

Computer Applications

- Que (1) Explain different applications of Computer in detail with example.
- Que (2) Explain Block Diagram of Computer and Elements of Computer in detail.
- Que (3) Explain different research issues related to HRIS, CRM and SCM.
- Que (4) Explain different types search options for searching content over Internet.
- Que (5) Explain the points that should be kept in mind while writing any research thesis in detail.
- Que (6) Explain print option in detail to print any research article.
- Que (7) What are formatting and editing? Explain different types of formatting and editing tools available in any word processing software.
- Que (8) Explain different formula/ Functions used in MS-Excel for analysis purpose.
- Que (9) What is chi-Square test? When is it used? How a hypothesis can be tested using chi-square test in MS-Excel, Explain the steps.
- Que (10) How ANOVA test can be performed using SPSS. Also write features of SPSS in detail.
- Que (11) How can you use PowerPoint to present your research work? explain in detail.
- Que (12) MS Excel gives you variety of Graphs and Charts. Illustrate. Also explain the situation where these graphs/ charts can be used and why.

Research Methodology

- Q1. "The research process involves a series of interrelated and intricate steps." Does every research study necessarily need to satisfy all the conditions and be carried out in this sequence? Explain.
- Q2. Select a research problem, enlist the variables in the problem and formulate a theoretical framework to demonstrate the link between the variables under study.
- Q3. Explain the meaning of the following in context of Research design.
1. Extraneous Variable
 2. Experimental and Control Groups
 3. Treatments
- Q4. Explain and illustrate the following research designs:
1. Latin Square Design
 2. Simple Factorial Design
 3. Informal Experimental Design
- Q5. Why probability sampling is generally preferred in comparison to non-probability sampling? Explain the procedure of selecting a simple random sample.
- Q6. What is the meaning of measurement in research? What difference does it make whether we measure in terms of a nominal, ordinal, Interval or ratio scale? Explain giving examples.
- Q7. "Scaling describes the procedure by which numbers are assigned to various degrees of opinion, attitude and other concepts." Discuss. Also point out the basis for scale classification.
- Q8. Critically examine the following:
- a) Interviews introduce more biases than does the use of questionnaire.
 - b) Data collection through projective techniques is considered relatively more reliable.

c) In collection of statistical data commonsense is the chief requisite and experience the chief teacher.

Q9. "Processing of data implies editing, coding, classification and tabulation".

Describe in brief these four operations pointing out the significance of each in context of research only.

Q10. What is the basic purpose of factor analysis? Explain the conditions that are required to be satisfied before carrying out a factor analysis exercise?

Q11. Discuss in detail the steps that a researcher needs to follow to formulate a good research report. Do the criteria become different for different kinds of reports?

Explain with examples.

Q12. In a test given to two groups of students, the marks obtained were as follows:

First Group 18 20 36 50 49 36 34 49 41

Second Group 29 28 26 35 30 44 46

Examine the significance of difference between mean marks obtained by students of the above two groups. Test at five percent level of significance.

Q13. Ten Young recruits were put through a strenuous physical training programme by the army. Their weight (in kg) were recorded before and after with the following results:

Recruit	1	2	3	4	5	6	7	8	9	10
Weight before	127	195	162	170	143	205	168	175	197	136
Weight after	135	200	160	182	147	200	172	186	194	141

Q14. The following data pertains to the numbers of units of a product manufactured per by 5 workmen from four different brands of machines.

Workmen	Machine Brands			
	A	B	C	D
1	46	40	49	38
2	48	42	54	45
3	36	38	46	34
4	35	40	48	35
5	40	44	51	41

Apply two way ANOVA and interpret the results.

Q15. A sample is selected from each of these makes of ropes and their breaking strengths are found as reported below:

I	II	III
72	73	84
80	83	75
76	77	69
75	76	70
71	71	73
	70	76
		80

Using Kruskal Wallis test examine whether there is any difference in their breaking strengths.

Q16. Two drugs are tried on patients for reducing weight. The decrease in weight is given below:

A	7	5	8	9	6	8	10	11	2	4					
B	6	4	5	10	9	8	7	5	6	11	12	7	6	5	8

Apply U test to know whether the two drugs differ significantly in reducing weight.
 Q17. Calculate correlation coefficient, regression coefficients? Also predict the value of Demand when price is 11?

Demand	100	75	80	70	50	65	90	100	110	60
Price	5	7	6	6	8	7	5	4	3	9

Q18. 200 digits were chosen at random from a set of tables. The frequencies of the digits were:

Digit	0	1	2	3	4	5	6	7	8	9
Frequency	18	19	23	21	16	25	22	20	21	15

Apply appropriate test and interpret the results.

Research and Publication Ethics

- Q1. Discuss the Guidelines on Good Publication of the COPE.
- Q2. Write a detailed note on Databases and Research Metrics.
- Q3. Write a essay on Academic Integrity and Research Quality.
- Q4. Write a note on publication ethics.

Advances in Management

Read the attached paper.

1. Critically evaluate the paper "An Examination of variables that predict turnover, staff & caregiver satisfaction in Behavior- Analytic Organizations" considering the basic management principles into consideration.

Review of Literature

All the students are required to submit a report on review of published research on their research topics in the standard format (APA format). This work is to be done under the guidance of their Ph. D. supervisors. The review of literature should be prepared after reviewing at least 40 research papers.

Code Book (format attached along with the assignment) is to be prepared for at least 10 research papers.

The assignment is to be submitted in typed form.

Two copies of report to be submitted on the day of Comprehensive Viva duly forwarded by your Supervisor.