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Sardar Patel University
M.Sc. Renewable Energy Semester: Fourth
Course Code: PS04CSYT01
Course Title: Research Methodology
Day and Date: Tuesday, 05.03.2016
Time: 02:30 PM to 05:30 PM

Total Marks: 70

- Note: 1. All the questions are compulsory
2. Figures on the right bracket indicated marks

Q-1 Select the correct answer

(12)

- i. Mean, Median and Mode are
(a) Measures of deviation
(b) Ways of sampling
(c) Measures of control tendency
(d) None of the above
- ii. Research is
(a) Searching again and again
(b) Finding solution to any problem
(c) Working in a scientific way to search for truth of any problem
(d) None of the above
- iii. Which of the following variables cannot be expressed in quantitative terms?
(a) Socio-economic Status
(b) Marital Status
(c) Numerical Aptitude
(d) Professional Attitude
- iv. A research paper is a brief report of research work based on
(a) Primary Data only
(b) Secondary Data only
(c) Both Primary and Secondary Data
(d) None of the above
- v. Which of the following is not covered under Intellectual Property Rights?
(a) Copyrights
(b) Patents
(c) Trade Marks
(d) Thesaurus
- vi. The essential qualities of a researcher are
(a) Spirit of free enquiry
(b) Reliance on observation and evidence
(c) Systematization or theorizing of knowledge
(d) All the above

vii. One of the following is not an open source software:

- (a) D-Space
- (b) Windows
- (c) Green-stone
- (d) Linux

viii. Information is.....

- (a) Raw Data
- (b) Processed Data
- (c) Input data
- (d) Organized data

Q-2 Write short note on following (Any Six)

(18)

- i. Define the term scientific research
- ii. Write the objectives of the research study
- iii. What do you mean by the research design
- iv. Define Dependant, independent variables and extraneous variables
- v. Brief about effective oral presentation
- vi. Write a short note on Review of Research literature
- vii. Write about motivation in research.
- viii. What is impact factor? Brief how it is calculated and used.

Q-3 A. Show the flow chart of research process and describe each steps of research process in brief (5)

B. Explain the problems encountered by researchers in India (5)

OR

Explain the technique involved in defining a problem (5)

Q-4 A. Explain brief the types of the qualitative research study (5)

B. Explain briefly the important concepts relating to research design (5)

OR

Discuss types of quantitative methods (5)

Q-5 A. Explain the layout of the research report. List the types of the report indicating its important features (5)

B. Discuss the precaution required for writing research reports (5)

OR

What is h-index. Explain in details. (5)

Q-6 A. What is plagiarism? Explain in details. (5)

B. Explain Intellectual property Right (IPR). What are the objectives of IPR. (5)

OR

What are the different Intellectual Property rights? Explain in brief. (5)

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