

MAHARAJA GANGA SINGH UNIVERSITY, BIKANER

Ph. D. COURSE WORK IN COMMERCE

Note : In this question paper, 9 questions will be set, 3 from each section. Candidates have to answer 5 questions in all taking at least one question from each section.

SECTION - A

Research : Meaning, Concept, Types & Fundamentals of research, Applied approaches; Experimental & Exploratory research.

Methodology : Collection and tabulation of data, preparation of report, designing of the research project and drafting of questionnaire and interviews.

Research design : Identification, setting of objectives, formulation of hypothesis, census, sample, case study, content analysis.

Classification of Data, Tabulation, Diagrams & Graphs, Measures of Central tendency, Dispersion & Skewness, Correlation & Regression, Trend Analysis.

SECTION - B

Sampling : Different types, Determination of sample size, Selection of samples, Techniques of sampling, sampling of attributes, testing of hypothesis, analysis techniques.

Test of significance : Parametric and Non-Parametric tests including z-test, t-test, Chi-square test, F-test, Analysis of Variance.

Presentation of results of enquiry : Report writing, use of graphs, charts and other techniques.

SECTION - C

COMPUTER APPLICATION IN RESEARCH (ELEMENTARY COMPUTER)

Types of Computer - Mini, Macro, Main Frame and Super Computer, Laptop, Palmtop.

Architecture of Computer System - CU, ALU, Primary Memory : RAM, ROM, Cache Memory, Secondary Memory : CD-RW, DVD, Pen Drive, Hard Disk.

Input-Output Devices - Keyboard, Mouse, Scanner, Voice Recognizer, Web cam, Printer, Monitor, Plotter, Speakers.

Number System and Conversion - Binary, Octal, Decimal and Hexadecimal, Logic Gates.

Computer Language - Machine, Assembly and High Level Language including 3GL and 4GL.

Computer Software - Operating System (Types of Operating System, Introduction to DOS, Windows and Linux), PC to Mobile Bluetooth Software, Application Software (Types of Application Software, MS-Office, Introduction CAD-CAM Software, Introduction to Virus and Anti-Virus Software, Introduction to DBMS.

General Utilities - Nero, Winrar, Adobe Reader, Audio-Video Player.

Computer Networking - Types of Networks, LAN, MAN, WAN, Concept of Topology, Bridge, Router, Gateway, Modem, ISDN, Leased Line.

Internet - TCP/IP, IP Address, WWW, Broad Band, E-mail, E-Commerce, Surfing, Web Browser.

Book Review : Review of Published research work in the relevant field.

References :

1. Schinder & Cooper : Business Research Methods (Tata McGraw Hill, N. Delhi)
2. Levin & Rubin : Statistics for Management (Prentice Hall of India, N. Delhi)
3. C. R. Kothari : Research Methodology
4. S. P. Gupta : Statistical Methods (S. Chand & Co. N. Delhi)
5. Kothari : Quantitative Techniques (Vikas Publishing House, N. Delhi)
6. Mathur, Khandelwal, Gupta : Operations Research (Ajmera Book Co., Jaipur)
7. N. P. Agarwal : Operations Research (Ramesh Book Depot., Jaipur)
8. N. P. Agarwal : Advanced Business Statistics (Ramesh Book Depot, Jaipur)
9. P. K. Sinha : Computer Fundamental (BPB Publication)
10. Rapidex Computer Course (Pustak Mahal)
11. IT Tools and Applications (BPB Publication)