SGT UNIVERSITY
FACULTY OF HOTEL & TOURISM MANAGEMENT

Syllabus for Pre- PhD COURSE WORK

Paper/ S. No	Topics to be Covered	Teaching Hours
***101 Section1	**Research Methodology & Research and Publication Ethics (Paper code 101)**	60
	Introduction and basic concepts in Research Methodology: Meaning of research, characteristics, significance & types of research, research approaches, research plan & its components, Criteria for good research & problems encountered by research scholars. **Identification and formation of research problem**: Necessity & Techniques involved in defining problem, Formulation of research question / hypothesis.	8
Section II	**Research Design:** Concept of research design, independent , dependable & extraneous variables**,** research hypothesis, case study method, descriptive & diagnostic studies, analytic studies, experimental designs- CRD, RBD, LSD & Factorial designs	8
Section III	**Data Collection-** primary & secondary data collection, Case study method etc. Data preparations, processing, analysis & interpretation.	8
	Writing of report- types of reports, stages in preparation, Characteristics, layout structures, documentation, footnotes, Bibliography & References- various methods. Editing final report, characteristics of good report	
Section IV	**Presentation of report/ paper**- Oral, Poster, publication of Paper, critical appraisal of Journal article.	6
	Funding agencies such as DSF, DST, DBT, ICMR, CSIR, UGC etc. Preparing proposal for funding, Role of IPR in research & development	
Section V	**Philosophy and Ethics** **Introduction to philosophy :** definition, nature and scope, concept, branches **Ethics:** definition, moral philosophy, nature of moral judgments and reactions	3

Section VI	**Scientific Conduct** • Ethics with respect to science and research • Intellectual honesty and research integrity • Scientific misconduct : Falsification, Fabrication, and Plagiarism (FFP) • Redundant publications: duplicate and overlapping publications, salami slicing • Selective reporting and misrepresentation of data	5
Section VII	**Publication Ethics** • Publication ethics: definition, introduction and importance • Best practices / standards setting initiative and guidelines: COPE, WAME, etc. • Conflicts of interest • Publication misconduct: definition , concept, problems that leads to unethical behavior and vice versa, types • Violation of publication ethics, authorship and contributor ship • Identification of publication misconduct, complaints and appeals • Predatory publishers and journals	7
	PRACTICE:	
	Open Access Publication: • Open access publication and initiatives • SHERPA / ROMEO online resource to check publisher copyright & self – archiving policies • Software tool to identify predatory publication developed by SPPU • Journal finder / journal suggestion tool viz. JANE, Elsevier Journal Finder, Springer Journal Suggester, etc	4
	Publication Misconduct: A. Group Discussion (2hrs) 1. Subject specific ethical issues, FFP, authorship 2. Conflicts of interest 3. Complaints and appeals : examples and fraud from India and abroad B. Software tools (2hrs) Use of plagiarism software like Turnitin, urkund and other open source software tools	4

	Databases and Research Metrics:	7
	A. Databases (4 hrs)	
	1. Indexing databases	
	2. Citation databases: Web of Science, Scopus, etc	
	B. Research Metrics (3hrs)	
	1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IIP, Cite Score	
	2. Metrics: h-index, g index, i10 index, altmetriics	

***102	**Statistics and Computer Fundamentals**	**60**

Section I	1. Generations of Computer (I-V)
	2. Block Diagram of a Computer
	3. Functions of the Different Units:
	      Input unit, Output unit, Memory unit, CPU (ALU+CU)
	4. Input & Output Devices:
	Input Devices:
	  a. Keyboard,
	  b. Point and draw devices: mouse, joystick, track ball, light pen
	  c. Data Scanning devices: image scanner, OCR, OMR, MICR, Bar code reader, card reader
	  d. Voice Recognition Device
	  e. Digitizers
	Output Devices:
	  a. Monitor
	  b. Printer: laser printer, ink jet printer, dot-matrix printer
	  c. Projector
		5

	5. Memories [Memory hierarchy]
	  a. Registers [Types of Registers]
	  b. Cache Memory
	  c. **Primary Memory**:
	
	      i) RAM
	      a) How data is stored in a RAM
	      b) DRAM and SRAM
	      ii) ROM
	      a) ROM BIOS/ Firmware
	      b) Types of ROM
	  d. Secondary Memories:
	
	i) **Hard disk**
	a) Structure of a hard disk, how data is stored in a hard disk, concept of tracks, sectors, clusters, cylinders
	b) Formatting of hard disc (low level formatting and high level formatting)
	ii) Floppy [data storage mechanism]
	iii) CD [data storage mechanism]
	iv) USB
		5

