

M.E. Semester-I

RESEARCH METHODOLOGY & COMMUNICATION SKILLS

Date: 24/5/13

Total Marks: 70

Time: 10.30 to 1.30

Instructions:

1. All the questions are compulsory.
2. Figures to the right indicate full marks to the question.
3. Answer each question in separate answer sheet.
4. Indicate clearly the option attempted along with its respective question number.

SECTION - I

Q-1 (a) Define 'research' and differentiate between Conceptual Vs. Empirical research. **05**

(b) List any Five objectives of research. **05**

(c) Differentiate between research methods and research methodology. **05**

OR

(c) Which are the basic postulates on which Scientific method is based? **05**

Q-2 (a) Describe various principles of Scientific Writing in detail. **05**

(b) Describe various types of sampling. **05**

OR

(a) What is a Research Problem? What are the steps involved in formulating the problem? **05**

(b) Write a short-note on 'Development of Working Hypothesis.' **05**

Q-3 (a) Write a short-note on 'Observation Method' of Data Collection **05**

(b) Discuss various limitations of Interview Method. **05**

OR

(a) Explain 'Simple regression analysis.' **05**

(b) How can Chi-square be used in Non-parametric test? **05**

SECTION-II

- Q-4 (a)** Write a detailed note on the Process of Communication. 05
(b) Define 'barrier' and discuss any TWO types of barriers. 05
(c) State the differences between Verbal and Non-Verbal Communication. 05

OR

- (c)** Limitations of Computer-based analysis. 05
Q-5 (a) Write a letter of inquiry to the Manager, Jaico Books, Kolaba, Mumbai 05
asking for a quotation of books required for your research.
(b) As the Chairman of Shantiniketan Housing Society Limited, Vadodara, 05
write a letter of complaint to the Health Department of the municipality
regarding the dumping of garbage opposite the entrance of the society.

OR

- (a)** Write an application for the post of Assistant Professor of Mathematics 05
along with a functional CV to The Chairman, Vidya Sankul, Anand.
(b) As an owner of an on-line sales website for electronic gadgets, you 05
have received a complaint from a customer regarding a defected mobile
handset. Draft a letter of adjustment.
Q-6 (a) Discuss any TWO types of research writing. 05
(b) Explain various steps in writing thesis. 05
OR
(a) Provide any Five guidelines for writing a good thesis. 05
(b) Discuss the importance of 'Works Cited' in a research paper. 05

KADI SARVA VISHWAVIDHYALAYA

Gandhinagar

ME -Semester-I

Subject: Research Methodology and Communication Skills

Date:

Max Marks: 70

Time: 03 hours

Instruction: (1) Answer each section in separate Answer sheet

(2) Use of Scientific calculators is permitted

Section-I

Q.1 (A) Multiple Choice Questions

05

- 1 Mrs. Patel is writing his daily observations of a student and writes, without interpretation, that the student is not completing the class work and is constantly speaking out of turn. Which of the following objectives does he appear to be using?
a. prediction b. description
c. explanation d. exploration
- 2 The development of a solid foundation of reliable knowledge typically is built from which type of research?
a. basic research b. action research
c. evaluation research d. orientational research
- 3 Which of these is not a method of data collection
a. Questionnaires b. Interviews
c. Experiments d. Observations
- 4 A condition or characteristic that can take on different values or categories is called
a. a constant b. a variable
c. a cause-and-effect relationship d. a descriptive relationship
- 5 A variable that is presumed to cause a change in another variable is called
a. categorical variable b. dependent variable
c. independent variable d. intervening variable

(B) Define the term 'Research', Give a comprehensive definition of research and explain its objectives. 05

(C) Describe the various steps involved in Research Process. Enumerate with suitable examples. 05

OR

(C) Explain the various types of Measurement and scaling techniques.

05

Q.2 Write short notes on the Two of the following

10

1. Write the five barriers of Communication and explain them
2. Define the term Communication and explain the cycle of communication
3. Discuss the main elements of Non-verbal Communication
4. Explain the importance of Literature Review in Research Process.

Q.3 (A) Discuss the relevance and types of Variables in Scientific Research

05

(B) Describe various principles of scientific Writing in detail.

05

OR

- Q.3 (A)** Differentiate between fundamental research and Applied research. **05**
- (B)** Discuss the various types of Sampling(Data Collection) **05**

Section-II

- Q.4 (A)** What is a Research Problem? What are the steps involved in formulating the problem? **05**
- (B)** Explain the Format and Contents of a Research Report **05**
- (C)** Define the Role of Computer in research **05**

OR

- (C)** Explain 4 Ps of Presentation. (Planning, preparation, practice, presentation) **05**
- Q.5 (A)** As a student, you want to purchase a Laptop for your personal use. Write a letter of inquiry asking prices, configuration, discount, mode of payment and terms and conditions to The Wipro Technologies, Memnagar, Ahmedabad **10**

OR

- (A)** As the Purchase Manager ABC Computers, 119 Ashram Road, Ahmedabad-380007, you ordered 25 computers from Vision Computers Limited, Nariman Point Road, Mumbai-400002. When the consignment arrived, you found some of the computers were in damaged condition. Write a letter of complaint asking for repair, replacement or compensation. **10**
- Q.6 (A)** Prepare a Chronological Resume with a forwarding letter for the post of 'Junior Engineers, at Elicon Company advertised in the 'Times of India' dated Dec09, 2012. Send your application to The Manager, Elicon Company, V.V. Nagar, Dist: ANAND **10**

OR

- (A)** Write an application for the post of Assistant Professor for Mechanical Department, LDRP- ITR along with a functional CV **10**