

No. of Printed Pages : 03

Roll No.

C-4004

B. Arch. EXAMINATION, Dec. 2018

(Third Semester)

(B. Scheme) (Main & Re-appear)

(ARCH.)

AR209B

BUILDING SERVICES-III

Time : 3 Hours]

[Maximum Marks : 50

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Make relevant sketches wherever necessary. Neatness carries due weightage.

(3-14/22)M-C-4004

P.T.O.

Unit I

1. Explain the climatic zones of India as per NBC, highlighting the characteristics of each zone. **10**
2. (a) Explain the elements which affects the micro-climate of site.
(b) How is the thermal balance of human body maintained ? **10**

Unit II

3. (a) Explain with an example each, showing the process of conduction, conduction and radiation. **10**
(b) Explain the following terms :
Conductivity and surface conductance.
4. Explain in detail the process of heat exchange of buildings. **10**

Unit III

5. (a) What do you mean by sun path diagram and what are its applications ?

- (b) On what factors do the orientation of buildings depends, climatically. **10**

6. Write short notes on the following : **10**
(a) High Performance Glasses
(b) Green House Effect.

Unit IV

7. Compare the approach of ECBC, GRIHA and LEED towards energy efficiency. **10**
8. (a) What are the functions of natural ventilation ?
(b) What are the factors affecting the indoor air flow ? **10**