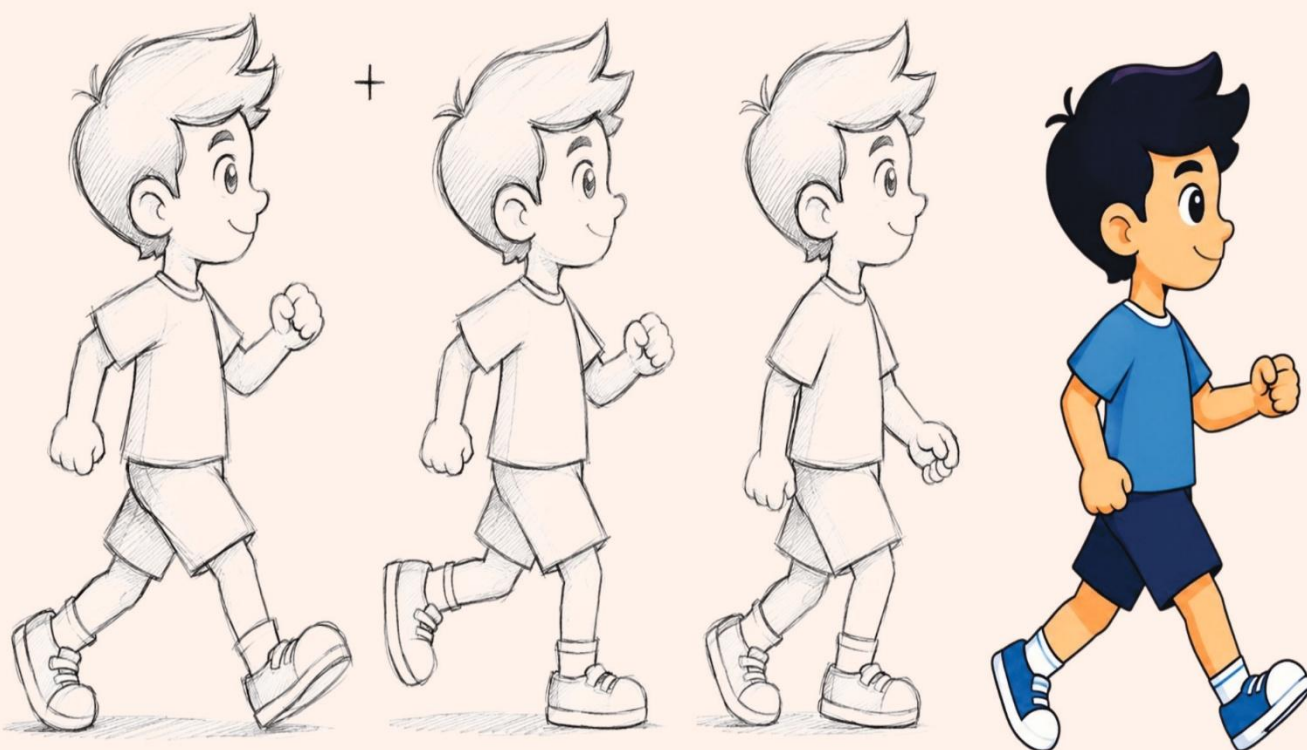


LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

JOB ROLE : ANIMATOR

(Qualification Pack Code: MES/Q0701)

Sector: Media and Entertainment
Classes XI and XII



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एन सी ई आर टी
NCERT

PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION

(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

28 July 2026

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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
Curriculum Development and Evaluation Centre

ACKNOWLEDGEMENTS

The PSS Central Institute of Vocational Education (PSSCIVE) expresses its sincere gratitude to the officials of the Department of School Education and Literacy, Ministry of Education, Government of India, for their financial support in the development of curricula and textbooks aligned with job roles across various sectors.

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.

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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.

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

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.

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	0	1	0	02

	decision or outcome, or to predict outcomes based on values)				
	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

Marking Scheme

Component	Marks
Employability Skills	10
Vocational Skills (Theory)	40
Practical Work	35
Project Work / Field Visit	15
Total	100

Note: The distribution of marks between theory and practical components shall be in accordance with the assessment guidelines prescribed by the concerned Examination Board and applicable NCVET (National Council for Vocational Education and Training) norms.

