Enrolment No._____

SARVAJANIK UNIVERSITY

W-2024 Date: 02-12-24 Time: 09:30 am to 12:30 pm
Regular and Backlog Exam

M. Interior Design I - Semester– I EXAMINATION

Course Code: **MIID11102** Total Marks: **180**

Course Name: **FUTURISTIC MATERIAL AND SYSTEM INTEGRATION-I**

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Support your answers with neat clean sketches wherever necessary.
5. Support your answers with examples wherever necessary

Q1.	**Answer the following 3 Marks each**	30
	1. Define Futuristic: **2. List the CONCERNS FOR THE FUTURE materials** **3. Futuristic materials are derived on which parameters** **4. List any five FUTURISTIC MATERIALS FOR INTERIORS** **5. Define: Ecological Footprint.** **6. What is the life span of cork tree and how many times can it be stripped thru its lifecycle?** **7. In which forms is cork available in the market?** **8. Explain the role of module system integration with respect to Futuristic materials** **9. Explain Self -healing concrete** **10. Explain Timber Terrazzo**	
Q.2	**Answer in detail - (Any TWO)**	30
	1. Why using sustainable building materials makes sense economically as well as ecologically. **2. Explain the method for extraction of cork. Differentiate between agglomerated cork and expanded cork.** **3. How can you conceptualize futuristic materials and technologies explain briefly with examples? / With the flow chart Conceptualize Futuristic materials and further Explain each one in brief with a relevant example.**	
Q.3	**Write Short Note on (Any Six)**	30
	1. Ecological Footprint. **2. Mycelium** **3. Pinatex** **4. 3 R's** **5. Criteria for futuristic material** **6. characteristics of cork & purpose for its applications.** **7. Materials Used for 3D printing**	

Q.4	Answer in Detail (ANY TWO)(15 Marks each)	30
	1. Explain Radiant cooling system for commercial use. 2. ExplainResidentialPEXPlumbingsystemofplumbing 3. Explain AHU System for HVAC System.	
Q.5	Answer in Detail (ANY THREE)(10 Marks each)	30
	Q.1 Explain material importance in Design. Q.2 Which factors or parameters affecting the selection of materials for designs? Explain any 3 important ones. Q.3 What is compound material? Propose one, which is not existed and explain its ingredient's importance. Q.4 Can we convert construction waste to a futuristic material? Why and how?	
Q.6	Answer the following (ANY ONE)	30
	(A) Eco vision Environmental Resources is plastic waste management site in Surat which was visited by you to understand the waste converted into a futuristic material, explain how collection, segregation, is done at the site. (B) Explain the process how a membrane and a rigid plastic waste are converted into different types of granules. (C) Give application of granules. OR (A) Define Recycling, upcycling, Down cycling and sustainability. (B) Explain the properties and characteristics of Recycling, upcycling Down cycling and sustainability. (C) Give examples of transformation of Recycling, upcycling Down cycling and sustainability.	