institutions, exhibitions, or related workplaces may be organised to provide exposure to professional practices, technologies, and career opportunities.

6. ASSESSMENT AND CERTIFICATION

Assessment should be competency-based and aligned with the learning outcomes of the course and relevant National Occupational Standards (NOSs). It should evaluate both theoretical knowledge and practical skills.

The National Skills Qualifications Framework (NSQF) is an outcomes-based framework that is referenced to the National Occupational Standards (NOSs) rather than input-based parameters. The NSQF level descriptors define the expected learning outcomes for each qualification level and encompass five key dimensions: process, professional knowledge, professional skills, core skills, and responsibility. Assessment under the NSQF is intended to verify

that learners have acquired the knowledge, skills, and competencies required to perform specific occupational roles. It also ensures that the learning programme has achieved the prescribed educational standards. Assessment should be closely integrated with certification so that learners, employers, and other stakeholders can clearly identify the competencies attained through the vocational course or subject.

Assessment practices should adhere to the principles of reliability, validity, flexibility, convenience, cost-effectiveness, fairness, and transparency. Standardized assessment tools should be employed to evaluate students' knowledge, and appropriate use of technology should be encouraged to enhance the quality, efficiency, and integrity of the assessment process.

Knowledge Assessment

Knowledge assessment should comprise two components:

- **Internal Assessment**, conducted by the institution; and
- **External Assessment**, including the theory examination conducted by the Board.

The assessment instruments should evaluate both conceptual understanding and the application of knowledge. Knowledge assessment may include objective-type, paper-based tests as well as short, structured-response questions aligned with the prescribed curriculum.

Written Examination

The written examination should enable candidates to demonstrate their knowledge, conceptual understanding, and ability to apply learning to relevant vocational contexts. The theory question paper for each vocational subject should be developed by a panel of subject experts comprising academicians, experienced vocational teachers, subject specialists from universities and colleges, and industry experts. The respective Sector Skill Council (SSC) should be consulted by the Central or State Board while constituting the panel of experts responsible for question paper development and the conduct of examinations, ensuring that the assessment aligns with current industry standards and the relevant National Occupational Standards (NOSs).

The blueprint for the question paper may be as follows:

Duration: 3 hrs **Maximum Marks: 40**

S.No.	Typology of Question	Very Short Answer (1 mark)	Short Answer (2 Marks)	Long Answer (3 Marks)	Total Marks
		No. of Questions			
1.	Remembering – (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories; identify, define or recite, information)	**3**	**2**	**2**	**13**

2.	Understanding – (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information)	**2**	**3**	**2**	**14**
3.	Application – (Use abstract information in concrete situation, to apply knowledge to new situations: Use given content to interpret a situation, provide an example, or solve a problem)	**0**	**2**	**1**	**07**
4.	High Order Thinking Skills – (Analysis and Synthesis – Classify, compare, contrast, or differentiate between different pieces of information; Organize and/ or integrate unique pieces of information from a variety of sources)	**0**	**2**	**0**	**04**
5.	Evaluation – (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	**0**	**1**	**0**	**02**
	Total	**5x1=5**	**10x2=20**	**5x3=15**	**40**

Skill Assessment (Practical)

Practical assessment should evaluate learners' ability to perform tasks and demonstrate competencies through hands-on activities, projects, portfolios, practical examinations, and viva voce. Assessment should be based on predefined performance criteria and competency checklists.

Project and Portfolio Assessment

Learners should maintain a portfolio containing practical exercises, project reports, design documents, animations, videos, and other evidence of learning. Project work should be assessed on creativity, technical competence, problem-solving ability, and presentation.

Certification

Upon successful completion of the course and assessment requirements, certification may be awarded by the concerned Examination Board in accordance with prevailing guidelines and applicable National Skills Qualifications Framework (NSQF) norms.

7. SCHEME OF UNITS AND ASSESSMENT

ANIMATOR
CLASS XI

Part	Unit Title	Hours	Maximum Marks
Part A: Employability Skills	Communication Skills – III	25	
	Self-Management Skills – III	25	
	Information and Communication Technology Skills – III	20	
	Entrepreneurial Skills – III	25	
	Green Skills – III	15	
	Total (Part A)	**110**	**10**
Part B: Vocational Skills	Introduction to Animation	40	
	Essentials of Animation	40	
	Digital 2D Animation	40	
	Introduction to 3D Modelling	45	
	Total (Part B)	**165**	**40**
Part C: Practical Work	Practical Examination	6	15
	Written Test	1	10
	Viva Voce	3	10
	Total (Part C)	**10**	**35**
Part D: Project Work/ Field Visit	Practical File / Student Portfolio	10	10
	Viva Voce	5	5
	Total (Part D)	**15**	**15**
	Grand Total	**300**	**100**

