CBSE | DEPARTMENT OF SKILL EDUCATION

MULTIMEDIA (SUBJECT CODE - 415)

Blue-print for Sample Question Paper for Class X (Session 2022-2023)

Max. Time: 2 Hours   Max. Marks: 50

PART A - EMPLOYABILITY SKILLS (10 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANSWER TYPE QUESTIONS	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	
1	Self-Management Skills – II	2	2	4
2	ICT Skills – II	2	1	3
3	Entrepreneurial Skills – II	2	2	4
	TOTAL QUESTIONS	**6**	**5**	**11**
	NO. OF QUESTIONS TO BE ANSWERED	**Any 4**	**Any 3**	**07**
	TOTAL MARKS	**1 x 4 = 4**	**2 x 3 = 6**	**10 MARKS**

PART B - SUBJECT SPECIFIC SKILLS (40 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANSWER TYPE QUESTIONS	DESCRIPTIVE/ LONG ANS. TYPE QUESTIONS	TOTAL QUESTIONS
		1 MARK EACH	2 MARKS EACH	4 MARKS EACH	
1	Surfaces and Materials	8	2	2	12
2	Shading and Texturing	8	2	2	12
3	Texturing in Photoshop and Autodesk Maya	8	2	1	11
	TOTAL QUESTIONS	**24**	**6**	**5**	**35**
	NO. OF QUESTIONS TO BE ANSWERED	**Any 20**	**Any 4**	**Any 3**	**27**
	TOTAL MARKS	**1 x 20 = 20**	**2 x 4 = 8**	**4 x 3 = 12**	**40 MARKS**

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Max. Time: 2 Hours   **Max. Marks: 50**

General Instructions:

1. Please read the instructions carefully.

2. This Question Paper consists of **21 questions** in two sections: Section A & Section B.

3. Section A has Objective type questions whereas Section B contains Subjective type questions.

4. **Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.**

5. All questions of a particular section must be attempted in the correct order.

6. **SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):**

    i.   This section has 05 questions.

    ii. Marks allotted are mentioned against each question/part.

    iii. There is no negative marking.

    iv. Do as per the instructions given.

7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**

    i.   This section has 16 questions.

    ii. A candidate has to do 10 questions.

    iii. Do as per the instructions given.

    iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. 1	**Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**	

i.	Which skills are required for self-management?
	    a) Self- Management
	    b) Responsibility
	    c) Time Management
	    d) All of these
		1

ii.	What should a strong password consist of?
	    a) Only letters
	    b) Numbers and special characters
	    c) Name of a person
	    d) Letters, numbers and special characters
		1

iii.	What makes you complete work or studies without others cheering you?
	    a) Self-Confidence
	    b) Communication
	    c) Self- Motivation
	    d) Self-Esteem
		1

iv.	To cut the file or folder, which shortcut key will you use on the computer?
	    a) Ctrl + V
	    b) Ctrl + X
	    c) Ctrl + P
	    d) Ctrl + C
		1

v.	Ravi's customer comes to his store and starts shouting at him. He does not get angry. He listens to what his customer is saying. He is _____.
	    a) hardworking
	    b) confident
	    c) patient
	    d) trying new ideas
		1

vi.	Business is a (an) _____ activity.
	    a) social
	    b) economic
	    c) hazardous
	    d) None of these
		1

Q. 2	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	

i.	What color scheme is used for Y axis in Maya?
	    a) Yellow
	    b) Red
	    c) Green
	    d) Blue
		1

ii.	_____wrap around an object, like gift wrapping, or stick to a flat surface, like wallpaper.
	    a) 2-D Textures
	    b) 3-D Textures
	    c) Diffusement Maps
	    d) Bump Maps
		1

iii.	Which function key is used for Rigging?
	    a) F2
	    b) F3
	    c) F4
	    d) F5
			1

iv.	Which influences the brightness of specular highlights?
	    a) Crease tool
	    b) Specular weight
	    c) UV Mapping
	    d) Blend option
			1

v.	_____in Maya is useful for storing tools and items that are frequently used.
	    a) Shelf
	    b) Channel Box
	    c) Status Line
	    d) Layer Editor
			1

vi.	By default, the value of alpha gain is _____.
	    a) -1
	    b) 0
	    c) 2
	    d) 1
			1

