**Course work Class- Room Conference Hall (Ground Floor)/ Room No.-8 Ground Floor)**

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| **#** | **9:15-10:05 AM** | **10:05-10:55AM** | **10:55-11:45PM** | **11:45-12:30PM** | **1:30-3:30 PM** | **3:30-5:00 PM** | **5:00 – 8:00 PM** |
| **Week Days** | **Research Methodology** | **Quantitative Techniques** | **Computer Application** | **Human Values and Ethics** | **Coordinator/ Deptt.** | **Class room/Computer Lab** | **Library** |
| Monday | Dr. Ramneek Jain | Mr. Omprakash | Mr. Yogesh Jakhar | Dr.Sagar Kacchawa | Critical Review  Discussion-Subject  Coordinator | Group Discussion/  Seminar/ Presentations  Among scholars Mr. Yogesh Jakhar | Preparation  assignment |
| Tuesday | Dr. Rakesh Ametha | Dr.Rakesh Kumar Jat | Mr. Yogesh Jakhar (PPT Presentation by scholar) | Dr.Sagar Kacchawa | Critical Review  Discussion-Subject  Coordinator | Group Discussion/  Seminar/ Presentations  Among scholars Mr. Yogesh Jakhar | Preparation  assignment |
| Wednesday | Dr. Rajendra Prasad | Dr.Rakesh Kumar Jat | Mr. Yogesh Jakhar | Dr.Sagar Kacchawa | Critical Review  Discussion | Group Discussion/  Seminar/ Presentations  Among scholars Mr. Yogesh Jakhar | Preparation  assignment |
| Thursday | Dr. Ramneek Jain | Mr. Omprakash | Dr. Yogesh Sharma | Dr.Sagar Kacchawa | Critical Review  Discussion | Computer Lab Practical  Dr. Yogesh Sharma | Preparation  assignment |
| Friday | Dr. O.P. Chahar | Dr. Mahendra Singh | Dr. Yogesh Sharma (PPT Presentation by scholar) | Dr.Sagar Kacchawa | Power point  Presentation/  Assignment | Computer Lab Practical  Dr. Yogesh Sharma | Preparation  assignment |
| Saturday | Dr.Rajender Singh Yadav | Dr. Mahender Singh | Dr. Yogesh Sharma | Dr.Sagar Kacchawa | Power point  Presentation/  Assignment | Computer Lab Practical  Dr. Yogesh Sharma | Preparation  assignment |
| **Sunday** | Dr.Chetan Choudhary/Dr.Mahender Singh/Dr.Sagar Kacchawa | | | | **visiting of nearest tourism/ Regional place (contact person Shri BalkrishnaTibrewala)** | | |

**Academic Year: 2017 - 2018COURSE CONTENTS OF RESEARCH METHODOLOGY**

1. Definitions of research, Objectives of research, Characteristics of research, Research as scientific method, Basic postulates of scientific research, Criteria of good research, Qualities of good research, Scope /significance of research, Problems in research, Role of research in decision making, Factors affecting research in decision making, Types of research .– Dr.Rajender Singh Yadav
2. Research process (an outline) , – Research problem, How to identify a research problem?, Selection of research problem, Sources of research problem, Criteria of selection of research problem, Formulation of research problem, Process involved in defining the problem, Establishment of research objectives. –Dr. Monalisha
3. Review of literature, Purpose of review, How to conduct literary survey? , Sources of literature, Recording the literature, Source cards, Note cards, How to write the review, important points while reviewing literature. Bibliography writing, about ph.d. Guide line. –Dr.Rajendra Prasad
4. Sampling Designs techniques**:** Concepts, Types and Techniques, Sample Size decision Data, Collection, Secondary and primary Data, method & Techniques, Designing questionnaire, Data Preparation , Tabulation, Coding, Editing.

**Scaling techniques:** Concept, types of Scales, rating Scales & ranking scales construction techniques, multi dimensional scalin**g,** how to write references and Bibliography. – Dr. O.P.Chahar

1. Attitude measurement & observation**:** and report preparation motivational research, observation type and layout of research report, precautions in preparing the research report.

Annexure in report, drawing conclusions, giving suggestions and recommendations to the concerned persons., Types of, steps of report writing, precautions in report writing Suggested Readings.

Effective presentation skills, Use of new technology for effective research aids, How to capture and maintain interest during research. .-Dr.Ramneek Jain

\*note in case of absence of any above faculty second option will take classes with prior information /faculty can mutually arrange their classes in case of their absence.