ANIMATOR
CLASS XII

Part	Unit Title	Hours	Maximum Marks
Part A: Employability Skills	Communication Skills – IV	25	
	Self-Management Skills – IV	25	
	Information and Communication Technology Skills – IV	20	
	Entrepreneurial Skills – IV	25	
	Green Skills – IV	15	
	Total (Part A)	**110**	**10**
Part B: Vocational Skills	Advanced 3D Production	75	
	Animation Techniques and Motion	50	

	Introduction to Video and Sound Editing	40	
	Total (Part B)	**165**	**40**
Part C: Practical Work	Practical Examination	6	15
	Written Test	1	10
	Viva Voce	3	10
	Total (Part C)	**10**	**35**
Part D: Project Work / Field Visit	Practical File / Student Portfolio	10	10
	Viva Voce	5	5
	Total (Part D)	**15**	**15**
	Grand Total	**300**	**100**

8. SYLLABUS

CLASS 11

Part A: Employability Skills

S.No.	Unit	Duration (Hrs)
1.	Communication Skills – III	25
2.	Self-Management Skills – III	25
3.	Information and Communication Technology Skills – III	20
4.	Entrepreneurial Skills – III	25
5.	Green Skills – III	15
Total		**110**

UNIT 1: COMMUNICATION SKILLS–III

S.No.	Learning Outcome	Theory (10 Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
1.	Demonstrate knowledge of effective communication	1. Introduction to communication 2. Importance of communication 3. Elements of communication 4. Perspectives in communication 5. Effective communication	1. Role-play on the communication process 2. Group discussion on factors affecting perspectives in communication 3. Classroom discussion on the 7Cs of effective communication (i.e. Clear, Concise, Concrete, Correct, Coherent, Courteous and Complete) 4. Chart making on elements of	03

			communication	
2.	Demonstrate verbal communication	1. Verbal communication 2. Public speaking	1. Role-play of a phone conversation 2. Group exercise on delivering speech and practicing public speaking	02
3.	Demonstrate non-verbal communication	1. Importance of non-verbal communication 2. Types of non-verbal communication 3. Visual communication	1. Role-play on non-verbal communication 2. Group exercise and discussion on Do's and Don'ts to avoid body language mistakes 3. Group activity on methods of communication	02
4.	Speak using correct pronunciation	1. Pronunciation basics 2. Speaking properly 3. Phonetics 4. Types of sounds	1. Group exercises on pronouncing words	01
5.	Demonstrate the knowledge of assertive communication style	1. Important communication styles 2. Assertive communication 3. Advantages of assertive communication 4. Practicing assertive communication	1. Group discussion on communication styles 2. Group discussion on observing and sharing communication styles	03
6.	Demonstrate the knowledge of saying No	1. Steps for saying 'No' 2. Connecting words (Conjunctions)	1. Group discussion on how to respond 2. Group activity on saying 'No'	02
7.	Identify and use parts of speech in writing	1. Capitalisation 2. Punctuation 3. Basic parts of speech 4. Supporting parts of speech	1. Group exercises on identifying parts of speech 2. Group exercises on constructing sentences 3. Group exercises on nouns	03

8.	Write sentences and paragraphs	1. Parts of a sentence 2. Types of object 3. Types of sentences 4. Paragraph	1. Exercises on making sentences 2. Activity on active and passive voice 3. Assignment on writing different types of sentences	02
9.	Communicate with people	1. Greetings 2. Introducing self and others	1. Role-play on formal and informal greetings 2. Role-play on introducing someone 3. Practice session and group discussion on greeting different people	02
10.	Introduce self to others and write about oneself	1. Talking about self 2. Filling out a form to write about self	1. Practicing self-introduction to write about self 2. Filling up forms to write about self	01
11.	Ask Questions	1. Types of questions 2. Asking close-ended and open-ended questions	1. Exercise on asking different types of questions 2. Group activity on framing open and close-ended questions	01
12.	Communicate information about family to others	1. Words that show relations in the family	1. Practice talking about family 2. Role-play on relations	01
13.	Describe habits and routines	1. Concept of habits and routines	1. Group discussion on habits and routines 2. Group activity on describing routines	01
14.	Ask or give directions to others	1. Asking for directions to a place 2. Giving directions for a place	1. Role-play on asking and giving directions to a place 2. Identifying symbols used for giving directions	01
			Total	**25**

