BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: B.ARCH **SEMESTER : 4th**
BRANCH: ARCHITECTURE **SESSION SP/2024**

SUBJECT: AR253 SITE PLANNING & LANDSCAPE ARCHITECTURE

TIME: 3 Hours **FULL MARKS: 50**

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
***4*. Before attempting the question paper, be sure that you have got the correct question paper.**
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

			CO	BL
Q.1(a)	Provide a technical explanation of the elements of design (line, form, etc.) and principles (balance, proportion, etc.). Illustrate their application with clear sketches, demonstrating their impact on landscape composition.	[5]	CO2, CO4	
Q.1(b)	Examine how light, as a landscape design element, can be used to express various design principles. Support your analysis with illustrative sketches.	[5]	CO1,CO2 CO4	
Q.2(a)	Critically analyze through sketches, the concept of "synthesis" in site planning. Discuss how data from previous stages is integrated to form a cohesive design vision. List the key elements of site planning, focusing specifically on those relevant to synthesis.	[5]	CO1, CO2, CO4	
Q.2(b)	Provide a meticulous breakdown of the site analysis process. Enumerate its specific steps, explaining the type of data collected at each stage, and its direct impact on design decisions.	[5]	CO1,CO2 CO4	
Q.3(a)	Analyze the symbiotic relationship between site topography and site engineering. Discuss the importance of understanding natural landforms, and how engineering solutions are employed to realize design concepts while addressing stability and drainage.	[5]	**CO2, CO3**	
Q.3(b)	Define a retaining wall, outlining its structural purpose. Illustrate different retaining wall types (e.g., gravity, cantilever) with sketches. Discuss their applications in landscape design, considering both function and aesthetics.	[5]	**CO1,CO2 CO4**	
Q.4(a)	Imagine a space of 30m x 20m play space for a nursery school. Design (through sketches) and Analyze the essential landscaping elements for a nursery school environment. Consider safety standards, developmental needs, and opportunities for sensory engagement. Prioritize features that promote both active play and quiet exploration.	[5]	CO1,CO2 CO4	
Q.4(b)	Explain with sketches about the contrast in the design philosophies and aesthetics of Indian Mughal Gardens and Vedic Gardens. How do they reflect different cultural values and relationships with nature?"	[5]	CO1, CO3, CO5	
Q.5(a)	Explain through sketches- 1) Rock Gardens 2) Butterfly Gardens 3) Bog Gardens	[5]	CO1, CO3, CO5	
Q.5(b)	Explain through sketches about the difference between Chinese Gardens and Japanese Gardens in Landscape architecture.	[5]	CO1,CO2 CO4	

:::::25/04/2024 M:::::