Q. 3	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	

i.	What is the short cut of Selection Tool?
	    a) T
	    b) R
	    c) U
	    d) Q
		1

ii.	Alpha is luminance, it is _____by default.
	    a) On
	    b) Off
	    c) Hidden
	    d) Merged
		1

iii.	The layers can be merged together in to a new layer, this is called _____
	    a) Display layers
	    b) Stamp new layer
	    c) Animation layers
	    d) Creating new layer
		1

iv.	'Texturing artist' in Media and Industry is also known as _____.
	    a) Graphic designer
	    b) Programmer
	    c) Media Artist
	    d) Shading artist	

v.	Which option will control that how much of texture's default color is mixed into texture color?
	    a) Blend
	    b) Color Remap
	    c) Color Contrast
	    d) Alpha gain
		1

vi.	The center location of Maya workspace is called the _____.
	    a) Label
	    b) Specific point
	    c) Central point
	    d) Origin
		1

Q. 4	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**		

i.	What corrects the color or intensity of a texture?
	    a) color balance
	    b) color gain
	    c) color offset
	    d) alpha offset
		1

ii.	In which format, Photoshop document is being saved?
	    a) .psb
	    b) .psd
	    c) .adb
	    d) .php
		1

iii.	Which option will reverses all texture colors?
	    a) Wrap
	    b) Filter
	    c) Invert
	    d) Filter offset
		1

iv.	_____map is a tillable image which gives the color information, but does not contain lighting or height information for the texture.
	    a) Diffuse map
	    b) Displacement map
	    c) Index of Refraction
	    d) UV Mapping
		1

v.	In Maya, materials are also called_____.
	    a) Textures
	    b) Matters
	    c) Surfaces
	    d) Shaders
		1

vi.	Which option is used to control the noise problems while sharpening images?
	    a) Stamp new layer
	    b) High pass layer
	    c) Sharpening the layer
	    d) Flattening the layer
		1

Q. 5	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**	
i.	Which panel lets you to edit the attributes and key values for selected objects? a) Layer Editor b) Channel Box c) Status Line d) Workspace Selector	**1**
ii.	_____ map lets you to describe how an object reflects its surroundings. a) Diffuse maps b) Specular maps c) Reflection maps d) Transparency maps	**1**
iii.	Status line in Maya is located at _____. a) Below the main menu bar b) Bottom of the workspace c) Left side of the workspace d) On the top	**1**
iv.	The color and brightness of light that a material appears to be emitting is called_____. a) Ambient Color b) Incandescence c) Bump mapping d) Diffuse	**1**
v.	_____ adjusts the brightness of the image. a) Color Balance b) Exposure c) Color Gain d) Color Offset	**1**
vi.	The default value for Anisotropy is_____, which means 'isotropic'. a) -1 b) 1 c) 0 d) 2	**1**

SECTION B: SUBJECTIVE TYPE QUESTIONS

Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks)

Answer each question in 20 – 30 words.

Q. 6	Rohan wants to start his own business. Suggest him at least four functions of an entrepreneur.	**2**
Q. 7	What are the factors that affect self-confidence?	**2**
Q. 8	Write two characteristics of Entrepreneurship.	**2**
Q. 9	List the steps to search for information using a web browser. Write at least 2 points.	**2**
Q. 10	Describe two stress management techniques.	**2**

Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)

Q. 11	What is Range Slider?	2
Q. 12	What are Environment textures?	2
Q. 13	What are Tear-off menus? What is their use?	2
Q. 14	What is the use of IOR parameter? Write at least 2 points.	2
Q. 15	What is Surface shading?	2
Q. 16	What is the importance of Roughness?	2

Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)

Q. 17	What are the benefits of using Maya? Write at least 4 benefits in steps.	4
Q. 18	Explain transparency maps and bump maps in brief.	4
Q. 19	What are the essential skills required for being a texturing artist? Write at least 4 skills.	4
Q. 20	What are the uses of Specular Maps? Write at least 3 points.	4
Q. 21	Name the various UV mapping techniques of Maya. Give at least 5 or 6 names.	4

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MARKING SCHEME FOR CLASS X (SESSION 2022-2023)

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1. Please read the instructions carefully.
2. This Question Paper consists of **21 questions** in two sections – Section A & Section B.
3. Section A has Objective type questions whereas Section B contains Subjective type questions.
4. **Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 2 hours.**
5. All questions of a particular section must be attempted in the correct order.
6. **SECTION A - OBJECTIVE TYPE QUESTIONS (24 MARKS):**
    i. This section has 05 questions.
    ii. There is no negative marking.
    iii. Do as per the instructions given.
    iv. Marks allotted are mentioned against each question/part.
7. **SECTION B – SUBJECTIVE TYPE QUESTIONS (26 MARKS):**
    i. This section contains 16 questions.
    ii. A candidate has to do 10 questions.
    iii. Do as per the instructions given.
    iv. Marks allotted are mentioned against each question/part.