UNIT 2: SELF-MANAGEMENT SKILLS–III

S.No.	Learning Outcome	Theory (10 Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
1.	Identify and analyse own strengths and weaknesses	1. Knowing yourself 2. Identifying strengths and weaknesses 3. Difference between interests and abilities	1. Activity on writing aims in life 2. Preparing a worksheet on interests and abilities	03
2.	Demonstrate personal grooming	1. Guidelines for dressing and grooming	1. Role-play on dressing and grooming standards 2. Self-reflection activity on dressing and grooming	04
3.	Maintain personal hygiene	1. Importance of personal hygiene 2. Three steps to personal hygiene 3. Essential steps of hand washing	1. Role-play on personal hygiene 2. Assignment on personal hygiene	03
4.	Demonstrate the knowledge of working in a team and participating in group activities	1. Describe the benefits of teamwork 2. Working in a team	1. Assignment on working in a team 2. Self-reflection on team work	03
5.	Describe the importance of networking skills	1. Benefits of networking skills 2. Steps to build networking skills	1. Group exercise on networking in action 2. Assignment on networking skills	03
6.	Describe the meaning and importance of self-motivation	1. Self-motivation 2. Types of motivation 3. Qualities of Self-motivated people	1. Activity on staying motivated 2. Assignment on reasons hindering motivation	03
7.	Set SMART goals	1. Meaning of goals and purpose of goal-setting 2. Setting SMART (Specific, measurable, attainable, realistic and timebound) goals	1. Assignment on setting SMART goals 2. Activity in developing long-term and short-term goals using the SMART	03

			method	
8.	Apply time management strategies and techniques	1. Time management 2. Steps for effective time management	1. Preparing a checklist of daily activities 2. Preparing to-do-list	03
			Total	**25**

UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS -III

S.No.	Learning Outcome	Theory (08 Hrs)	Practical (12 Hrs)	Duration (20 Hrs)
1.	Create a document on the word processor	1. Introduction to ICT 2. Advantages of using (Information and communication technology) a word processor 3. Work with LibreOffice Writer	1. Group activity on demonstration and practice of the following: i. Creating a new document ii. Typing text iii. Saving the text iv. Opening and saving files on Microsoft Word/Libre Office Writer	02
2.	Identify the basic interface of LibreOffice	1. Standard user interface of LibreOffice writer i. Status bar ii. Menu bar iii. Tool bar iv. Making a text bold	1. Group activity on using the basic user interface of LibreOffice writer 2. Group activity on working with Microsoft Word	02
3.	Save, close, open and print document	1. Saving a word document 2. Closing a word document 3. Open an existing document 4. Print a word document	1. Group activity on performing the functions for saving, closing, and printing documents in LibreOffice Writer 2. Group activity on performing the functions for saving, closing, and printing	02

			documents in Microsoft Word	
4.	Format text in a word document	1. Changing style and size of text 2. Aligning text and 3. Cutting, Copying, Pasting text 4. Finding and replacing	1. Group activity on formatting text in LibreOffice Writer 2. Group activity on formatting text in Microsoft Word	02
5.	Check spelling and grammar in a word document	1. Starting a spell checker 2. Short-cut menu for spell checker 3. Autocorrecting spellings	1. Group activity on checking spelling and grammar using LibreOffice Writer 2. Group activity on checking spelling and grammar using Microsoft Word	02
6.	Insert lists, tables, pictures, and shapes in a word document	1. Insert bullet list 2. Inserting the following in word document i. Number list ii. Tables iii. Pictures iv. Shapes	1. Practical exercise of inserting lists and tables using LibreOffice Writer	03
7.	Insert header, footer and page number in a word document	1. Inserting the following in a word document i. Header ii. Insert footer iii. Insert page number iv. Page count	1. Practical exercises of inserting header, footer and page numbers in LibreOffice Writer and Microsoft Word	03
8.	Demonstrate the use of track change option in a word document	1. Tracking changes in LibreOffice Writer 2. Manage option 3. Comparing documents	1. Group activity on performing changes in track mode in LibreOffice Writer and Microsoft Word	04
			Total	**20**

