## Question Bank for (Architecture Design) - 3<sup>rd</sup> Stage

Design Staff:

**Q1:** There are diverse types of movements in projects, draw a sketch explaining Linear movement.

**Q2:** There are diverse types of movements in projects, draw a sketch explaining Radial movement

Q3: For your sport center project, Draw a bubble diagram for the plans

Q4: For your sport center project, Sketch the zoning of the project

**Q5:** school has been designed in the site shown below: Design only the parking lot for the project, in Scale 1:500 with all the necessary dimensions.

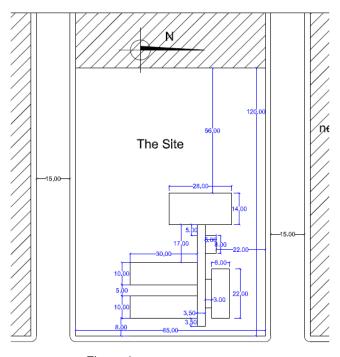


Figure 1

 $\bf Q6: {\it Design}$  a general Toilet for a Shopping Center (Male) and (Female)

4 WC + 8 Washbasins for each.

## Note:

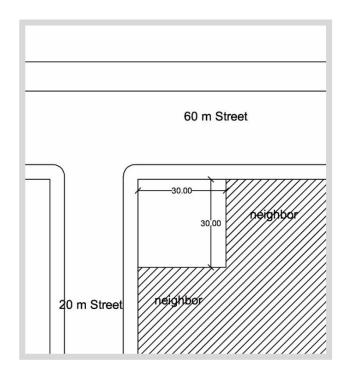
- 1- The design should depend on the architectural standards.
- 2- Mention all the dimensions.

**Q7:** Through your research study of local and international examples, mention the name and the main concept of five similar examples for international sport centers.

**Q8:** Through your research study of local and international examples, mention the name and the main concept of five similar examples for international mixed use projects.

**Q9**: Design of a Flower Showroom on the given site by: first writing the program, then sketching the requirements below:

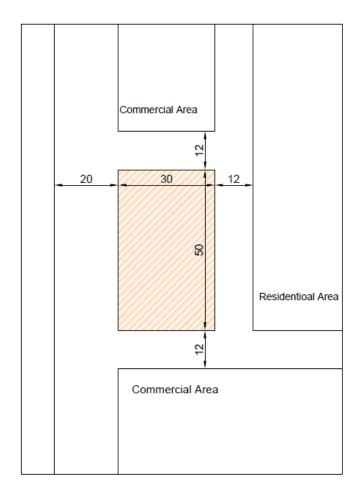
a. Plans with surroundings (1:50)
b. 2 Elevations (1:50)
c. 1 Section (1:50)



**Q10:** Design of a Engineering Bureau on the given site by: first writing the program, then sketching the requirements below:

d. Plans with surroundings (1:100)e. 1 Elevations (1:100)f. 1 Section (1:100)

g. 3 D View



- Q11. What is the difference between architectural design and other design disciplines?
- Q12. Discuss the elements of architecture concepts with examples.
- **Q13.** "The intangibles are more pertinent for a designer". Discuss this statement with your observations.
- **Q14.** Is the scope of architecture merely limited to organization of space, or something much more?
- Q15. How does architectural design affect human behavior in?
- **Q16.** The allocation and placing of furniture decides the utility of space in residential projects. Discuss.
- **Q17.** In sport center project, do the term "circulation and space usage" have any connections? Give reasons for your answer.

- **Q18.** The language of architecture has plan, section and elevation. Discuss their relationships and give examples on mixed use projects?
- Q19. What factors do you consider when you are asked to design a sport center?
- **Q20.** What is circulation? Give a brief account of the different elements of circulation in sport center projects.
- **Q21.** What is the impact of variations in horizontal and vertical circulations on the human mind? Discuss in general.
- **Q22.** Vertical circulation as an important element of architectural design is the outcome of the fast changing world. Discuss.
- **Q23.** What is the role of "scale" in an architectural composition? Discuss this theme with illustrations.

