

5. Write short notes on any *three* of the following with illustrations :

- (a) Visual cues
- (b) Participatory Observation techniques
- (c) Landscape evaluation paradigm
- (d) Photographically studying behaviour.

5+5+5=15

6. (a) Observing and behaviour mapping is a method for describing what people do in the designed environment. Explain how you would observe library visitors in your university library.

- (b) An imageability technique uses adjective rating scale to develop an understanding of people's environmental preferences. In the town of Kinston, North Carolina, a public workshop was held in which residents could evaluate the desirability of four alternative vacant building for housing the future community arts centre.

AA-264

Master of Architecture EXAMINATION, May 2017

(First Semester)

(Re-appear Only)

SUSTAINABLE ARCHITECTURE

MARC-609

Research Methods in Architecture

Time : 3 Hours]

[Maximum Marks : 75

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. All questions carry equal marks.

Unit I

1. (a) James Synder provides a commonly accepted definition of research, “it is systematic enquiry directed towards the created of knowledge.” In the light of this statement discuss the typology (classification) of architectural research methods.
(b) What are types of variables and hypotheses in research ? $7\frac{1}{2}+7\frac{1}{2}=15$
2. (a) If you are conducting a closed-ended questionnaire survey of around 200 respondents in a shopping mall in Delhi, whether you would choose “Probability” or “Non-probability” sampling and why ?
(b) Find the mean, median and mode of this set of data values :
{9, 3, 3, 44, 17, 17, 44, 15, 15, 15, 27, 40, 8}
 $7\frac{1}{2}+7\frac{1}{2}=15$

Unit II

3. Robert Yin provides the following definition :
“A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.” Yin suggest that the purpose of case study can be explanatory, descriptive or exploratory, discuss each with appropriate examples. **15**
4. Experimental research offers the best known scientific way to establish causality or causal relationship between variables. Experimental research involves the use of measurable variables, but with a requirement for a treatment controlled by the researcher. In the light of this statement explain experimental research with appropriate examples. **15**

(b) Which *one* of the following would be the inductive argument (bottom up reasoning and deductive (top down reasoning) ? Discuss answer with reasons.

(i) The members of the Singhal family are Preeti, Neha and Rajan. Preeti wears glasses, Neha wears glasses, and Rajan wears glasses. Therefore, *all* members of the Singhal family wear glasses.

(ii) Bergen is either in Norway or Sweden. If Bergen is in Norway, then Bergen is in Scandinavia. If Bergen is in Sweden, then Bergen is in Scandinavia. Therefore, Bergen is in Scandinavia. $7\frac{1}{2}+7\frac{1}{2}=15$

Art council members rated each alternative using a prepared list of polar opposite adjectives. Discuss the adjectives used to examine future building images and method to analyze the responses to arrive at the conclusions. $7\frac{1}{2}+7\frac{1}{2}=15$

Unit IV

7. How you would structure a research paper on a study of rain water harvesting in residential buildings ? **15**

8. (a) Write parenthetical citation and reference for the given book in Harvard and Chicago style.

Title of the book : The Green Studio Handbook : Environmental Strategies for Schematic Design

Name of author : Alison Kwok and Walter Grondzik

Publisher : Routledge

City of publication : London

Year of Publication : 2011