UNIT 4: ENTREPRENEURIAL SKILLS– III

S.No.	Learning Outcome	Theory (10 Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
1.	Differentiate between different kinds of	1. Introduction to entrepreneurship 2. Types of business	1. Role-play on different kinds of businesses	03

	businesses	activities- manufacturing, trading, and service	around us	
2.	Describe the significance of entrepreneurial values	1. Values of an Entrepreneur 2. Case study on qualities of an entrepreneur	1. Role-play on qualities of an entrepreneur	03
3.	Describe the attitudinal changes required to become an entrepreneur	1. Difference between the attitude of an entrepreneur and an employee	1. Interviewing employees and entrepreneurs	03
4.	Describe the importance of thinking like an entrepreneur	1. Problems of entrepreneurs 2. Problem-solving 3. Thinking like an entrepreneur to solve problems	1. Group activity on identifying and solving problems	04
5.	Generate business ideas	1. The business cycle 2. Principles of idea creation 3. Generating a business idea 4. Case studies	1. Group activity to create business ideas	04
6.	Describe customer needs and the importance of conducting a customer survey	1. Understanding customer needs 2. Conducting customer survey 3. Knowing competitors for understanding supply	1. Group activity for conducting a customer survey	04
7.	Create a business plan	1. Importance of planning 2. Preparing a business plan 3. Principles to follow for growing a business 4. Case studies	1. Group activity on developing a business plan	04
			Total	**25**

UNIT 5: GREEN SKILLS–III

S.No.	Learning Outcome	Theory (07 Hrs)	Practical (08 Hrs)	Duration (15 Hrs)
1.	Describe the importance of the main sectors of the	1. Important sectors of green economy- i. Agriculture ii. Energy resources	1. Group discussion on sectors of the green economy 2. Preparing posters	06

	green economy	iii. Construction iv. Fisheries v. Forestry vi. Tourism vii. Transport viii. Water Management ix. Waste management x. Manufacturing xi. Industry	on various sectors for promoting the green economy	
2.	Describe policies for the green economy	1. Policies for a green economy	1. Group discussion on initiatives for promoting the green economy 2. Writing an essay or a short note on the important initiatives for promoting a green economy	03
3.	Describe the role of various stakeholders in the green economy	1. Stakeholders in the green economy	1. Group discussion on the role of stakeholders in the green economy 2. Making solar bulbs	03
4.	Describe the role of government and private agencies in the green economy	1. Role of the government in promoting a green economy 2. Role of private agencies in promoting green economy	1. Group discussion on the role of government and private agencies in promoting a green economy 2. Preparing posters on green sectors	03
			Total	**15**

Part B: Vocational Skills

S.No.	Unit	Duration (Hrs)
1.	Introduction to Animation	40
2.	Essentials of Animation	40
3.	Digital 2D Animation	40
4.	Introduction to 3D Modelling	45
Total		**165**

UNIT 1: INTRODUCTION TO ANIMATION

S.No.	Learning Outcome	Theory (15 Hrs)	Practical (25 Hrs)	Duration (40 Hrs)
1.	Describe the fundamentals of animation	1. Importance of animation 2. Uses of animation 3. Working of animation 4. History of animation 5. Career options in animation and media 6. Role of artificial intelligence in animation	1. Identifying key milestones in the history of Indian animation	06
2.	Describe animation techniques	1. Traditional and classical animation techniques 2. Computer animation techniques 3. Animation development pipeline (production pipeline)	1. Demonstrating traditional and classical animation.	20
3.	Explain the features of different types of animation	1. Types of animation 2. Animation through frames and motion 3. Phi phenomenon 4. Types of frames	1. Performing a role-play skit demonstrating different types of animation	14
			Total	**40**

UNIT 2: ESSENTIALS OF ANIMATION

S.No.	Learning Outcome	Theory (15 Hrs)	Practical (25 Hrs)	Duration (40 Hrs)
1.	Demonstrate knowledge of visual storytelling	1. Overview of storytelling 2. Visual storytelling 3. Difference between verbal and visual storytelling 4. Importance of visuals in communication 5. Role of emotions in storytelling	1. Discuss the 12 principles of animation in groups	20
2.	Apply principles of animation	1. Principles of animation • Squash and stretch • Anticipation • Staging • Straight ahead and pose-to-pose animation	1. Group discussion on principles of animation	10

		• Follow-through and overlapping action • Slow out and slow in Arcs • Secondary action • Timing and spacing • Exaggeration • Solid drawing • Appeal		
3.	Demonstrate understanding of production pipeline	1. Stages in Animation Production Pipeline • Pre-production • Production • Post-production	1. Group discussion on stages of production in animation.	10
			Total	**40**

