Roll No.							Total No. of Pages :	01

Total No. of Questions: 08

## PHD (Civil Engg) RESEARCH METHODOLOGY (CIVIL ENGG)

Time : 3 Hrs. Max. Marks : 100

## **INSTRUCTIONS TO CANDIDATES:**

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWENTY marks.
- 1. a) What is the role of research in present day civil engineering? Explain the significance and uses. (10)
  - b) Write a note on conducting review of literature

(10)

- 2. What's the relationship between PhD thesis outcome and its methodology?
- 3. What are different types of data? Elaborate methods of capturing data digitally Why is proper
- 4. hypothesis formation essential for a good research? Elaborate Null and alternate hypothesis along with situations where one tail and two tailed hypothesis testing would be required
- 5. What is statistical method for dimension reduction? Explain prerequisites for the same?
- 6. Explain various non parametric tests and their applicability.
- 7. Discuss the structure and procedure of scientific reporting with a detailed note on citation methods.
- Highlight the Research Ethics and ethical issues specifically plagiarism?

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