CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2020-2021

MULTI MEDIA (CODE NO. – 415)

JOB ROLE: TEXTURING ARTIST

RATIONALIZED CURRICULUM FOR

CLASS–X FOR SESSION 2020-21

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

	UNITS	NO. OF HOURS for Theory and Practical 200		MAX. MARKS for Theory and Practical 100
Part A	**Employability Skills**			
	Unit 1 : Communication Skills-II	10		
	Unit 2 : Self-Management Skills-II	10		
	Unit 3 : ICT Skills-II	10		10
	Unit 4 : Entrepreneurial Skills-II	15		
	Unit 5 : Green Skills-II	05		
	Total	**50**		**10**
Part B	**Subject Specific Skills**	**Theory (In Hours)**	**Practical (In Hours)**	**Marks**
	Unit 1: Surfaces and Materials	30	15	9
	Unit 2: Shading and Texturing	30	15	8
	Unit 3: Texturing in Photoshop and Autodesk MAYA	35	25	7
	Total	**95**	**55**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
	Total			**35**
Part D	**Project Work/Field Visit**			
	Practical File/ Student Portfolio			10
	Viva Voce			05
	Total			**15**
	GRAND TOTAL	**200**		**100**

DETAILED CURRICULUM/TOPICS:

Part-A: EMPLOYABILITY SKILLS

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

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

Part-B – SUBJECT SPECIFIC SKILLS

UNIT 1: SURFACES AND MATERIALS

LEARNING OUTCOMES	THEORY	PRACTICAL
1. **Identify the characteristics of the real life surfaces**	• Real life surfaces in the context of texturing	• Demonstration of characteristics of real life surfaces
2. **Describe the various 3D surfaces and material**	• 3D surfaces and material in the context of texturing	• Demonstration of the characteristics of real 3D surfaces and material
3. **Identify the properties of the surface and material**	• Properties of surfaces and material in the context of texturing	• Explanation of the properties of material and their effect on texturing
4. **Explain the effect of lighting conditions on surfaces**	• Reaction of surfaces to varying lighting conditions	• Demonstration of effects of lighting conditions on different surfaces

Unit 2: Shading and Texturing

LEARNING OUTCOMES	THEORY	PRACTICAL
1. **Identify surface shading properties**	• Types of surface shading properties	• Differentiation of colour and transparency, specular and reflection
2. **Describe Maya material**	• Surface, displacement and volumetric materials	• Explanation of the Maya material • Demonstration of double side shaded surface, layer texture and layer shader
3. **Describe assigning and creation material**	• Creation and assigning materials by the use of hyper shade in MAYA or 3Ds MAX	• Demonstration of texturing using hyper shade in MAYA • Assigning separate material to a group of faces
4. **Describe various texture maps**	• Realistic texturing	• Demonstration of the use of texturing maps
5. **Describe shading network**	• Shading network in MAYA	• Demonstration of the use of shading network in MAYA

Unit 3: Texturing in Photoshop and Autodesk Maya

LEARNING OUTCOMES	THEORY	PRACTICAL
1. **Create colour map**	• Process of creating diffuse map in photoshop • Unrapping the 3D Polygon Object. **(To be assessed in practicals only, _No question to be asked in theory examination from this portion_)**	• Differentiation of pixels and resolution • Demonstration of creating diffuse map
2. **Create bump map and use desaturate command**	• Creating bump in MAYA map in MAYA • Use of desaturate command and high pass filter	• Demonstration of the process to desaturate and high pass filter
3. **Create specular map**	• Use of specular maps • Process of creating specular maps in photoshop and MAYA • Export the UV map to Adobe Photoshop and paint the Texture on UV map **(To be assessed in practicals only, _No question to be asked in theory examination from this portion_)** • Return to MAYA and observe the Texture on 3D objects	• Demonstration of texturing using hyper shade • Assignment of separate material to a group of faces
4. **Demonstrate knowledge of creating seamless textures**	• Diffuse and opacity map, specular, reflection and glow map, hump, normal and displacement map	• Demonstration of the process of displacement, normal, bump map, reflection, specular and glow map • Create textured and painted 3D object, like Pen, Pencil, Chair, House, Tree, Human Face, Human Body in MAYA