UNIT 3: DIGITAL 2D ANIMATION

S.No.	Learning Outcome	Theory (15 Hrs)	Practical (25 Hrs)	Duration (40 Hrs)
1.	Demonstrate knowledge of 2D animation	1. Concept of 2D animation 2. Pre-production 3. Production 4. Post-production	1. Exploring the 2D animation pipeline and commonly used tools	10
2.	Demonstrate understanding of different types of 2D animation	1. Cell animation 2. Digital animation 3. Path animation 4. Stop-motion animation 5. Sand animation 6. Cut-out animation 7. Rotoscoping 8. Cinemagraphs	1. Field visit to an animation centre and preparation of pictorial chart showcasing animation types	15
3.	Apply 2D animation processes	1. Walk cycle 2D animation 2. Software for 2D animation 3. Cut-out animation 4. Tweening	1. Creating a basic character walk cycle	15
			Total	**40**

UNIT 4: INTRODUCTION TO 3D MODELLING

S.No.	Learning Outcome	Theory (15 Hrs)	Practical (30 Hrs)	Duration (45 Hrs)
1.	Describe fundamentals of 3D modelling	1. Features of 3D modelling	1. Creating a 3D character using modelling software	10

		2. Elements of 3D modelling 3. Techniques of 3D modelling		
2.	Create and edit 3D models	1. Character Designing of "Shark"	1. Creating a basic 3D model	25
3.	Demonstrate applications of 3D modelling in animation and media	1. Applications of 3D modelling 2. Advantages of 3D modelling in animation and media 3. Future trends of 3D modelling in animation and media	1. Exploring applications and future trends of 3D modelling	10
			Total	**45**

CLASS 12

Part A: Employability Skills

S.No.	Units	Duration (Hrs)
1.	Communication Skills- IV	25
2.	Self-management Skills – IV	25
3.	Information and Communication Technology Skills - IV	20
4.	Entrepreneurial Skills – IV	25
5.	Green Skills – IV	15
Total		**110**

UNIT 1: COMMUNICATION SKILLS – IV

S.No.	Learning Outcome	Theory (10hrs)	Practical (15 hrs)	Duration (25 hrs)
1.	Demonstrate active listening skills	1. Active listening - listening skills and stages of active listening 2. Overcoming barriers to active listening	1. Group discussion on factors affecting active listening 2. Preparing posters of steps for active listening 3. Role-play on negative effects of not listening actively	10
2.	Identify the parts	1. Parts of speech –	1. Group practice	10

	of speech	using capitals, punctuation, and basic parts of speech, supporting parts of speech	on identifying parts of speech 2. Group practice on constructing sentences	
3.	Write sentences	1. Writing simple sentence 2. Writing complex sentences 3. Types of object 4. Types of sentences i. Active and Passive sentences ii. Statement/ Declarative sentence iii. Question/ Interrogative sentence iv. Emotion/ Reaction or Exclamatory sentence v. Order or Imperative sentence vi. Paragraph writing	1. Group work on writing sentences and paragraphs 2. Group work on practicing writing sentences in active or passive voice 3. Group work on writing different types of sentences (i.e., declarative, exclamatory, interrogative and imperative)	05
	Total			**25**

UNIT 2: SELF-MANAGEMENT SKILLS – IV

S.No.	Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1.	Describe the various factors influencing motivation and positive attitude	1. Motivation and positive attitude 2. Intrinsic and extrinsic motivation 3. Positive attitude – ways to maintain positive attitude 4. Stress and stress management – ways to manage stress	1. Role-play on avoiding stressful situations 2. Activity on listing negative situations and ways to turn them to positive	15

2.	Demonstrate the Knowledge of becoming oriented	1. Becoming result-oriented 2. Goal setting – examples of result-oriented goals	1. Group activity on listing aim in life	05
3.	Describe the importance of self-awareness and the basic personality traits, types and disorders	1. Steps towards self-awareness 2. Personality and basic personality traits 3. Common personality disorders- i. Suspicious ii. Emotional and impulsive iii. Anxious 4. Steps to overcome personality disorders	1. Group discussion on self-awareness	05
	Total			**25**

UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS - IV

S.No.	Learning Outcome	Theory (06 hrs)	Practical (14 hrs)	Duration (20 hrs)
1.	Identify the components of a spreadsheet application	1. Getting started with a spreadsheet - types of a spreadsheet 2. Steps to start LibreOffice Calc., 3. Components of a worksheet	1. Group activity on identifying components of spreadsheet in LibreOffice Calc.	02
2.	Perform basic operations in a spreadsheet	1. Opening workbook and entering data – types of data, steps to enter data, editing and deleting data in a cell 2. Selecting multiple cells 3. Saving the spreadsheet in various formats 4. Closing the spreadsheet 5. Opening the spreadsheet	1. Group activity on working with data on LibreOffice Calc.	03

