

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE – RAIGAD -402 103
Mid Semester Examination – MARCH - 2019**

Branch: M.Arch (Environmental Architecture) First Year

Sem.:- II

Subject:- Environmental and Ecological Planning

Subject Code: - MAREA1 0200002

Marks: 40

Date: - 13-03 -2019

Time: - 2 Hrs.

- Instructions: - 1. The First question is compulsory**
2. Answer any THREE out of the remaining.

Q. No.1:- Write 2 names for any 5 of the following: 10 Marks

- A. Biotic factors of ecosystem
- B. Abiotic factors of ecosystem
- C. Natural ecosystems
- D. Producers
- E. Herbivores
- F. Consumers
- G. Decomposers

Q. No. 2:- Write short notes on any 2: 10 Marks

- A. Acid rains
- B. Desertification
- C. Climate Change
- D. Global warming

Q. No.3:- Elaborate forest ecosystem and its benefits. 10 Marks

Q. No. 4:- Elaborate strategies to conserve biodiversity. 10 Marks

Q. No. 5:- Discuss water pollution and water quality parameters. 10 Marks

Q. No. 6:- Explain water cycle and oxygen cycle. 10 Marks

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY
LONERE, RAIGAD, 402 103
Mid Semester Examination – March 2019**

Branch: M. Arch (Environmental)	2018 – 2019	Semester II
Subject: Research Methodology		
Subject Code: MAREA10200005		Marks 20
Date: 15-03- 2019		
Time: 1 hour		

Instructions: 1. The first question is compulsory
2. Answer any one out of the remaining.

- Q. 1 Answer any four: 2 x 4
- (a) Illustrate independent and dependent variables with examples.
 - (b) List the various modes of design of experiments?
 - (c) Explain the concept of hypothesis with an example.
 - (d) What is control in the design of experiments?
 - (e) What is an extraneous variable?
- Q. 2 (a) Under what conditions does a research problem exist? Illustrate. 2 x 6
(b) What is the need for a research design?
- Q. 3 (a) What are the components of a research problem? 2 x 6
(b) Explain research design and list the various aspects which are involved in taking design decisions.

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DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE – RAIGAD -402 103
Mid Semester Examination – OCTOBER - 2018

Branch: M.Arch (Environmental) 1st Year

Sem.:- II

Subject:- Climate Responsive Design -II - (Light and Ventilation)

Subject Code: -MAREA10200003

Marks: 40

Date: - 14 -03 -2019

Time: -2 Hours

- Instructions: -**
1. The First question is compulsory
 2. Answer any THREE out of the remaining.
 3. Support your answers with sketches wherever necessary

Q. No.1:- Define the following:

10 Marks

- a) Stack Ventilation
- b) Glare
- c) Clear Sky
- d) Ventilation Rate
- e) Full form of ISHRAE

Q. No.2:-Elaborate on the photometric quantities.

10 Marks

Q. No.3:- What are the components of natural light? Please Elaborate.

10 Marks

Q. No.4:- Describe the categories of artificial lighting. State the guidelines for selection of artificial lighting.

10 Marks

Q. No.5:- Define 'Daylight Factor'. Describe different day-lighting strategies for enhancing daylight.

10 Marks

Q. No.6:- Define ventilation. What are the factors that need to be considered while designing a naturally ventilated space ?

10 Marks

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LONERE – RAIGAD -402 103
Mid Semester Examination – OCTOBER - 2018

Branch: **M.Arch (GENERAL)** **First Year** Sem.:- **II**
Subject: - **Low cost building materials and construction**
Subject Code: - **MAR10200003** Marks: **40**
Date: - **13 -03 - 2019**
Time: - **2 Hrs.**

Instructions: - 1. The First question is compulsory
2. Answer any THREE out of the remaining.

- Q. No.1:- Spell the need of alternative construction materials in low cost housing. 10 Marks**
- Q. No. 2:- Write a note on Rammed earth construction technique in detail with sketches 10 Marks**
- Q. No.3:- Write a note on 10 Marks**
- a. Prefabricated Brick Panel System for Roof/Floor**
 b. Precast Reinforced Concrete Plank and Joist Scheme for Roof/Floor
- Q. No. 4:- Discuss vault construction methodology in detail with the help of Nubian Vault Construction technique. 10 Marks**
- Q. No. 5:- Describe Madras terrace roof. 10 Marks**
- Q. No. 5:- Discuss any two mud construction technique by highlighting hydrous state of earth used in it (other than rammed earth) . 10 Marks**

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LONERE – RAIGAD -402 103
Mid Semester Examination – March - 2019**

Branch: M.Arch (General) First Year.

Sem.:- 2nd Semester

Subject:- Building Byelaws, Code & Legislation

Subject Code: - MAR10200006

Marks: 40

Date: - 15 - 03 -2019

Time: - 2 Hr.

**Instructions: - 1. The First question is compulsory
2. Answer any THREE out of the remaining.**

Q. No.1:- Write any two

10 Marks

A. CBD

B. ISBT

C. Truck Terminal

Q. No. 2:- Question No.2

10 Marks

Describe and discuss in detail MIDC Waluj Aurangabad plan along with sketches and conceptual maps.

Q. No.3:- Question No.3

10 Marks

Describe and discuss in detail CIDCO Chikalthana Aurangabad plan along with conceptual plan.

Q. No. 4:- Question No.4

10 Marks

Write in detail about the Neighbourhood Concept and its relevance in planning.

Q. No. 5:- Question No.5

10 Marks

What are different planning organization in and around Aurangabad. Discuss in detail with drawings.

M-arch-Gen

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Mid Semester Examination – OCTOBER - 2018

Branch: M.Arch(GENERAL) First Year

Sem.:- II

Subject:- Sustainable Architecture & Design

Subject Code: - MAR10200004

Marks: 40

Date: - 14-03-2019

Time: - 2 Hrs.

Instructions: - 1. The First question is compulsory
2. Answer any THREE out of the remaining.

Q. No.1 Match the following

10 Marks

- | | |
|-------------------------|----------------------|
| i. Rainfall | Composite |
| ii. Stevenson screen | Rain gauge |
| iii. Vapor Pressure | Moderate |
| iv. Carbon Footprint | Arne Naess |
| v. Delhi | Atmospheric humidity |
| vi. Pune | Temperature |
| vii. Deep ecology | William Rees |
| viii. Planned Obselence | Hygrometer |
| ix. Micro climate | Capitalist Approach |
| x. Humidity | Site level study |

Q. No. 2:- Explain Koppen's classification of climate.

10 Marks

Q. No.3:- Explain the characteristics of hot and dry climate and cold and cloudy climate. 10 Marks

Q. No. 4 write short notes on

10 Marks

- Explain the 3 pier structure of sustainable development
- Explain deep ecology draw supportive sketches.

Q. No. 5:- Explain the following terms

10 Marks

- Fare trade
- Cradle to Cradle
- Green House Gases
- Carbon Footprint
- LCA