Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

PhD - SEMESTER–I EXAMINATION – SUMMER 2018

Subject Code: PHE001 **Date: 24-05-2018**

Subject Name: Research Methodology (Engineering and Computer Science)

Time: 02.30 pm to 05:30 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **Write in brief:** **15**

A. Write references of journal papers and books from your literature review in standard format

B. What are the important Quality Indices for Research Publications

C. Differentiate between various IP Rights

Q.2 Write a brief project report of your research, stating various components such as: search for the state-of-the-art; scientific investigations to solve the problem; validation, testing and analysis of results; new invention done; further scope of modifying or expanding your hypothesis. **25**

Q.3 Write a short critique on 3 Journal Papers closest to your domain and summarize the Research Gap **15**

Q.4 **Answer very briefly** **15**

1. What is Quantitave Research Methodology?
2. What does Citation index service provide?
3. APA is an acronym for ?
4. Name one of the Intellectual Properties
5. What is a survey to collect data on the entire population called?
6. What is Plagiarism?
7. Explain what you understand by the word Hypothesis
8. What are the precautions to be taken while interpreting data?
9. What are Type I and Type II errors?
10. New Innovation Act 2008 will cover which IPR?
11. What unethical act is covered under Plagiarism?
12. What are the major chapters of a Thesis?
13. Explain H Index
14. How can you rank journals within a discipline?
15. What is a Chi Square Test?

****