		6. Printing the spreadsheet		
3.	Demonstrate the knowledge of working with data and formatting text	1. Using spreadsheet for addition – adding value directly, adding by using cell address, using a mouse to select values in a formula, using sum function, copying and moving formula 2. Formatting cell and content 3. Changing text style and font size 4. Aligning text in a cell 5. Highlighting text	1. Group activity on formatting a spreadsheet in LibreOffice Calc 2. Group activity on performing basic calculations in LibreOffice Calc.	02
4.	Demonstrate the knowledge of using advanced features in spreadsheet	1. Advanced features in Spreadsheet i. Sorting data ii. Filtering data iii. Protecting spreadsheet with password	1. Group activity on sorting data in LibreOffice Calc	02
5.	Make Use of software for making slides presentations	1. Steps to start LibreOffice Impress 2. Adding text to a presentation	1. Group practice on working with LibreOffice Impress tools	02
6.	Demonstrate the knowledge of opening, closing and slide presentations	1. Printing a presentation	1. Group activity on closing and saving a presentation in LibreOffice Impress	03
7.	Demonstrate the knowledge of working with slides	1. Working with slides and text in a presentation- adding slides to a presentation, deleting slides, adding and formatting text, highlighting text, aligning text and changing text color	1. Group practice on working with font styles in LibreOffice Impress	03

8.	Demonstrate the use of advanced features in a presentation	1. Advanced features used in a presentation 2. Inserting shapes in the presentation 3. Inserting clipart and images in a presentation 4. Changing slide layout	1. Group activity on changing slide layout on LibreOffice Impress	03
	Total			**20**

UNIT 4: ENTREPRENEURIAL SKILLS-IV

S.No.	Learning Outcome	Theory (10hrs)	Practical (15hrs)	Duration (25hrs)
1.	Describe the types and qualities of entrepreneurs	1. Entrepreneurship and entrepreneur 2. Characteristics of entrepreneurship 3. Entrepreneurship- art and science 4. Qualities of a successful entrepreneur 5. Types of entrepreneurs 6. Roles and functions of an entrepreneur 7. What motivates an entrepreneur? 8. Identifying opportunities and risk-taking 9. Startups	1. Group discussion on the topic 'An entrepreneur is not born but created' 2. Conducting a classroom quiz on various aspects of entrepreneurship	10
2.	Identify the barriers to entrepreneurship	1. Barriers to entrepreneurship i. Environmental barriers ii. Faulty business plan iii. Personal barriers	1. Group discussion about "What we fear about entrepreneurship" 2. Activity on taking an interview of an entrepreneur	05
3.	Identify the attitude	1. Entrepreneurial	1. Activities will	05

	that makes an entrepreneur successful	attitude	be decided by the teacher	
4.	Demonstrate the Knowledge of Entrepreneurial Attitude and Competencies	1. Entrepreneurial competencies i. Decisiveness ii. Initiative iii. Interpersonal skills- positive iv. attitude, stress v. management vi. Perseverance vii. Organizational skills- time management, goal setting, efficiency, managing quality	1. Activity on "My entrepreneurial attitude"	05
	Total			**25**

UNIT 5: GREEN SKILLS-IV

S.No.	Learning Outcome	Theory (05 hrs)	Practical (10 hrs)	Duration (15 hrs)
1.	Identify the benefits of the green jobs	1. Green jobs 2. Benefits of green jobs 3. Green jobs in different sectors: i. Agriculture ii. Transportation iii. Water conservation iv. Solar and wind energy v. Eco-tourism vi. Building and construction vii. Solid waste management viii. Appropriate technology	1. Group discussion on the importance of green job	8
2.	State the importance of green jobs	1. Importance of green jobs in the following i. Limiting greenhouse gas emissions	1. Preparing posters on green jobs 2. Group activity on tree	7

		ii. Minimising waste and pollution iii. Protecting and restoring ecosystems iv. Adapting to the effects of climate change	plantation	
	Total			**15**

Part B: Vocational Skills

S. No.	Unit	Duration (Hrs)
1.	Advanced 3D Production	75
2.	Animation Techniques and Motion	50
3.	Introduction to Video and Sound Editing	40
Total		**165**

UNIT 1: ADVANCED 3D PRODUCTION

S. No.	Learning Outcome	Theory (35 Hrs)	Practical (40 Hrs)	Duration (75 Hrs)
1.	Apply concepts of texturing in 3D animation	1. Texturing in 3D animation 2. Stages in texturing	1. Conducting interview of a 3D animation professional 2. Texturing a 3D shark model 3. Creating a 3D production pipeline flowchart	30
2.	Demonstrate knowledge of lighting and rigging	1. Lighting in production 2. Types of lights in Maya software, 3. Lighting techniques 4. Role of lighting artist, 5. Rigging	1. Rigging a textured shark model 2. Lighting the rigged and textured shark model	15
3.	Demonstrate knowledge of post-production activities	1. Rendering 2. Compositing 3. Editing 4. Sound and music score 5. Titles and credits	1. Rendering the shark model from multiple camera angles	30
			Total	**75**

