

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc./ IMSC Winter 2019-20 Examination

Semester:3/9**Subject Code: 11200201****Subject Name: Research Methodology and Scientific Writing****Date:06/12/2019****Time:02:00 pm to 04:30 pm****Total Marks:60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Essay type (4x2) (Each of 04 marks) (08)**
 (a) Describe with suitable layout of different steps involved in research process.
 (b) What is the necessity of defining a research problem? Explain.
- Q.1. B) Answer the following questions (Any two) (04)**
 (a) Short note (2x2) (Each of 02 marks) (04)
 1. Component of Research problem.
 2. What is interview?
 (b) Difference between Scheduled interview and Questionnaires. (04)
 (c) Short note on Characteristics of a good research report. (04)
- Q.2. A) Answer the following questions. (04)**
 (a) Short note (Each of 02 marks) (04)
 1. Bibliography and its importance in context of research paper.
 2. Precautions for writing research report
 (b) Short note on Layout of research Proposal. (04)
- Q.2. B) Answer the following questions (Any two) (03)**
 (a) Multiple choice questions. (Each of 01 marks) (03)
 1. Research undertaken for knowledge sake is.
 A.) Pure Research B.) Action Research C.) Pilot study D.) Survey
 2. To gain familiarity to achieve new insights into it
 A.) Diagnostic B.) Formulative C.) Hypothesis D.) Descriptive
 3. solution based research studies used for
 A.) Diagnostic B.) Descriptive C.) Applied D.) Both A and B
 (b) Short note on Action research. (03)
 (c) Short note on Field research. (03)
- Q.3. A) Essay type (4x2) (Each of 04 marks) (08)**
 (a) Discuss the characteristic and type of scientific research.
 (b) Explain the meaning and significance of research design
- Q.3. B) Answer the following questions (Any two) (04)**
 (a) Short note on (2x2) (Each of 02 marks) (04)
 1. Experimental and control groups
 2. Variables in context of research design
 (b) Short note on Objective type of research and define research. (04)
 (c) Short note on telephonic method of data collection. (04)
- Q.4. A) Answer the following questions. (04)**
 (a) Short note (2x2) (Each of 02 marks) (04)
 1. What is hypothesis?
 2. What is the difference between Descriptive and Diagnostic research?
 (b) Short note on Principle of Experimental control (04)
- Q.4. B) Answer the following questions (Any two) (03)**
 (a) Multiple choice questions (Each of 01 marks) (03)
 1. Complex random sampling studies is
 A.) Quota sampling B.) Judgement sampling C.) Systematic sampling D.) None
 2. Survey –type research studies usually having
 A.) Small sample B.) Large sample C.) Causal analysis D.) Both A and C
 (b) Write API format of reference with example and explain different variable affecting for good research writing. (03)
 (c) Write note on sample design. (03)