	6. Software
	
	System Software
	a. Operating System:
	
	   i. Functions of O/S
	   ii. Types of O/S
	b. Program Language Translators:
	i. Assembler
	ii. Compiler
	iii. Interpreter
	c. Utility Programs
	d. Communication Software
	e. Performance Monitoring Software
		5

	7. Application Software 8. Software hierarchy and dependence between the different layers 9. **Computer Languages**: i. Machine language ii. Assembly language iii. High level language	
Section II	**Descriptive statistics:** **Measures of Central tendency**- mean, median, mode **Measures of dispersion**- Range, mean deviation, standard deviation.	5
	Index numbers, Analysis of time series. **Correlation & Regression analysis**	5
	Probability: Binomial Distribution, Poisson Distribution, Normal Distribution. Geometrical distribution, correlated measurements.	5
	Variance- measures of relationship, covariance's, Karl Pearson's Correlation coefficient, Measures of skewness, kurtosis, Spearman Rank correlation.	5
	Sampling & statistical inferences: Types of sampling, Sampling & non-sampling errors, Sampling distribution- distribution of mean, proportion, student' t, Chi-square test, F- distributions, degree of freedom, central limit theorem & statistical inferences	10
	Testing of Hypothesis-test statistics & critical region, test of significant attributes, Tests of mean, proportion, variance, difference of two means, two proportions, two variances. student' t, Chi-square, F distributions Z test, Small sample tests- T Test, F test of equality of variance, large sample tests, normal test. P value approach, power of test. **Anova**- one way & two way techniques	15
***103	**Subject Specific Paper** Curriculum & syllabus will be as per concerned subject and be of Master's level.	45
***104	**Computer Fundamentals and Software Applications : Practical** **MS Office** i) Microsoft Word ii) Microsoft Excel iii) Microsoft PowerPoint **Software** i) MATLAB ii) XPPAUT iii) SPSS iv) Epi Info v) STRATA vi) ProQuest	30

	vii) Delnet viii) SCC ix) J-Gate	

SGT UNIVERSITY

FACULTY OF HOTEL & TOURISM MANAGEMENT

FORMAT FOR COURSE CURRICULUM

Course Title: Advances in Hospitality Operations & Management
Credit Units: 04   **Course Code -**

L	T	P/S	SW/FW	TOTAL CREDIT UNITS
02	-	-	04	04

Course Objectives:

The objective of the course is to make student understand the basic structure organization and function of hospitality industry.

Pre-requisites: Knowledge about basics of Hospitality Industry Operations & Management

Student Learning Outcomes: The student will be able to:

1. The student will be able to understand the various aspects like planning management & control of operations related to the hospitality industry.
2. The course will also explain the marketing & human resource related functions of the hospitality industry.

Course Contents/Syllabus:

	Weightage (%)
Module I: Global Scenario of the Hospitality industry	**20%**
Descriptors/Topics Hospitality industry of world and India. History & origin of hospitality industry, Concepts of Hospitality industry, tenants of hospitality industry(hotels, food service outlets, lodge, inns, airlines, rail and cruise lines, tour and travel operations, events managements, MICE etc). Current trends in hospitality industry. Future of hospitality industry.	
Module II:- Hotel Operations Challenges & Aspects	**20%**

Descriptors/Topics Various operations of hotels (Front Office, Accommodation management, Food Production and F& B Service). Concept of control of different operations of the hotel. Departments and their roles and responsibilities. Interdepartmental coordination and dependence. Importance & objectives of control in hotel operations Security and Engineering, Facility Planning, , Laws related to hospitality	
Module III:- Hospitality Sales & Marketing Techniques	**20%**
Descriptors/Topics The new concepts of Sales & Marketing, types of Service Marketing, Strategic marketing, Social Media Marketing, Segmentation targeting and positioning of hospitality products, New Product development in Hospitality industry, Pricing Strategies in Hospitality product marketing, Marketing research in hospitality industry, Hospitality Products advertising and promotion, Quality Management, Innovation and invention in hospitality marketing.	
Module IV:- Hospitality Learning & Development	**20%**
Descriptors/Topics The modern concept of Human Resource Management, role and objectives of HRM in hospitality, the recent Human Resource Structure , Recruitment, selection, orientation, placement, training & development and retention in hospitality industry. Work Life balance. Supervision in hospitality, Managing Productivity and controlling labor costs, Discipline & managing conflict, team building, motivation, Change management, Time management.	
Module V- Strategic Leadership in Hospitality Industry	**20%**
Descriptors/Topics Introduction to supervision in hospitality, managing productivity and controlling labor costs, discipline and managing conflict, team building, motivation, change management, time management.	