UNIT 2: ANIMATION TECHNIQUES AND MOTION

S. No.	Learning Outcome	Theory (20 Hrs)	Practical (30 Hrs)	Duration (50 Hrs)
1.	Demonstrate use of edit keys in timeline	1. Types of Keyframes 2. Benefits of editing keys 3. Disadvantages of auto key 4. Animation settings and playback	1. Exploring the software and its key functions	10
2.	Demonstrate understanding of frames, timing, frame rate, and keyframes	1. Frames in animation 2. Timing in animation 3. Frame rate 4. Keyframes	1. Creating a ball animation using keyframes	15
3.	Create and edit animation sequences using graph editor	1. Basics of Graph Editor 2. Edit animation curves using the Graph Editor	1. Creating a bouncing ball animation using Graph Editor	15
4.	Create a bouncing ball animation	1. Procedure to create a bouncing ball	1. Creating a bouncing ball animation	10
			Total	**50**

UNIT 3: INTRODUCTION TO VIDEO AND SOUND EDITING

S. No.	Learning Outcome	Theory (15 Hrs)	Practical (25 Hrs)	Duration (40 Hrs)
1.	Demonstrate knowledge of digital video editing	1. Workspaces 2. Tools panel 3. Toolbox 4. Projects 5. Create a project 6. Editing workflow 7. Source clips, clip instances, and sub clips 8. Timeline panel overview 9. Work with tracks	1. Demonstration using and customising the workplace in Adobe Premiere Pro. 2. Identifying and using tools in the Tools Panel	20
2.	Demonstrate knowledge of audio editing and sound design basics	1. Using the workspace 2. Editing audio 3. Saving your work	1. Cleaning up an interview recording using Adobe Audition	10
3.	Describe post-production workflow and media export	1. Post-production workflow 2. Major activities in post-production 3. Media export	1. Exploring post-production workflow and media	10
			Total	**40**

9. ORGANISATION OF FIELD VISITS

In a year, at least **3 field visits/educational tours** should be organised for students to expose them to workplace activities and industry practices in Animation, VFX, Gaming, and Media Production.

S. No.	Location	Objectives
1.	Animation and VFX Studios	Exposure to 2D/3D animation pipelines, motion capture labs, rendering setups, visual effects production, and collaborative workflows.
2.	Broadcasting and Media Houses	Understanding the application of animation in television production, advertising, digital content creation, and news graphics.
3.	Gaming and AR/VR Companies	Learning about interactive animation, game design workflows, virtual reality (VR), augmented reality (AR), and immersive media technologies.
4.	Film Production Units	Observing the integration of animation with cinematography, editing, compositing, visual effects, and sound design processes.
5.	Museums, Theme Parks and Creative Exhibitions	Exploring real-world applications of animation, digital storytelling, infotainment, edutainment, interactive displays, and multimedia installations.

10. LIST OF EQUIPMENT AND MATERIALS

A. HARDWARE

S. No.	Equipment	Minimum Specifications	Qty.	Approx. Unit Cost (₹)	Approx. Total Cost (₹)
1.	Desktop Workstation	Intel Core i5/Ryzen 5, 16 GB RAM, 512 GB SSD, 4 GB Graphics Card	10	55,000	5,50,000
2.	Faculty Computer	Intel Core i7/Ryzen 7, 16 GB RAM, SSD	1	70,000	70,000
3.	Drawing Tablets	Huion/XP-Pen Entry Level (6–8 inch)	5	6,000	30,000
4.	UPS	1 KVA UPS	5	10,000	50,000
5.	External Hard Drive	2 TB Portable HDD	2	6,000	12,000
6.	Multimedia Projector	Full HD Projector	1	40,000	40,000

B. SOFTWARE

S. No.	Software	Purpose	Qty.	Cost
1.	Autodesk Maya, Adobe Animate, Blender	3D Modelling and Animation	10 PCs	Free (educational license)
2.	Krita	Digital Drawing and 2D Animation	10 PCs	Free (educational license)
3.	OpenToonz	2D Animation	10 PCs	Free (educational license)
4.	Audacity	Audio Editing	10 PCs	Free
5.	LibreOffice	Documentation and Presentations	10 PCs	(educational license)

