

Seat No.: _____

Enrolment No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
PHD – SEMESTER 1 EXAMINATION - WINTER - 2019

Subject Code: PHE001

Date: 20-10-2019

Subject Name: Research Methodology

Time: 03:00 PM to 06:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumption wherever necessary
3. Figures to the right indicates full marks

- Q.1 (A) What are the objectives of exploratory research, diagnostic research, descriptive research, and hypothesis – testing research studies? Which research study best fit to your work? Why? 07
- (B) Differentiate between inductive research approach and deductive research approach 04
- (C) How does abstract of a research paper differ from conclusion? 02
- (D) Under what circumstances a stratified sampling is recommended? 02
- Q.2 (A) What are the major citation index services? Explain the importance of citation index services in literature survey 05
- (B) What are the various journal ranking index? Explain each in brief. 05
- (C) Simulation is commonly used in engineering and scientific research. What do you mean by simulation? List minimum three reasons to carry out simulation as part of research work. 05
- Q.3 (A) What are the common features available in bibliography management tool? 05
- (B) What is research? Explain briefly the research process for getting a PhD. 10
- Q.4 (A) Explain the approach to be adopted to read the technical research paper effectively and summarize the research gap identified from your research domain. 10
- (B) Write a statement of purpose (SoP) of a research proposal highlight the novelty, proposed research outcomes and future prospective of the research. 10
- (C) Give reason, multivariate analysis is preferred over univariate analysis in case of simultaneous analysis of more number of variables for a sample of observation 05