8. SYLLABUS

Animator CLASS XI

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 communication	Introduction to communication, importance, elements of communication, perspectives in communication, effective communication	Role-play, group discussion, 7Cs discussion, chart making	03
2.	Demonstrate verbal communication	Verbal communication, public speaking	Phone conversation role-play, speech delivery practice	02
3.	Demonstrate non-verbal communication	Importance, types, visual communication	Role-play, body language discussion, communication activity	02
4.	Speak using correct pronunciation	Pronunciation basics, speaking properly, phonetics, types of sounds	Pronunciation practice activities	01
5.	Apply an assertive communication style	Communication styles, assertive communication, advantages, practice	Group discussions on communication styles	03

6.	Demonstrate the knowledge of saying no	Steps for saying “No”, connecting words	Response discussion, saying “No” activity	02
7.	Identify and use parts of speech in writing	Capitalisation, punctuation, parts of speech	Identification exercises, paragraph writing, sentence construction	03
8.	Write correct sentences and paragraphs	Parts of sentence, objects, sentences, paragraph	Sentence writing, active-passive voice, assignments	02
9.	Communicate with people	Greetings, introducing self and others	Greeting role-play, introduction role-play	02
10.	Introduce yourself and write about oneself	Talking about self, filling forms	Self-introduction practice, form filling	01
11.	Develop questioning skill	Types of questions, open and closed-ended questions	Question framing exercises	01
12.	Communicate information about family	Names of relatives, relations	Family discussion, role-play	01
13.	Describe habits and routines	Habits and routines	Group discussion and activity	01
14.	Ask or give directions to others	Asking directions, using landmarks	Role-play, symbol identification	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 analyze strengths and weaknesses	Understanding self, identifying strengths and weaknesses, interest’s vs abilities	Life aims activity, worksheet preparation	03
2.	Demonstrate personal grooming skills	Grooming guidelines, grooming checklist	Role-play, self-reflection	04
3.	Maintain personal hygiene	Importance, hygiene steps, hand washing	Role-play, assignment	03
4.	Work in a team and participate in group activities	Benefits of teamwork	Assignment, self-reflection	03
5.	Develop networking skills	Benefits and steps of networking	Networking exercise, assignment	03

6.	Understand self-motivation	Meaning, types, building motivation	Motivation activity, assignment	03
7.	Set goals	Goal setting, SMART goals	SMART goal assignment, Goal development activity	03
8.	Apply time management strategies	Importance of time management, effective steps	Checklist preparation, to-do list	03
Total				25

UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) – III

S.No.	Learning Outcome	Theory (8 Hrs)	Practical (12 Hrs)	Duration (20 Hrs)
1.	Create a document using a word processor	Introduction to ICT, Advantages, LibreOffice Writer	Create, save, open documents	02
2.	Identify icons on the toolbar	Status bar, menu bar, icons, functions	LibreOffice and MS Word activities	02
3.	Save, close, open and print documents	Save, Close, Open, Print	Practice in LibreOffice and MS Word	02
4.	Format text in a document	Style, size, alignment, cut-copy-paste, find and replace	Formatting exercises	02
5.	Check spelling and grammar	Spell checker, autocorrect	Grammar and spelling exercises	02
6.	Insert lists, tables, pictures and shapes	Bullets, numbering, tables, pictures, shapes	Practical exercises	03
7.	Insert header, footer and page number	Header, footer, page number, page count	Practical exercises in LibreOffice and MS Word	03
8.	Use Track Changes option	Tracking, managing changes, compare documents	Track Changes activities	04
Total				20

UNIT 4: ENTREPRENEURIAL SKILLS – III

S.No.	Learning Outcome	Theory (10 Hrs)	Practical (12 Hrs)	Duration (20 Hrs)
1.	Differentiate between kinds of businesses	Entrepreneurship, business activities	Role-play on businesses	03
2.	Describe entrepreneurial values	Meaning of value, entrepreneurial values, case study	Role-play	03

3.	Demonstrate attitudinal changes required for entrepreneurship	Entrepreneur vs employee attitude	Interviews	03
4.	Develop entrepreneurial thinking skills	Entrepreneurial problems, problem solving	Problem-solving activity	04
5.	Generate business ideas	Idea creation, business ideas, case studies	Business idea generation	04
6.	Understand customer needs and surveys	Customer needs, customer survey	Survey activity	04
7.	Create a business plan	Business planning, growth principles, case studies	Business plan development	04
Total				25