C. AUDIO AND VISUAL EQUIPMENT

S. No.	Equipment	Specification	Qty.	Unit Cost (₹)	Total Cost (₹)
1.	USB Microphone	Basic Condenser Microphone	2	4,000	8,000
2.	Headphones	Studio/Monitoring Type	5	2,000	10,000
3.	Webcam/Camera	HD Webcam for Reference Capture	2	3,000	6,000

D. FURNITURE AND CLASSROOM SETUP

S. No.	Item	Qty.	Unit Cost (₹)	Total Cost (₹)
1.	Computer Tables	30	5,000	50,000
2.	Chairs	30	1,500	45,000
3.	Faculty Table and Chair	1 Set	10,000	10,000

E. TRADITIONAL ANIMATION MATERIALS

S. No.	Material	Qty.	Unit Cost (₹)	Total Cost (₹)
1.	Sketchbooks	30	150	4,500
2.	Drawing Pencil Sets	30	150	4,500
3.	Marker Sets	10	300	3,000
4.	Tracing Paper Packs	10	300	3,000
5.	Flipbooks	30	100	3,000

11. VOCATIONAL TEACHER'S/ TRAINER'S QUALIFICATION

Qualification and other requirements for appointment of Vocational Teachers/Trainers on a contractual basis shall be decided by the respective State/UT. The suggestive qualifications and minimum competencies for the Vocational Teacher/Trainer are as follows:

S. No.	Qualification	Minimum Competencies
1.	Graduation in any stream from a recognized Institute/Organization, with at least one year of work experience or teaching/industry experience in the relevant field (Animation, Multimedia, Visual Effects (VFX), Graphic Design, Digital Media, Fine Arts, Computer Graphics, Game Design, or related field)	• Effective communication skills (oral and written) • Basic computing skills

Note: Age limit relaxation shall be applicable as per the prevailing Government rules and regulations of the respective State/UT.

The following desirable qualifications are intended to ensure that teachers/trainers can provide practical, industry-aligned instruction while fostering creativity, innovation, teamwork, and employability among students.

Area	Desirable Requirement
Industry Experience	Experience in 2D Animation, 3D Animation, Modelling, Texturing, Rigging, Rendering, Video Editing, Motion Graphics, or VFX Production
Software Proficiency	Knowledge of Blender, Autodesk Maya, Adobe Animate, Adobe Photoshop, Adobe Premiere Pro, Adobe After Effects, Adobe Audition, OpenToonz, Krita, or equivalent software
Teaching Skills	Ability to conduct practical demonstrations, project-based learning, field visits, and industry interactions
Professional Skills	Teamwork, creativity, problem-solving, classroom management, and mentoring skills

12. ROLES AND RESPONSIBILITIES OF THE VOCATIONAL TEACHER/TRAINER

The Vocational Teacher/Trainer is responsible for delivering competency-based education and training that equips learners with the knowledge, practical skills, and professional attitudes required for employment and entrepreneurship in the animation and digital media sector.

S. No.	Roles and Responsibilities
1.	Deliver theory and practical training as per the approved curriculum.
2.	Maintain laboratory equipment, software, and learning resources.

3.	Organize field visits, industry interactions, and guest lectures.
4.	Guide students in projects, portfolios, and practical assignments.
5.	Assess students' performance through practical and theory-based evaluations.
6.	Ensure safety, discipline, and proper utilization of laboratory resources.
7.	Maintain records related to attendance, assessment, and practical work.
8.	Facilitate industry exposure and career guidance in Animation and Multimedia sectors.

13. LIST OF CONTRIBUTORS

S. No.	Name	Designation	Organization / Department
1.	**Dr. Vinay Swarup Mehrotra**	Professor and Head	Curriculum Development and Evaluation Centre (CDEC) and Centre for International Relationship (CIR), PSS Central Institute of Vocational Education (PSSCIVE), NCERT, Bhopal
2.	**Dr. Sourabh Meshram**	Assistant Professor (Contractual)	Curriculum Development and Evaluation Centre (CDEC), PSS Central Institute of Vocational Education (PSSCIVE), NCERT, Bhopal
3.	**Dr. Pavitra Shrivastava**	Professor and Head	Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal
4.	**Mr. Vaibhav Parashar**	Head, Animation and VFX Department	Scope Global Skills University, Bhopal
5.	**Mr. Akhilesh Rajput**	Director	MAAC (Maya Academy of Advanced Creativity), Bhopal
6.	**Mr. Prakash Mishra**	Assistant Professor	Film Production Department, Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal
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