SECTION A: OBJECTIVE TYPE QUESTIONS

Q. No.	QUESTION	Source Material (NCERT/PSSCIVE/ CBSE Study Material)	Unit/ Chap. No.	Page no. of source material	Marks
Q. 1	**Answer any 4 out of the given 6 questions on Employability Skills (1 x 4 = 4 marks)**				
i.	d) All of these	**CBSE Study Material**	**2**	**50**	**1**
ii.	d) Letters, numbers and special characters	**CBSE Study Material**	**3**	**93**	**1**
iii.	c) Self- Motivation	**CBSE Study Material**	**2**	**61**	**1**
iv.	b) Ctrl + X	**CBSE Study Material**	**3**	**83**	**1**
v.	c) patient	**CBSE Study Material**	**4**	**99**	**1**
vi.	b) economic	**CBSE Study Material**	**4**	**101**	**1**
Q. 2	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**				
i.	c) Green	**CBSE Study Material**	**1**	**6**	**1**
ii.	a)2D Textures	**CBSE Study Material**	**2**	**46**	**1**
iii.	b) F3	**CBSE Study Material**	**1**	**18**	**1**
iv.	b) Specular weight	**CBSE Study Material**	**3**	**99**	**1**
v.	a) Shelf	**CBSE Study Material**	**1**	**16**	**1**
vi.	d) 1	**CBSE Study Material**	**2**	**48**	**1**
Q. 3	**Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)**				
i.	d) Q	**CBSE Study Material**	**1**	**17**	**1**
ii.	b) off	**CBSE Study Material**	**2**	**48**	**1**
iii.	b) Stamp new layer	**CBSE Study Material**	**3**	**91**	**1**
iv.	d) Shading artist	**CBSE Study Material**	**1**	**38**	**1**
v.	a)Blend	**CBSE Study Material**	**2**	**50**	**1**
vi.	b) Origin	**CBSE Study Material**	**1**	**6**	**1**

Q. No.	QUESTION	Source Material (NCERT/PSSCIVE/ CBSE Study Material)	Unit/ Chap. No.	Page no. of source material	Marks
Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)				
i.	a)color balance	CBSE Study Material	2	48	1
ii.	b) .psd	CBSE Study Material	3	67	1
iii.	c) Invert	CBSE Study Material	2	49	1
iv.	a)Diffuse map	CBSE Study Material	3	65	1
v.	d) Shaders	CBSE Study Material	2	40	1
vi.	b) High pass layer	CBSE Study Material	3	92	1
Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)				
i.	b) Channel Box	CBSE Study Material	1	16	1
ii.	c) Reflection maps	CBSE Study Material	3	117	1
iii.	a)Below the main menu bar	CBSE Study Material	1	16	1
iv.	b) incandescence	CBSE Study Material	3	114	1
v.	b) Exposure	CBSE Study Material	2	47	1
vi.	c) 0	CBSE Study Material	3	104	1

SECTION B: SUBJECTIVE TYPE QUESTIONS

Q. No.	QUESTION	Source Material (NCERT/PSSCIVE/ CBSE Study Material)	Unit/ Chap. No.	Page no. of source material	Marks
Answer any 3 out of the given 5 questions on Employability Skills in 20 – 30 words each (2 x 3 = 6 marks)					
Q. 6	Answer- The main functions of an entrepreneur are: 1. Decision Making: An entrepreneur must be a good decision taker. His decision can determine the profit and loss of the company. 2. Division of Income: Income must be divided amongst the different factors of production. Even if there is a loss, the income must be divided accordingly. 3. Management Control: An entrepreneur must possess good managerial skills to control the activities of a company. 4. Risk taking and uncertainty: An entrepreneur must have skills to calculate the risk and strength to face any uncertain situations. (Any other function of an entrepreneur)	CBSE Study Material	4	99	2
Q. 7	Answer- Factors that affect self-confidence are:- a) When we think we cannot do a particular work. b) When we keep thinking of our past mistakes and feel bad about it, instead of learning from them.	CBSE Study Material	2	18	2