UNIT 5: GREEN SKILLS – III

S.No.	Learning Outcome	Theory (7 Hrs)	Practical (8 Hrs)	Duration (15 Hrs)
1.	Importance of main sectors of green economy	Ecosystem, food chain, sustainable development, green sectors	Discussions, poster making	06
2.	Recommendations of green economy policies	Green economy policies	Discussions, essay writing	03
3.	Green sectors and stakeholder roles	Stakeholders in green economy	Discussions, solar bulb making	03
4.	Role of government and private agencies	Government and private sector roles	Discussions, poster making	03
Total				15

Animator

Class XI

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	Fundamentals of animation, importance, uses, working, evolution, modern animation era, career options, Artificial Intelligence (AI) in animation	Activity on exploring journey of Indian Animation	06
2.	Describe animation techniques	Traditional and classical animation, computer animation, live-action animation, rotoscoping animation, Computer Generated Imagery (CGI) pipeline development	Flipbook creation, shadow puppetry, and stop-motion clay animation projects	20
3.	Explain the features of different types of animation	Flipbook animation, traditional animation, cut-out animation, clay animation, stop-motion animation, puppet animation, computer animation, animation through frames and motion	Skit-based and role-play activities representing different animation types	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 storytelling	Key features of storytelling, difference between verbal and visual storytelling, importance and significance of visuals in communication, role of emotions in storytelling	Group discussion on principles of visual storytelling	20
2.	Apply principles of animation	12 principles of animation and their application in animation design and movement	Group discussion on principles of animation	10

3.	Demonstrate understanding of production pipeline	Stages of production pipeline: pre-production, production, post-production, in animation as workflow integration	Group discussion on stages of animation production	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	Concept of 2D animation, overview of production pipeline, stages and workflow in 2D animation	Group discussion and presentation on 2D animation workflow	10
2.	Demonstrate understanding of different types of 2D animation	Cell animation, digital animation, stop-motion animation, sand animation, cut-out animation	Field visit to an animation centre and preparation of pictorial chart showcasing animation types	15
3.	Apply 2D animation processes	Walk cycle animation, rotoscoping, cinematographs, software-based animation using Pencil 2D, Adobe Animate, Toon and Boom Harmony, creation of cut-out animation using tweening techniques	Creation of a simple walk cycle animation project	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	Features of 3D modelling, elements, and techniques	Creating a basic 3D character using modelling software	10
2.	Create and edit 3D models	Surface development, texturing, rigging, and animation pipeline in 3D modelling	Object modelling and editing activity using 3D tools	25
3.	Demonstrate applications of 3D modelling in	Applications of 3D modelling in media industries, advantages	Group discussion on real-world	10

	animation and media	of 3D modelling, emerging and future trends of 3D modelling in animation and media industry	applications and presentations on future trends in 3D modelling	
Total				45

Animator

Class XII

Part A: Employability Skills

S. No.	Unit	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 (10 Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
1.	Demonstrate active listening skills	Active listening, listening skills, stages of active listening, overcoming barriers	Group discussion, poster preparation, role-play on effects of poor listening	10
2.	Identify the parts of speech	Capitals, punctuation, basic and supporting parts of speech	Identifying parts of speech, sentence construction	10
3.	Write sentences	Simple and complex sentences, types of objects, active and passive voice, declarative, interrogative, imperative sentences, paragraph writing	Writing sentences and paragraphs, active/passive voice practice, different sentence types	05
Total				25

UNIT 2: SELF-MANAGEMENT SKILLS – IV

S. No.	Learning Outcome	Theory (10 Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
1.	Describe factors influencing motivation and positive attitude	Motivation, intrinsic and extrinsic motivation, positive attitude, stress management	Role-play on stress avoidance, positive thinking activity	10
2.	Describe how to become result-oriented	Result orientation, goal setting	Group activity on life aims	05
3.	Describe self-awareness, personality traits, types and disorders	Self-awareness, personality traits, personality disorders (suspicious, emotional and impulsive, anxious), steps to overcome disorders	Group discussion on self-awareness	10
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 components of a spreadsheet application	Spreadsheet basics, LibreOffice Calc, worksheet components	Identify spreadsheet components	02
2.	Perform basic spreadsheet operations	Data entry, editing, deleting, selecting cells, saving, opening, printing	Working with data in LibreOffice Calc	03
3.	Work with data and format text	Formulas, SUM function, Copy/Move formulas, Cell formatting, Font styles, alignment, highlighting text	Spreadsheet formatting and calculations	02
4.	Use advanced spreadsheet features	Sorting, filtering, password protection	Sorting data activity	03
5.	Use presentation software	Presentation software, LibreOffice Impress, adding text	Practice using Impress tools	02

