

**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,
LONERE – RAIGAD – 402 103
Summer Semester Examination, May 2018**

Branch: M. Tech. Electronics (EE/ETE/ECE/CE)

Semester: II

Subject with Code: Research Methodology

Marks: 60

[MTECE255D/MTEEE255D/MTETE255D/MTCEE255D]

Date: 23 / 05 / 2018

Time: 3 Hrs.

Instructions to the Students:

1. Each question carries 12 marks.
2. Attempt any five questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly.

Q.No.1 a.) Distinguish between Research methods and Research methodology. (06)

b.) Explain the significance of research. (06)

Q.No. 2 a.) Describe fully the techniques of defining a research problem. (06)

b.) Explain, how the working hypotheses can be developed? (06)

Q.No. 3 a.) What are the parts of research design? Give your understanding of a good research design. Is single research design suitable in all research studies? If not, why ? (06)

b.) How to develop a Research Plan? Explain. (06)

Q.No. 4 a.) Explain the steps of Simulation modeling. (06)

b.) Explain the basic principles of experimental designs. (06)

Q.No. 5 a.) Explain in brief different types of sample designs. (06)

b.) Calculate the Covariance between X and Y using short-cut method. (06)

X :	65	66	67	68	69	70	71	72
Y :	60	65	68	68	70	78	80	88

Q.No. 6 a.) Explain in brief the layout of research report. (06)

b.) Write short note on plagiarism. (06)

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