**Note:-Research Methodology classes will be monitor by Dr.Rajender Prasad/ Dr. O.P.Chahar**

**Suggested Readings:**

1. Research Methodology - JJTU Publication
2. Research Methods for Business students: Saunders Lewis, Thorn Hill, and Pearson Education
3. Research Methodology Methods and Techniques: C.R.Kothari, New Age International Publishers
4. Business Research – Cooper 7 Schindler, TataMcGraw Hill – 2006
5. Marketing Research – Beri, Tata McGraw Hill, 1993, 2nd edition
6. Optimization techniques in Engineering –KENT PHI
7. Design of techniques for Science and engineering -MOOR
8. Experimental Designs in Behavioral Research – 1989 – K.Broota – New Age Int. Publisher
9. Methods in Social Research – Goode &Hatt – 2006 surjeet publications
10. Foundations of behavioral Research – Fred Kerlinger 2009 – Surjeet Publications

**COURSE CONTENTS OF QUANTITATIVE TECHNIQUE**

1. Application of central tendency and central dispersion, ANNOVA, Coding Method 2 way ANOVA, – Dr. Rakesh Kumar Jat
2. Co- efficient of correlation, coefficient of determination and rank correlation coefficient, Poison and Normal Distribution , Probability distribution, Binominal, Regression testing. – Dr. Mahender Singh
3. Determination, calculation of standard of estimate,(Standard deviation ,Testing of hypothesis – Tests of significance, Testing of Multinomial Hypotheses, Chi-square Test: Condition of application of Chi square Test –steps Involved, Chi square Test of Independence., ANOCOVA –Techniques and Assumptions.– Dr. Rakesh Kumar Jat
4. Large and Small sample Tests; parametric Test: t- test, F Test. Mr. Omparkash

**\*faculty can mutually arrange their classes in case of their absence.**

**Note:-QT classes will be monitor by Dr. Dr.Mahender Singh**

**Suggested Readings:**

1. Mathematical Statistics – Gupta &Kapoor – Sulthanchand& Sons, New Delhi
2. Research Methodology – JJTU Publication
3. Kothari CR – Quantitative Techniques ( Vikas Publishing New Delhi)
4. Kapoor V.K.- Operations Research (Sultan chand& sons New Delhi)
5. Khandelwal&M.Gupta – Quantitative Techniques (Tata MC Grow – hill publishing Co. Ltd. New Delhi)
6. Agarwal N.P. – Quantitative Techniques
7. D.M.Mithani – Quantitative Techniques

**COURSE CONTENTS OF COMPUTER APPLICATION**

1. Classification of computers, computer memory, Types of software’s: Application and system software’s, operating systems and types, single user, multi user, multi tasking and single tasking, Application of computers for business and research.
2. Data Communication Concepts, Local area network, internet, intranet, Extranet, Web e- mails, search engine- enterprise: E- Communication and E- Collaboration.
3. File handling in window severalvarious of MS office, Ms word: Test formatting, Mail merge, Macro, MS Excel: Features, Various Formulas And M.S Power Point: Creating Presentation and effects.
4. Introduction to SPSS: Definition, Objective and features, Data analysis using SPSS: Data entry, creating variables, switching to data analysis: Frequencies, Recording into different variables, cross tabulations and layers.

**\*Theory classes of computer application will be look after by Mr. Suresh Kumar Meena (HOD),**

**Practical Classes for computer application will be taken by Mr. YogeshJhakhar**

**\*faculty can mutually arrange their classes in case of their absence.**

**Note:-Computer Application classes and Practical will be monitor by Mr. Suresh Kumar Meena.**

**Suggested Readings:**

1. Computer Fundamentals - V.Rajaraman, PHI
2. Computer Fundamentals - Sinha and sinha, BPB Publications
3. Introduction to Computers - Norton, TATA McGraw Hill
4. Computer fundamental and

Introduction to IBM PC -Dr. Pankaj Nagar Manish Soni, RameshBook Depot

1. An introduction to data base system - Desai, Galgotia Publication
2. Computer Network - Tanebaum, Person
3. An introduction to Database System - Date/ Kannan/ Swamynathan, Person
4. Fundamentals of Computers - V.Rajaraman, Prentice Hall

Software suggested -SPSS, Excel Solver

**Vice-Chancellor**