6.	Open, close and save presentations	Open, close, save, print presentations	Saving and opening presentations	01
7.	Perform slide and text operations	Add/delete slides, format text, alignment, text colour	Font style practice in Impress	04
8.	Use advanced presentation features	Shapes, clipart, images, slide layouts	Slide layout activity	03
Total				20

UNIT 4: ENTREPRENEURIAL SKILLS – IV

S. No.	Learning Outcome	Theory (10 Hrs)	Practical (15 Hrs)	Duration (25 Hrs)
1.	Describe entrepreneurship, entrepreneur types, roles and functions	Entrepreneurship, characteristics, art and science, entrepreneur qualities, types, roles, motivation, risk-taking, start - ups	Group discussion, classroom quiz	10
2.	Identify barriers to entrepreneurship	Environmental barriers, business plan issues, personal barriers	Discussion on fears of entrepreneurship, entrepreneur interview	05
3.	Identify attitudes that make entrepreneurs successful	Entrepreneurial attitude	Activity on entrepreneurial attitudes	05
4.	Demonstrate entrepreneurial attitudes and competencies	Competencies, decisiveness, initiative, interpersonal skills, perseverance, organizational skills	Games, discussions, best-out-of-waste, stress management and time management activities	05
Total				25

UNIT 5: GREEN SKILLS – IV

S. No.	Learning Outcome	Theory (05 Hrs)	Practical (10 Hrs)	Duration (15 Hrs)
1.	Identify benefits of green jobs	Green jobs, benefits, opportunities in agriculture, transportation, water conservation, renewable energy, eco-tourism, construction, waste management	Group discussion on importance of green jobs	08
2.	State the importance of green jobs	Green jobs in reducing emissions, minimizing pollution, protecting ecosystems, climate adaptation	Poster preparation, tree plantation activity	07
Total				15

Animator

Class XII

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	Texturing fundamentals, layout design, UV mapping, line testing, onion skinning, walk cycle modelling, texturing workflows using Autodesk Maya and Adobe Photoshop	Conducting interview of a 3D animation professional. Texturing a 3D shark model. Creating a 3D production pipeline flowchart	30
2.	Demonstrate knowledge of lighting and rigging	Purpose and role of lighting in production, types of lights in Maya software, lighting	Rigging a textured shark model. Lighting the rigged	15

		techniques, role of Lighting Artist, rigging, industry standards, role and importance of lighting in 3D animation production	and textured shark model	
3.	Demonstrate knowledge of post-production activities	Rendering compositing, editing, sound and music	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 (Hrs)
1.	Demonstrate use of edit keys in timeline	Keyframe animation principles, auto-keying, timeline workflow in Autodesk Maya	Hands-on practice using edit keys in animation timeline	10
2.	Demonstrate understanding of frames, timing, frame rate, and keyframes	Frame rate concepts, timing in animation, keyframes, set key workflow and principles	Creating a ball animation using keyframes	15
3.	Create and edit animation sequences using graph editor	Graph editor interface, animation curve manipulation, interpolation concepts	Creating a bouncing ball animation using Graph Editor	15
4.	Create a bouncing ball animation	Types of bouncing ball animation, principles of animation (squash and stretch, ease in/ease out)	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	Video editing workspace, tools and interface, project workflow, timeline navigation, editing standards and practices	Demonstration using and customising the workplace in Adobe Premiere Pro. Identifying and using tools in the Tools Panel	20
2.	Demonstrate knowledge of audio editing and sound design basics	Audio editing workspace, amplitude control, audio editing techniques, multitrack editing, audio rendering principles	Cleaning up an interview recording using Adobe Audition	10
3.	Describe post-production workflow and media export	Major activities in post-production, workflow structure, post production media export settings and formats export	Discussion on post-production workflow and media export process	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
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