

L-1/T-2/ARCH

Date: 10/01/2021

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-1/T-2, B. Arch Examinations (Term: January-2020)

Sub: **ARCH 155** (Climate and Design)

Full Marks: 120

Time: 2 Hours

The figures in the margin indicate full marks

USE SEPARATE SCRIPTS FOR EACH SECTION

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**SECTION-A (60 Marks)**

There are **FOUR** questions in this section. Answer **Q.1** and any **TWO** from the rest.

(Special Instruction: **Open Book** Examination)

1. Write short notes: (4x5=20)
  - a) Diurnal temperature
  - b) Psychometric chart
  - c) Comfort Zone
  - d) Thermal Balance of Human Body
  
2. Discuss the basis of classification of Tropical Climate and name the major climatic zones. Compare any five characteristics of warm-humid climate with that of Hot-dry desert climate. (20)
  
3. 'The microclimate of Dhaka city is different from its' surrounding area' discuss the factors causing this climatic deviation. (20)
  
4. Elaborate how human body loss heats in various thermal environment. (20)

**SECTION-B (60 Marks)**

There are **FOUR** questions in this section. Answer **Q.5** and any **TWO** from the rest.

5. Write short notes on: Thermal Capacity; Stack Effect; Air Conditioner; and Wind Scoop. (4x5=20)
  
6. Differentiate between the three basic types of shading devices. Critically evaluate the considerations of using these three devices in the climatic context of Dhaka. (20)

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7. Describe the principle of heat exchange of buildings. How will you calculate heat gain or heat loss of a building? Explain with an example. (20)
8. Justify the functions of ventilation? Illustrate with annotated sketches how opening can be controlled to influence airflow pattern of indoor spaces. (20)

L-1/T-2/ARCH

Date:17/01/2021

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-1/T-2, B. Arch. Examinations (Term: January-2020)

Sub: **ARCH 165** (Building and Finish Material).

Full Marks: 120

Time: 2 Hours

USE SEPARATE SCRIPTS FOR EACH SECTION

The figures in the margin indicate full marks

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### **SECTION-A (60 Marks)**

There are **FOUR** questions in this section. Answer **Q.1** and any **TWO** from the rest.

(Special Instruction: **Close Book** Examination)

1. Answer the followings. (Any Two)
  - (a) Explain your selection criteria of first-class brick for building construction? (10)
  - (b) Describe the properties and application of wrought iron, cast iron and steel. (10)
  - (c) Explain the properties and uses of different types of sand. (10)
2. Application of various structural steel sections in building industry. (20)
3. Describe the making process and uses of terrazzo floor. (20)
4. Describe various technical terms of brick masonry with illustration. (20)

### **SECTION-B (60 Marks)**

There are **FOUR** questions in this section. Answer **Q 5** and any **TWO** from the rest.

(Special Instruction: **Close Book** Examination)

5. Answer the followings. (Any Two)
  - (a) Describe the various components of oil-based paint. (10)
  - (b) Illustrate the modern glass manufacturing process. (10)
  - (c) Describe various defects in timber with sketches. (10)

6. What are your considerations of painting as an architect? (20)
7. Describe different methods of timber seasoning. (20)
8. Describe any four types of wall finish material and its advantages. (20)

L-1/T-2/ARCH

Date:13/01/2021

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-1/T-2, BARCH Examinations (Term: January-2020)

Sub: **ARCH 175**, (Art History)

Full Marks: 120

Time: 2 Hours

The figures in the margin indicate full marks

USE SEPARATE SCRIPTS FOR EACH SECTION

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### **SECTION-A (60 Marks)**

There are **FOUR** questions in this section. Answer **Q.4** and any **TWO** from the rest.

(Special Instruction: **Open Book Examination**)

1. Describe the term "Pictorial Narration" through elaborating two examples of Sumerian Art History with simple annotated sketches and illustrations. (18)
2. Describe the four "Pompeian Styles" of Roman wall painting with simple illustrations. (18)
3. Explain Greek Pottery Art through an example with simple annotated sketches. (18)
4. Write short notes on Cave Painting, Hieroglyph and Stained Glass Painting. (3x8=24)

### **SECTION-B (60 Marks)**

There are **FOUR** questions in this section. Answer **Q.5** and any **TWO** from the rest.

(Special Instruction: **Open Book Examination**)

5. In which "ism" artist tried to capture the light quality and portray the prevailing moment of an event/environment through multiple canvases? Explain that "ism" with examples. (20)
6. Describe the painting style and subject matter of the paintings of artist S M Sultan and Shilpacharja Zainul Abedin. (10+10=20)
7. Describe and illustrate Cubism and Abstract Expressionism Art Styles with examples.(10+10=20)
8. Give short notes on the following: (2x10=20)
  - a. "Chiaroscuro" technique of painting.
  - b. "Op Art" and "Futurism".

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-1/T-2 B.Arch Examination- January 2020

Sub: **HUM 147** (Introduction to Sociology)

Full Marks: 120

Time 2 Hours

The Figures in the margin indicate full marks

**USE SEPARATE SCRIPTS FOR EACH SECTION**

There are 02 page(s) in this question paper.

**SECTION – A**There are **FOUR** questions in this section. Answer any **THREE**.

1. (a) How do you define physical environment and man-made environment? (10)  
(b) 'Everything is connected to everything else' – explain in terms of human ecology. What are the negative impacts of global warming? (10)
2. (a) 'Private property is the terra firma of capitalism' – explain this statement on the basis of the nature of capitalism. (10)  
(b) Define human migration. Critically discuss the Malthusian Theory of Population. (10)
3. (a) What are the factors that influence a city's growth? Discuss the disadvantages of megacities. (10)  
(b) What are the social differences between 'pre-industrial cities', 'industrial cities' and 'post-industrial cities'? (10)
4. (a) What is meant by refuse, reduce, reuse and recycle (4Rs)? Give examples. (10)  
(b) Briefly discuss the sources of social change. (10)

**SECTION – B**

There are **FOUR** questions in this section. Answer any **THREE**.

5. a) 'Sociological imagination is an unusual type of creative thinking for understanding social relationships'- Justify this statement with a suitable example. (10)
- (b) Briefly discuss the functionalist theoretical perspective of sociology. (10)
6. (a) What do you understand by social inequality? Explain the nature of caste system of social stratification. (10)
- (b) Discuss the different types of social mobility. (10)
7. (a) 'Ethnocentrism is a habit to judge other ways of life by the standards of our own group'- Explain. (10)
- (b) Briefly discuss the different types of social norms. (10)
8. Write short notes on any **two** of the following: (20)
- (a) In group and out group.
- (b) Social networks and virtual world.
- (c) Ascribed status and achieved status.