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**SECTION – A**

There are **FOUR** questions in this Section. Answer Q. no. 1 and any **TWO** from the rest.

1. Write short notes on the followings (any two): **(10×2)**
  - (a) Earth's Thermal Balance
  - (b) Climate Change
  - (c) Temperature Inversion
  
2. (a) 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. **(25)**
  
3. What do you understand by the term 'Site Climate'? Discuss the factors causing deviations of the urban climate from the regional climate. **(25)**
  
4. What do you understand by thermal comfort? Discuss the thermal balance and regulatory mechanisms of a human body in detail. **(25)**

**SECTION – B**

There are **FOUR** questions in this Section. Answer Q. No. 5. and any **TWO** from the rest.

5. Write short notes on any TWO of the followings: **(10×2=20)**
  - (a) Functions of ventilation
  - (b) Shadow angle
  - (c) Stack effect
  
6. (a) How to design openings of a building to ensure cross ventilation? **(15)**  
(b) Describe the air flow patterns around buildings. **(10)**
  
7. (a) Describe heat exchange processes of buildings. **(15)**  
(b) Define – 'conductance' and 'transmittance'. **(10)**
  
8. Describe the three basic types of shading devices. Discuss the considerations of using those devices in a building of Dhaka city. **(25)**

**SECTION – A**

There are **FIVE** questions in this Section. Answer Q. no. 1 and any **THREE** from the rest.

1. Explain the physical Characteristics of Concrete' in terms of strength, Durability and workability. What are the functions of Cement ingredients? Mention the factors that affect the properties of Concrete. (15+5+5=25)
2. What are the basic constituents of Brick Clay? Explain the functions and desirable conditions of Brick Clay for a good Brickwork. (5+10=15)
3. Explain the common use of building stones in Bangladesh. Discuss the physical properties and uses of 'Granite' as a building material. (5+10=15)
4. Write short Notes on the following. (Any Three) (5×3=15)
  - (a) Portland Cement
  - (b) Harmful Constituents of Brick clay.
  - (c) Geological Classification of Stones.
  - (d) Sandstone
5. Discuss the general properties of stone for Building Construction. (15)

**SECTION – B**

There are **FIVE** questions in this Section. Answer Q. no. 6 and any **THREE** from the rest.

6. Explain with 'Sketches' the application process of 'Two" floor finish material commonly used in Bangladesh. (25)
7. Explain the following characteristics of clay tiles: (5×3=15)
  - (a) Degree of vitrification.
  - (b) Surface finish
  - (c) Composition of the Tile body

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8. Elaborate with 'Sketches' and 'Float process' of glass manufacturing. (15)
9. (a) What are the constituent parts of paint? (5)
- (b) Explain the following types of paint coating. (2×5=10)
- (i) Pigment Coating
  - (ii) Clear Coating
  - (iii) Bituminous Coating
  - (iv) Rust preventive Coating
  - (v) Heat and Fire resisting Coating.
10. Write short notes on the following (Any Three): (3×5=15)
- (a) Hiding power of paint
  - (b) Fourcault process of Glass manufacturing
  - (c) Cellular glass
  - (d) Pavers
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**SECTION – A**

There are **FOUR** questions in this Section. Answer Q. No. 4 and any **TWO** from the rest.

1. At the end of 18<sup>th</sup> century in Europe, art became ‘a means of expression for the artist’ – explain. (23)
2. What significant changes were brought to the age old tradition of Western art by ‘Impressionism’ and ‘Expressionism’? Describe with examples. (23)
3. Picasso and Braque started a new art movement, which question did they raise and who influenced them? How did they liberate painting from accepted traditional values illustrate through examples. (23)
4. Briefly write on any two topics from the followings: (12×2=24)
  - (a) Surrealism
  - (b) Constructivism
  - (c) Shilpacharya Zainul Abedin

**SECTION – B**

There are **FIVE** questions in this Section. Answer Q. No.9. and any **THREE** from the rests.

5. “A depiction of reality-but a reality in its own right”, explain this statement with a reference to Chinese paintings. (20)
6. (a) Describe the salient features of Greek sculptures with examples. (20)
7. Write down the Egyptian technique of drawing human figures. What changes were made in art during the New Kingdom of Egyptian civilization? (20)
8. Why is the Renaissance period so important in the development of Western art? Describe Chiaroscuro and Sfumato in short. (20)
9. (a) Write short note on any ONE of the followings: (10)
  - (a) Cave Painting
  - (b) Assyrian Low Relief

L-1/T-2/ARCH

Date : 02/02/2016

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-1/T-2 B. Arch. Examinations 2014-2015

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

Full Marks : 140

Time : 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

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**SECTION – A**

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

1. (a) What is sociology? Explain the importance of studying sociology for an Architect. (13 ⅓)  
(b) How can a sociological imagination help you better understand your world? Explain with an example of sociological imagination. (10)
2. (a) Illustrate the stages of social research with a suitable example. (13 ⅓)  
(b) What is socialization? Discuss the importance of family and peer groups as the agencies of socialization. (10)
3. (a) In what ways is globalization just a friendlier term for neo-imperialism? (13 ⅓)  
(b) ‘When a system of social inequality is based on a hierarchy of groups, sociologists refer to it as stratification.’ – R. Schaefer. Elucidate the statement. (10)
4. Write short notes on any **THREE** of the following. (23 ⅓)  
(a) Ethnocentrism.  
(b) Cultural Lag.  
(c) ‘Safety Net Program’ of government of Bangladesh.  
(b) Chronic Poverty.

