Salahddin University	Question Bank	Module: Architectural Design 3&4
Collage of Engineering	2021-2022	fall and spring Semesters
Architectural Department		Design Staff

## **Question Bank**

- 1. Define Design process.
- 2. What is Matrix in Design process? (Enhance your answer by sketching)
- 3. How to convert a matrix to a bubble chart to zoning? (Enhance your answer by sketching)
- 4. Select points for site analysis for a project. (Enhance your answer by sketching)
- 5. What is architectural concept?
- 6. What are the treatments that must be followed to design the building on the sloping land?
- 7. Explain the gradation that exists in residential buildings from the public zone to the private zone? (Enhance your answer by sketching)
- 8. Determine the shape of the triangle in the kitchen. (Enhance your answer by sketching)
- 9. What is the best view and orientation for the living room in the Kurdistan region?
- 10. What is the best view and orientation for bedrooms in the Kurdistan region?
- 11. Determine the best location and orientation for the lab in the school building.
- 12. Count the spaces needed for a learning cluster for students from stages 1 to 3. (Enhance your answer by sketching)
- 13. Count the spaces needed for a learning cluster for students from stages 4 to 6. (Enhance your answer by sketching)
- 14. Determining the direction of buses in school garages. (Enhance your answer by sketching)
- 15. Draw a classroom for 32 students on a scale of 1/50; including furniture and dimensions. (Enhance your answer by sketching)
- 16. What furniture should be in the classroom? (Enhance your answer by sketching)
- 17. How to design a lobby in a learning cluster? (Enhance your answer by sketching)
- 18. Determine the location and orientation of multipurpose hall in school building. (Enhance your answer by sketching)
- 19. Explanation of the bus stop and its necessity in the school building. (Enhance your answer by sketching)
- 20. How to treat pedestrians in the school building on the sloping land? (Enhance your answer by sketching)
- 21. How do the different functions linked to each other in the school buildings? (Enhance your answer by sketching)
- 22. Design an outdoor learning terrace for 32 students on a scale of 1/50. (draw the plan and elevation)
- 23. What is annex room in learning block? (Enhance your answer by sketching)
- 24. What is the difference between a classroom and an outdoor learning terrace?

- 25. What are the relations between the learning cluster and the outdoor learning terrace? (Enhance your answer by sketching)
- 26. Draw a chair for the students from grades 1 to 3 in a classroom. (draw plan and elevation Scale 1/50)
- 27. Draw a table for the students from grades 1 to 3 in a classroom. (draw plan and elevation Scale1/50)
- 28. Draw a chair for the students from grades 7 to 9 in a classroom. (draw plan and elevation Scale 1/50)
- 29. Draw a table for the students from grades 7 to 9 in a classroom. (draw plan and elevation Scale1/50)
- 30. Explain the needs of handicapped students in the school building. (Enhance your answer by sketching)
- 31. Draw the plan of toilet for handicapped students in the school building. Scale 1/50
- 32. Designing the lobby of a learning block for students from grades 7 to 9. (draw plan and section scale 1/50)
- 33. What is the best orientation for the class room in the school building?
- 34. Draw a restaurant in school building on a scale of 1/50; including furniture and dimensions.
- 35. What is the best place for the reception room in the house? Why?
- 36. What is the best orientation and place for bed rooms in the house? Why?
- 37. Draw a master bed room in a villa on a scale of 1/50; including furniture and dimensions.
- 38. What does mean daily activities and night activities in the house building?
- 39. What is the best view and orientation for dining room in the house?
- 40. Count the area needed for parking 50 vehicles in a school building. (Enhance your answer by sketching)
- 41. Draw a sketch for kitchen, dining and living room on a scale of 1/50; including furniture and dimensions.
- 42. Draw a plan and section of multipurpose hall in the school building on a scale of 1/50. (plan and section)
- 43. Draw an administration building in the school building on a scale of 1/50.
- 44. Determine the best location and orientation for the house.
- 45. Give an opinion of shelter design for students in a school building. (Enhance your answer by sketching)
- 46. Draw personal lockers for 16 students from grades 7 to 9 in a classroom. (draw plan and elevation Scale 1/50)
- 47. Draw a library in school building on a scale of 1/50; including furniture and dimensions.
- 48. Draw a master bed room in villa on a scale of 1/50; including furniture and dimensions.
- 49. What dose eco-friendly house means? Why we need our house to be eco-friendly?
- 50. What are the main problems with our house design and how we can resolve them?
- 51. What are the spaces that priorities to be oriented to sun orientation in house design?
- 52. What is the best orientation building in our region? Why? Support your answers by giving some examples
- 53. What are the main spaces in a house? Draw the relationship matrix between them and then transformed to zoning.
- 54. What is the brain storming and how can we bring a reliable concept to our design?