## **Q24.** Write short notes on:

- Space usage
- Vertical circulations
- Horizontal circulation
- Light and form
- Scale
- Proportions
- Form and function
- · Light and interior
- · Pattern and Texture
- Elements of Architecture
- Q25. What is the architectural concept in general and explain the purpose of architectural concept in any building design process?
- **Q26.** What are the possible notions/ ideas that can shape the architectural concept or a concept can be driven from? Explain your answers with examples.
- **Q27.** What are the main types of architectural concepts in general? Enrich your answers with precedents for each type.
- **Q28.** In the process of transmitting any idea into architectural concept and form, what kind of metaphorical translation (direct or indirect) is most sensible and generally leads to a more solid and expressive design concept? Give reason and examples for your answer.

- **Q29.** Should an architectural design concept be evolved from one "Big Idea" or a set of smaller conceptual scenarios?
- Q30. When you first start building up your concept for any project design, what are the main consideration or elements that can be taken into account?
- Q31. How a building typology can affect the architectural concept (considering different parameters of Form, Function, Purpose, Aesthetic values, Users etc.)? Explain your answer in relation to both projects of **Sport Centre** and **Mix-used Residential Tower.**
- Q32. What are the connection between site characteristics/ elements and the concept development of a building?
- Q33. In what possible ways, the physical and socio-cultural parameters of the exiting context can influence the design concept? Explain your answers with regard to the context of **Erbil** City.
- **Q34.** What is the role of design brief or design programme in elaborating and developing the concept at any given project?
- Q35. The narrative and storytelling is a vital role of any peace of architecture; what features can provide a foundation to your concept development and shaping the story?
- Q36. Why the form generation stages are important in the concept development process and how they can help you in justification and reasoning of your idea?
- Q37. What tools or methods can assist you in the process of creating and delivering the meaningful concept as an architectural student?
- **Q38:** In the Olympic sport centre, there should be allocated stages for spectators. Specify the area required for each spectator seating, then specify the width of the corridor in front of it? Enhance your answer with drawings.
- Q39: Draw the standard dimensions (width \*length) for each of the basketball, volleyball, and handball fields? Then specify the total dimension of M.P.H. when all 3 fields are gathered in one field for an indoor Multi-Purpose Hall (M.P.H.) in an Olympic project?

**Q40:** Draw the circulation routes of players, spectators, staff, and trainers in an M.P.H. field used for Olympic purposes? Specify why some of these circulations should not intersect with each other?

**Q41:** When you design a spa for the Olympic sport centre, should you provide a view on the outside or not (In-Out relationship)? Explain in detail? Similarly, does Gym(fitness) require a view on outside landscape or not? Why? Explain the advantages and disadvantages.

**Q42:** What is the difference between an Olympic swimming pool and a non-Olympic (recreational) swimming pool in terms of size, dimensions, shape, and functional requirements?

**Q43:** What is the minimum corridor width for a shopping mall for its series of shopping units? Explain what factors affect determining these corridor widths? Explain your answer with drawings.

**Q44:** What is the difference between hypermarket, supermarket, and department stores in shopping malls? Explain in detail.

**Q45:** What are the differences between residential point towers, single load gallery towers, and double load gallery towers in Mixed-Use residential buildings? Explain the advantages and disadvantages of each?

**Q46:** How do you specify the number of lifts need for a 20-floor point tower block that is used by 100 families across all its floors? Then mention the difference between ordinary lifts and service lifts in residential Highrise buildings?

**Q47:** There are claims that many residential high-rise buildings are notorious for lack of social interaction and community spirit, how do you develop the social sustainability aspects and overall sense of ownership in high-rise residential buildings?