Pedagogy for Course Delivery:
- Lecture
- PPT
- Case Study
- Assignment

Assessment / Examination Scheme

Theory	SW	End Term
50%	50%	100%

Theory Assessment: 50%

Continuous Assessment/Internal Assessment					End Term Examination	Total
Components (Drop down)	**P-1**	**C-1**	**CT-1**	**A**		
Weightage (%)	5	5	15	5	70	100

Field Work / Self Work: 50%

Continuous Assessment/Internal Assessment				End Term Examination		Total
Components (Drop down)		**Field visit**		**Field report**		
Weightage (%)		30		70		100

Text & References:
- Robbins, S.P. 2005, Organizational Theory: The structure and design of organizations, 3rd Ed, Prentice Hall International.
- Marketing Management , Keller & Kotler 14th edition
- Beri, Gc., Marketing Research, Second Edition, Tata McGraw Hill Tourism
- & Cultural Heritage of India by Acharya, Ram, RBSA Publication
- Successful Tourism Planning and Management by Seth, P N, Cross Section Publication, New Delhi

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COURSE CURRICULUM

Course Title: QUANTITATIVE TECHNIQUES

Credit Units: 04   **Course Code:**

L	T	P/S	SW/F W	TOTAL CREDIT UNITS
3	-	-	2	04

Course Objectives:

The objective of the course is to give a conceptual introduction to the field of Statistics (collecting, analyzing, presenting and interpreting data) and its many applications in area of experimental as well as observational research in hospitality and tourism management. The course is application oriented and the mathematical prerequisite is knowledge of algebra.

Pre-requisites: Nil

Student Learning Outcomes:
- Understanding the different types of statistical tool and techniques in research
- Importance of statistics in research

Course Contents/Syllabus:

	Weightage (%)
Module I	**20**
Descriptors/Topics **Introduction** Role of Statistics in Research, Designing a plan for data collection, Exploring and Modeling the Data, Data Structures,Univariate, bivariate and multivariate data, Scales of Measurement, Qualitative and Quantitative data, time series and cross sectional data, Computer and Statistical analysis.**Grouping and Displaying Data to Convey Meaning:** Frequency distributions Dot plot, histogram, ogive, Stem-and-Leaf Display. Cross tabulation, Scatter Diagrams, Trend line.	
Module II	**20**
Descriptors/Topics **Summary Statistics & Corelation:** Measures of Central Tendency and Dispersion. Distribution shape, Five-Number Summery, Box Plot. **Dispersion:** Range, Quartile deviation, Standard Deviation, Variance, Coefficient of Variation.	

Karl Pearson's Coefficient of Correlation, Spearman Rank Correlation, Simple Linear Regression Least Square Method	
Module III	**20**
Descriptors/Topics **Probability & Probability Distributions** Basic terminology, three types of probability, probability rules. Probability Distributions, Random variables, Expected value and variance in decision making, Binomial Distribution, Poisson Distribution, Normal Distribution, Normal Approximation of Binomial Probabilities	
Module IV	**20**
Descriptors/Topics **Statistical Inference** Sampling and Sampling Distribution, Estimation: Point Estimates, Interval estimation for Mean and Proportion (σ known and σ unknown case), Determining the sample size in estimation. Testing Hypotheses: Developing Null and Alternative Hypothesis, Type I and Type II errors, One Sample Tests for Mean and Proportion, Two Sample Tests for Mean and Proportion and Inferences about population variances. Anova, Chi Squard Test.	
Module V	**20**
Descriptors/Topics **Regression and Time Series** Simple Linear Regression Model, Least squares Method, Coefficient of Determination, Model Assumptions, Testing for Significance, Using Regression equation for estimation and prediction, interpreting computer solution, residual analysis. Multiple Regression, Multiple Coefficient of Determination, Model Assumptions, Testing for Significance, Using Estimated Regression Equation for Estimation and Prediction. Logistic Regression. Components of Time Series, Smoothing Methods, Trend-Seasonal Analysis	

Pedagogy for Course Delivery:

> ➢ **Case study**
> ➢ **PPT**

Lab/ Practicals details, if applicable: NA

 List of Experiments:

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)	End Term Examination
100%	-	100%

Theory Assessment (L&T):

	Continuous Assessment/Internal Assessment				End Term Examination
Components (Drop down)	Class Test	Assignment	Viva	Attendance	External Exam
Weightage (%)	15	05	05	05	70

- Internal Components includes: Case study/ Presentations/ Fieldwork/ Viva voce
- At least two internal components must be included

Text & References
- Quantitative Techniques , C. R. Kothari, Vikas Publishing House
- A Textbook of Quantitative Techniques, N. P. Bali, P. N. Gupta, C. P. Gandhi, Firewall Media.
- Quantitative Methods:Theory and Applications, J K Sharma, Macmillan Publication House.