- 55. What is the difference between analogy and metaphor in architecture concept?
- 56. In psychological side, what types of colors can be use in the primary school?
- 57. What is the impact of green school design on the building uses?
- 58. Analyze the selected site area according to the environmental issues.
- 59. Analyze the site area according to its boundary.
- 60. What is concept development? Use some sketches to support your answers.
- 61. Design a small house with all needed requirement spaces with in 100m2, scale 1/50
- 62. Design a villa with all basic requirements on 1000m2 with in two floor, Scale 1/50
- 63. Design a plan and a section for a classroom including all needed standard for the tables, chairs, smartboard, windows ....etc., scale 1/50
- 64. How can we achieve sustainable school design?
- 65. What area the three main component of sustainable house?
- 66. Design a school classrooms cluster for the grade 1-3, scale 1/50, is there any difference in design while we design for the grad 6-9? Give some example with your answers.
- 67. What are the factors to be considered in the design of a library building?
- 68. What are the requirements for elementary school design?
- 69. What is an ideal kitchen layout in **restaurant** for school building? (Enhance your answer by sketching)
- 70. Why is **outdoor learning** important in elementary schools?
- 71. What do you put in a school playground for grade 1,2,and 3?(just count)
- 72. What are the numbers of a car parking for 40persons, how to calculate them?
- 73. In your opinion, school building is a functional or form building.....
- 74. Design a **multipurpose hall**, the basic layout of the hall is a free shape with maximum of 500 seats, the basic dimension 25\*40.(plan ,section and front of elevation ,scale 1:50 )
- 75. How to design shelter (**waiting area** for students and teachers) of car parking space. Support your answers by drawing sketches and including **access** students from main entrance to entrance of classroom )
- 76. Design of **administrative office** in school building (number of staff 25 members) should be including (plan ,section and main elevation)
- 77. What are **activities outside** of the classroom for grade 7, 8, and 9? (Examples and mention)?
- 78. What are the criteria for selecting site of school building?
- 79. What are the factors to be considered when designing a laboratory? explain it
- 80. Which is the best orientation for classroom? Why? Explain it?
- 81. Explain types of space organization through sketch?
- 82. How you select type of circulation in educational building?
- 83. Define school and its function and design criteria?
- 84. What are specifications of modern design for educational building (elementary school)?
- 85. Design space program for a elementary school of 150 students?
- 86. Compare local elementary school design with international primary school design?
- 87. How you develop local elementary school?
- 88. Modify local classroom design for students to increase their comfort?
- 89. Identify best shape for elementary school at mountain?

- 90. Select right color composition for elementary school
- 91. Design a colorful classroom for student's age from 10 to 12 years old?
- 92. How you enhance activity in elementary school?
- 93. How you motivate students through design?
- 94. Design modern library using contrast color?
- 95. Analyze three local libraries and three international library, then compare design solution?
- 96. Identify best design criteria for local elementary school growth?
- 97. Explain role of color composition in elementary school?
- 98. Sketch three mass model identify which type suitable for elementary school?
- 99. Draw modern landscapes that enhance student activity and productivity?
- 100. Explain types of educational building?