**SECTION – B**

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

5. (a) How do you define physical environment and man-made environment? (4)  
(b) Define with examples orange category A industry and orange category B industry. (6)  
(c) Briefly explain the negative impacts of global warming. (13 ⅓)
6. (a) What do you know about industrial revolution and capitalism? What are the negative impacts of capitalism on society? (13 ⅓)  
(b) Critically discuss how the technological developments have changed out social and economic life. (10)

7. (a) Explain the various stages of demographic transition theory. (7)  
(b) Write down the factors that have led to the growth of cities. (10)  
(c) What are socio-cultural factors that influence population growth? Discuss in detail. (6 ⅓)
8. Write short notes on any THREE of the following: (23 ⅓)
- (a) Sources of social change
  - (b) Features of capitalism
  - (c) Environmental justice
  - (d) Types of pollution
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L-1/T-2/ARCH

Date : 07/02/2016

BANGLADESH UNIVERSITY OF ENGINEERING AND TECHNOLOGY, DHAKA

L-1/T-2 B. Arch. Examinations 2014-2015

Sub : **ARCH 715** (Aesthetics)

Full Marks : 140

Time : 3 Hours

The figures in the margin indicate full marks.

USE SEPARATE SCRIPTS FOR EACH SECTION

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**SECTION – A**

There are **FOUR** questions in this Section. Answer Q. No. 4 and any **TWO** from the rest.

1. What is meant by Intuition and Imagination respectively by Croce and Collinwood; elaborately discuss various aspects of Expression in Art. (25)
2. Is beauty a part of the object itself or it is a subjective issue the mind of the observer? Describe your own, through regarding aesthetics. (25)
3. What are the limitations of the theory of expression only in Art? Describe the main features of formalism in Art. (25)
4. Write short notes on any two: (10×2)
  - (a) IMAGINATIVE PROJECTION
  - (b) Concept of beauty in middle age.
  - (c) Baumgartner.

**SECTION – B**

There are **FOUR** questions in this Section. Answer Q. No. 5 and any **TWO** from the rest.

5. Write short notes on any two: (10×2)
  - (a) Five theoretical models of aesthetics according to Yuri Borev.
  - (b) Sublime
  - (c) Kents idea of free and dependent beauty.
6. What was Aristotle's position with reference to platonic concept of universal form of beauty? Describe Aristotle's idea regarding scale, disinterestedness and catharsis. (25)
7. Write briefly about Rationalism and Empericism. Discuss the utilitarian view of Socrates and the universal view of Plato regarding beauty. (25)
8. Describe briefly how art was understood in terms of imitation or representation. What was the limitation of that theoretical position? (25)

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**SECTION – A**

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

1. (a) What are the characteristics of Environmental Psychology? (6)  
(b) Briefly discuss theories of environment-behaviour relationship. (17 1/3)
  
2. (a) What are the differences between personal space and territoriality? (6)  
(b) Describe the effects of noise on performance. (17 1/3)
  
3. (a) What are the architectural mediators of Crowding? (6)  
(b) What are the factors related to designing living structures for the elderly people? (17 1/3)
  
4. (a) Clearly draw and properly label Zeisel's design spiral. (6)  
(b) Delineate psychological factors for designing modern classrooms. (17 1/3)

**SECTION – B**

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

5. (a) What does Psychology study? (6)  
(b) Compare the Perspectives of Psychology. (17 1/3)
  
  6. (a) Differentiate between Sensation & Perception. (6)  
(b) Discuss theories of motivation. (17 1/3)
  
  7. (a) What are the different types of reinforcement and Punishment? (6)  
(b) Describe structures of memory. (17 1/3)
  
  8. (a) How is Intelligence quotient (IQ) measured? (6)  
(b) Discuss Prominent theories of Personality. (17 1/3)
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**SECTION – A**

There are **FOUR** questions in this Section. Answer Q. No. 1 and any **TWO** from the rest.

1. Write short notes on (Any Four) of the followings (20)
  - (a) Hyperbolic paraboloids.
  - (b) Shells of revolution.
  - (c) Cable Structure and Networks.
  - (d) Tents.
  - (e) Free Forms.
  
2. (a) What are Metals? Discuss the properties of Metals. (15)  
(b) What is “Stone Masonry”? Discuss the types of Stone Masonry. (10)
  
3. (a) What is “Folded Plate”? Discuss by a Paper Model with a neat sketch. (15)  
(b) How does folded plate work? Discuss with a neat sketch. (10)
  
4. (a) Discuss the difference and similarities between “Truss” and “Space Frames”. Discuss the connecting systems of the members of Truss and Space Frames with neat sketches. (15)  
(b) What is “Buckminster Fuller dome”? How it is a lower cost Shelter? (10)

**SECTION – B**

There are **FOUR** questions in this Section. Answer Q. No. 5 and any **TWO** from the rest.

5. Specify the following building materials related to construction work (Any Four) (20)
  - (a) Vulcanization of rubber
  - (b) Sustainability in construction
  - (c) Aims of Modular Co-ordination
  - (d) Adobe construction system
  - (e) Straw bell walling
  
6. (a) What Thermoplastics and Thermosetting polymers are? How one can recycle plastics? (15)  
(b) What is the method of collecting Natural Rubber? (10)

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7. (a) What is Modular Co-ordination? Define Multi module and planning module. (15)  
(b) What is the advantage and disadvantage of prefabrication? (10)
8. (a) What is Indigenous Material in construction industry? Why is it important? (15)  
(b) Write short notes on four Indigenous Materials. (10)
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