**Q48:** Draw the changing area: cubicles with clothes locker in the swimming pool. Scale 1/100

**Q49.** Draw the communal changing area: without shoe-removal bench in the swimming pool. Scale 1/100

**Q50.** Draw the communal changing area: with shoe-removal bench in the swimming pool. Scale 1/100

- **Q51.** Draw the changing area: mixed type in the swimming pool. Scale 1/100
- Q52. Draw the plan of non-swimmer's pool. Scale 1/100
- Q53. Draw the section of non-swimmer's pool. Scale 1/100
- **Q54.** Draw some examples of overflow channels details. Scale 1/50
- **Q55.** Draw the plan of diving pool. Scale 1/100
- **Q56.** Draw the section of diving pool. Scale 1/100
- Q57. Draw the plan of Olympic pool. Scale 1/100
- **Q58.** Draw the section of Olympic pool. Scale 1/100
- **Q59.** In Residential and Commercial Units, what is the maximum distance between any location in an occupied room and the Fire escape? Explain it with sketches.
- **Q60.** On Each storey of a Residential or Commercial Building, how many escape routes (minimum) should be available that can lead to the open-air area? Explain it with sketches.
- **Q61.** What is the best orientation for living areas in the residential units? and why?
- **Q62.** Draw a bubble diagram showing the functional relationship of a Residential unit's spaces?
- **Q63.** In terms of size and number of rooms, what are the types of Residential units in a multistorey Residential Building? Mention 5 types and draw an optimum plan for each type.
- **Q64.** For spaces like Bathroom and Kitchen in residential units of a multistorey building, how can you get rid of any type of smell or steam without having windows on the external façade? Explain it with sketches.

- **Q65.** If a space in a residential unit is oriented to a non-preferable direction where the sunrays will directly hit the room through the windows the whole day, what are the possible solutions for this issue? Explain it with sketches.
- **Q66.** Draw three plans for three different arrangements for the Vertical circulation core of a residential building, where each core must include at least 2 elevators, 1 stair, and 1 Mechanical room. (The total area of the core must not exceed 80 m2 including the structure, and the waiting area in front of the Elevators)
- **Q67.** Draw a typical floor plan for a Residential multistorey building with outline dimensions of (50m x 10m), where it must include 4 different types of residential units (studio apartment(s), 1+1 apartment(s), 2+1 apartment(s), and 3+1 apartment(s)), Vertical circulation core(s), Fire escapes, and circulation corridors.
- **Q68.** For a Residential multistorey building in Erbil city, what are the methods and techniques that the architect can use to reduce the impact of summer's high temperatures on the building?
- **Q69.** What is meant by future expansion? What is the purpose of it in the sport center project if so,

for what would it be used?

- **Q70.** How much does the location of the site affect the Sports Center project?
- **Q71.** How many entrances should we have in the mall (podium) of the apartment project? Talk about Them
- Q72. Identify the types of structures for sport centers and briefly describe them
- Q73. What are the benefits of site conditions (topography) in the design of the sport center?
- **Q74.** How can we achieve sustainability in the sport center project?
- **Q75.**How important is the use of color in the interior of Sports Center? If it matters why and if it doesn't matter why?
- **Q76.** Discuss the importance and impact of lighting in the Sport Center project on the players inside
- **Q77.** if there is any? Discuss the impact of the sun path on the form (elevations and roofs)of the Sport Centre
- **Q78.** As a student, how much can you explain the impact of budget on sport center design?
- **Q79.** Do you like residential multistory building or house? Why? Why not?

- **Q80.**What is the best color for the interior residential multistory building when it is small like studio type or 1+1,Why?
- **Q81.** It is a good idea to live in residential multistory building on 12th floor in Erbil city? why? why not?
- **Q82.** How you can design a residential apartment type 1+3, if you have a noisy neighbor in one side of your apartment? why?
- **Q83.**Do you feel that the residential apartment safer or more secure than a house? why? why not?
- **Q84.**Draw and show the different between the plan for residential apartment studio type 1+0 and type 1+1.
- **Q85.**Draw and design the vertical shaft inside the residential apartment type 1+4, and write the benefit point of it.
- **Q86.** For constructing a residential multistory building in Erbil city, which type of material you can use for reducing the summer heat.
- **Q87.** Why there is (Erbil City ) more interested for buying the residential apartment type 1+1, and 1+2?
- **Q88.** Do you feel that the design balcony in residential multistory building is necessary? Why? Why not?