

Khulna University of Engineering & Technology

Department of Architecture

B. Arch 1st Year 2nd Term Regular Examination, 2023

Course No: Arch 1265 Course Title: Building and Finish Material

Full Marks: 210

Time: 03 Hours

- N.B i) Answer any three questions from each section in separate script
ii) Figures in the right margin indicate full marks



Section-A

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|----|--|-----|
| 1. | a) What characteristics make mud a sustainable building material? Discuss it in brief. | 15 |
| | b) Describe the details of cob construction methods with necessary illustrations. | 20 |
| 2. | a) What are the functions of seasoning? Explain different types of artificial seasoning. | 17 |
| | b) Discuss various types of bamboo joints with necessary illustrations. | 18 |
| 3. | a) Why cement is better lime as building material explain briefly. | 15 |
| | b) Write the characteristics of good bricks. | 13 |
| | c) Write short note on 'Clamp Burning'. | 07 |
| 4. | a) Distinguish between wrought iron and cast iron with examples. | 14 |
| | b) Write short notes on (any three): | 3X7 |
| | i. Natural defects of timber | =21 |
| | ii. Test of sand | |
| | iii. RCC (Reinforced Cement Concrete) | |
| | iv. SS (Stainless Steel) | |

Section-B

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|----|---|----|
| 5. | a) What are the specifications of good plaster? | 05 |
| | b) What are the types of finishing in buildings? What type of finishing would you prefer for your place and why? | 30 |
| 6. | a) Mention a few types of special coatings applied in building materials. | 05 |
| | b) Would you prefer to paint a concrete wall or leave it exposed? Rationalize your answer considering multiple factors. | 30 |
| 7. | a) What are the characteristics of good tiles? | 05 |
| | b) What types of tiles would you prefer for private and public use? Rationalize your answer. | 30 |
| 8. | a) What is insulation? | 05 |
| | b) Describe the reasons why A.C.Ps are comparatively a more popular material for contemporary buildings? | 30 |

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Department of Architecture

B. Arch. 1st Year 2nd Term Regular Examination, 2023

Course No: Arch 1255 Course Title: Climate & Built Environment

Full Marks: 210

Time 3 hrs.

- N.B. i) Answer any three questions from each section in separate script
ii) Figures in the right margin indicate full marks



Section A

01. a) How does the earth- sun relationship affect the amount of radiation received on the earth's surface? Explain. 15
b) Briefly explain the earth's thermal balance with diagrams. 20
02. a) What do you understand by urban climate? Discuss the factors causing deviations of the urban climate from the regional macro climate. 5+15
=20
b) Write short notes on: 3x5
=15
I. Microclimate
II. Temperature Inversion
III. Funneling Effect
03. a) Discuss various subjective factors of thermal comfort. 15
b) How does the human body produce and release heat to the environment? Explain with examples. 20
04. a) What is sol-air temperature? 10
b) Explain the heat exchange mechanism of a typical building with necessary illustrations. How can you calculate the heat flow rate? 25

Section B

05. a) Why is the understanding of climate important in architecture? 10
b) Illustrate the ways in which Sangath addressed the climatic adversities of Ahmedabad. 25
06. a) Illustrate in a section how stack effect ensures comfort in a building. 10
b) What type of controls would you implement in your departmental building to ensure better health and thermal comfort? 25
07. a) Describe with necessary diagrams the role of wind, water and clay in the formation of our Bengal Matrix. 20
b) What are the key points to learn from Kashef Mahboob's Friendship Centre in Gaibandha? 15
08. a) What is the most defining strategy employed in the design of Arcadia Education Project? Describe the strategy in brief. 15
b) Which passive design strategies would you follow in designing for a tropical climate like Bangladesh? Elucidate with strategies diagrams. 20

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Department of Architecture

B. Arch. 1st Year 2nd Term Regular Examination, 2023

Course No: HUM 1225 Course Title: Basics of Sociology

Full Marks: 210

Time: 03 Hours

- N.B i) Answer any three questions from each section in separate script
ii) Figures in the right margin indicate full marks



Section-A

1. a) What is civilization? Critically explain the elements of civilization. 15
b) Is there any relation between culture and Architecture? Explain with relevant example from countries around the world. 10
c) "Societies have passed on from one stage to another"- Explain the statement. 10
2. a) What is community? Explain the basic pre-conditions of community. 15
b) Define culture. Describe the elements of culture with examples from your own society. 15
c) What do you mean by cultural hegemony? 05
3. a) Define "Sub Culture". How it is different from counter culture? 10
b) What is society? Explain different types of societies and their evolution. 10
c) What is socialization? Analyze the stages of socialization from the perspective of primary socialization. 15
4. a) What is built environment? Critically explain the relation between Architecture and built environment. 18
b) What is neighborhood? Describe the consequences of built environment on neighborhood relationship. 17

Section-B

5. a) Define globalization with its basic characteristics. 08
b) Do you think globalization is an opportunity or an obstacle for Bangladesh? Write your opinion with proper evidence. 12
c) Describe the factors affecting urban growth in Bangladesh. 15
6. a) Describe the initial types of social control. 08
b) Do you think the role of family as an agency of social control has changed a lot in recent past? Clarify your position with empirical evidence. 15
c) How does property create a social impact to control the human behavior? 12
7. a) Define social stratification. Explain the systems of stratification in Bangladeshi society with impacts. 15
b) Differentiate between sex and gender. Explain the basic features of Gender and Development (GAD). 20
8. a) Explain the organs of the state. Do you think all the organs are functioning properly in current Bangladesh? Why/why not? 20
b) How do you evaluate the significance of the recent student movement in Bangladesh to create social space? 15

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B. Arch 1st Year 2nd Term Regular Examination, 2023

Course No: Arch 1233

Course Title: Art History

Full Marks: 210

Time: 03 Hours

- N.B. i) Answer any three questions from each section in separate script
ii) Figures in the right margin indicate full marks



Section-A

1. a) Works of art are valued not only by artists and patrons but also by the entire culture. 25
Justify the statement mentioning different values of art.
- b) Critically evaluate Greek coins as important artwork of this style. 10
2. a) Discuss the relation of Christianity with early Christian and Byzantine art. 15
- b) Critically evaluate 'New Testament Initial L' as an important part of Romanesque art. 20
3. a) Stained glass window is one of the main features of Gothic style. Explain. 15
- b) Differentiate the characteristic of the door jamb statues in west and south transept facade of Chartres Cathedral. 10
- c) Evaluate Leonardo da Vincis 'Madonna and child with Saint Anne' in your own words. 10
4. a) Write short note on (any 04): 4X7
I. The Holy Trinity =28
II. The Bayeuse Tapestry
III. The Last Supper
IV. Gattamelata
V. The Mona Lisa
- b) Briefly discuss about High Renaissance. 07

Section-B

5. a) How was the human figure portrayed in the emerging years of art? 05
- b) How are the human figures in Baroque art different from those in primitive art? 30
6. a) Differentiate Impressionism from Realism. 05
- b) How would you relate the Van Gogh of 'The Starry Night' to the Edvard Munch of 'The Scream'? 30
7. a) Define the geometric formation of Cubism. 05
- b) Describe the contradictions that shaped the New World Order in the context of sublime art. 30
8. a) Define Bengal Renaissance in brief. 05
- b) Describe the ways in which the new space conception of perspective transformed art from the real to abstract. 30