

Reg. No. :

Name :

Ph.D. ENTRANCE EXAMINATION, NOVEMBER 2022

FACULTY OF ENGINEERING AND TECHNOLOGY

ARCHITECTURE

Time : 3 Hours

Max. Marks : 100

Instructions :

- 1) Answer **any ten** questions each from Section **A** and **B**.
- 2) Each question carries **5** marks.
- 3) No additional Answer sheets will be provided.
- 4) Candidates should clearly indicate the section, Question number in the answer booklet.

Section – A

Research Methodology

- I. Answer any **ten** questions. All Questions carry equal marks.
1. Discuss the methods you will adopt for formulating a Research Problem.
 2. Discuss the salient features of “Intellectual Property Rights”.
 3. What is “Null Hypothesis”?
 4. Explain the methods of ‘Data Adjusting’ and its relevance.
 5. Discuss the advantage of ‘Schedule’ over ‘Questionnaire Survey’.
 6. Discuss briefly ‘Ethics in Research’.
 7. What is ‘Fundamental Research’?

8. Discuss briefly the 'Scientific Journal Rating Systems'.
9. Which are the Major Referencing Styles? Discuss on any one referencing style familiar to you.
10. 'Data cleaning' is important in Research, Discuss.
11. Discuss about Plagiarism in Research.
12. What is the importance of cluster Analysis?
13. Explain Research Design.
14. Discuss Random Sampling Procedure.
15. Discuss Ethnography as a strategy for Qualitative Research.

(10 × 5 = 50 Marks)

Section – B

Architecture

- II. Answer any **ten** questions. All Questions carry equal marks.
1. Differentiate between Plotted housing and Group Housing.
 2. Define a SLUM? What are the methods to be adopted for prevention of SLUMS?
 3. Discuss ADOBE mud wall construction technique.
 4. Discuss Green building Concept. What are its advantages?
 5. Discuss the GRIHA rating system.
 6. Discuss the advantages of Cavity Walls.
 7. What is Reverberation? Discuss the Sabine's expression for reverberation time.
 8. Which are the major Acoustical defects? Explain any one defect.
 9. What do you know about PERT network analysis?

10. What is 'Day light factor'? What are its components?
11. The Munsell Colour system distinguishes colour in terms of Hue, Value and Chroma. Discuss.
12. What is passive Cooling? Discuss the role of water in a passive cooling system.
13. Discuss the Concept of Urban Heat Island.
14. Differentiate POLICY and STRATEGY.
15. Discuss the role of Courtyards in improving wind flow in traditional Kerala residential Architecture?

(10 × 5 = 50 Marks)