	c) When we expect to be successful at the first attempt itself and do not try again. d) When we are surrounded by people who have a negative attitude, which is reflected in their speech.				
Q. 8	Answer- 1. Ability to take up risks. 2. Believe in hard work & discipline 3. Financial literacy & money management skills. 4. Effective planning & execution.	**CBSE Study Material**	**4**	**96**	**2**
Q. 9	Answer- To see the information on the various websites, you need an Internet Browser. An Internet Browser is an application or a software program on your computer or laptop which helps you visit the various websites. Some examples of browsers are Google Chrome, Mozilla Firefox and Internet Explorer. Searching for information: Do the steps below to search for information on the Internet. – Open an Internet browser - Type the topic, on which you want information, in the search box and hit the Enter key. The search results having the required information will be displayed. Click Firefox icon to open Firefox Mozilla browser and search for information.	**CBSE Study Material**	**3**	**92**	**2**
Q. 10	Answer -1. Physical Exercise - When stress affects the brain, rest of the body also feels the impact. Physical exercise in the form of walking, skipping or for that matter indulging in any sports has been found to relieve stress as they stabilize mood, improve self-esteem and induce sleep. 2. Yoga -Yoga is a school of Hindu philosophy reduces stress, which includes a series of postures and breathing exercises practiced to achieve control of body and mind.	**CBSE Study Material**	**2**	**51**	**2**
Answer any 4 out of the given 6 questions in 20 – 30 words each (2 x 4 = 8 marks)					
Q. 11	Answer -The Range Slider lets us to set the start and end time of your animation. If we want to focus on a smaller portion of the whole animation, playback range can also be used.	**CBSE Study Material**	**1**	**17**	**2**

Q. 12	Answer- Environment textures are commonly used either as backgrounds for objects in our scene or as reflection maps.	**CBSE Study Material**	**2**	**46**	**2**
Q. 13	Answer- We can display menus as separate windows. This is helpful when we use a menu repeatedly. Pull down the menu and click the tear-off line at the top. Tear-off menus always display on top.	**CBSE Study Material**	**1**	**18**	**2**
Q. 14	Answer- 1. IOR (Index of refraction) parameter defines the material's Fresnel reflectivity and is by default the angular function used. 2. IOR will define the balance between reflections on surfaces facing the viewer and on surface edges. 3. IOR is basically used for materials like plastic, glass or skin and metal-ness for metals.	**CBSE Study Material**	**3**	**103**	**2**
Q. 15	Answer- Surface shading is a combination of the basic material of an object and any textures applied to it. Some of the basic attributes of materials include color, transparency and shine.	**CBSE Study Material**	**2**	**40**	**2**
Q. 16	Answer- The importance of Roughness:- 1. Roughness controls the glossiness of the specular reflections. 2. The lower the value, the sharper the reflection. In the limit, a value of 0 will give you a perfectly sharp mirror reflections while 1.0 will create reflections that are close to the diffuse reflection. We should connect a map here to get variation in the specular highlight.	**CBSE Study Material**	**3**	**100**	**2**
Answer any 3 out of the given 5 questions in 50– 80 words each (4 x 3 = 12 marks)					
Q. 17	Answer - Benefits of using Maya:- 1. Working in Maya software increases productivity. 2. Complicated or realistic effects can be easily applied with the various tools of Maya. 3. There are many tools in Maya that help animators to focus on their creativity and workflow. 4. Working in Autodesk Maya help the animators to perform in real background.	**CBSE Study Material**	**1**	**3**	**4**

Q. 18	Answer- i) Transparency Maps: - 1. By mapping a texture to the Transparency attribute of an object's material, we create a transparency map which lets us to make parts of an object opaque, semi-transparent, or entirely transparent. ii) Bump Maps: - 1. By mapping a texture to the bump attribute of an object's material, we create a bump map which lets us to add the illusion of surface bump detail to a surface.	**CBSE Study Material**	2	52	4
Q. 19	Answer -Essential Skills for being a texturing artist are: 1. The ability to work within a team of other Texture artists or independently. 2. A commitment to creative collaboration within the team and with other departments. 3. Proactive and excellent communication, organization and interpersonal skills. 4. Creative problem solving skills.	**CBSE Study Material**	1	38	4
Q. 20	Answer – The uses of Specular Maps are: 1. Some surfaces are shinier than others. By mapping a texture to the specular attribute of an object's material, we create a specular map which lets us to describe how shine appear on objects. 2. Specular highlights show the places on the object where the light sources are reflected at consistent angles; reflections on an object show, among other things, light bounced from surrounding objects. 3. Specular highlights depend directly on the view (camera), not on the position of the light, like diffuse shading does. 4. The size of a specular highlight on a surface makes the surface look either flat or shiny.	**CBSE Study Material**	3	98	4
Q. 21	Answer- The various UV mapping techniques of Maya are:- 1.Automatic UV mapping 2. Planar UV mapping 3. Cylindrical UV mapping 4. Spherical UV mapping 5. User defined UV Mapping 6. Best Plane mapping 7. Camera UV mapping	**CBSE Study Material**	2	54	4