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Course Title: Research and Publication Ethics (RPE)

Credit Units: 2

Course Level: Doctoral   **Course Code:**

L	T	P/S	SW/FW	TOTAL CREDIT UNITS
2	0	0	0	2

Course Description: This course has total 6 modules focusing on the basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.), and plagiarism tools will be introduced in this course.

Course Objective:

Pre-requisites: NIL

Course Contents/Syllabus:

Modules	Weightage (%)
Module I – Philosophy and Ethics	14
Descriptors/Topics 1. Introduction to philosophy; definition, nature and scope, concept, branches 2. Ethics: definition, moral philosophy, nature of moral judgments and reactions.	
Module II – Scientific Conduct	14
Descriptors/Topics 1. Ethics with respect to science, social science and research 2. Intellectual and research honesty and research integrity 3. Scientific misconducts: Falsification, Fabrication and Plagiarism (FFP) 4. Redundant publications: duplicate and overlapping publications, salami slicing 5. Selective reporting and misrepresentation of data.	
Module III – Publications Ethics	22
Descriptors/Topics 1. Publications ethics: definition, introduction and importance 2. Best practices in research / standards-setting initiatives and guidelines: COPE, WAME, etc 3. Conflicts of interest 4. Research and Publications misconduct: definition, concept, problems that lead to unethical behavior and vice versa, publication types 5. Violation of publications ethics, authorship and contributorship 6. Identification of publication misconduct, complaints and appeals 7. Predatory publishers and journals.	

Module IV – Open Access Publishing	14
Descriptors/Topics 1. Open access publications and initiatives 2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies 3. Software tool to identify predatory publications developed by SPPU 4. Journal finder / journal suggestion tools viz. JANE, Elseview Journal Finder, Springer Journal Suggester, etc.	
Module V – Publication Misconduct	**14**
A. Group Discussions 1. Subject-specific ethical issues, FFP, authorship 2. Conflicts of interest 3. Complaints and appeals: examples and fraud from India and abroad. **B. Software tools** 1. Use of plagiarism software like Turnitin, Urkund and other open source software tools	
Module VI – Databases and Research Metrics	**22**
A. Databases 1. Indexing databases 2. Citation databases: Web of Science, Scopus, etc. **B. Research Metrics** 1. Impact Factor of journal as per Journal Citation Report, SNIP, SJR, IIP, Cite Score. 2. Metrics: h-index, g index, i10 index, altmetrics	

Student Learning Outcomes:

At the end of this course, the students will be able to get

    i.   Awareness about the publication ethics

    ii.   Awareness about the publication misconducts

Pedagogy for Course Delivery:

Classroom teaching, guest lectures, group discussion, and practical sessions.

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)	End Term Examination
100%	**------**	**100%**

Theory Assessment (L&T):

Continuous Assessment/Internal Assessment			End Term Examination
Components (Drop down)	**Attendance**	**Class Tests/Quizes**	
Weightage (%)	5	35	60

Text Reading:

References

Bird, A. (2006). *Philosophy of Science*. Routledge.

MacIntyre, Alasdair (1967) *A Short History of Ethics*. London.

P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865

National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition*. National Academies Press.

Resnik, D. B. (2011). What is ethics in research & why is it important. *National Institute of Environmental Health Sciences*, 1–10. Retrieved from https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm

Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179–179. https://doi.org/10.1038/489179a

Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance(2019), ISBN:978-81-939482-1-7. http://www.insaindia.res.in/pdf/Ethics_Book.pdf

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COURSE CURRICULUM

Course Title: RESEARCH METHODOLOGY

Credit Units: 04   **Course Code:**

L	T	P/S	SW/FW	TOTAL CREDIT UNITS
3	-	-	2	04

Course Objectives:

The objective of the course is to familiarize the PhD scholars with research and its various methods.

The focus of the course is applied and decisional. It aims at providing the relevant inputs to the research scholars so that they could study systematically various complex problems and provide information and solutions for the same

Pre-requisites: Nil

Student Learning Outcomes:
- Understanding the different types of research methods
- Understanding the tool and techniques of successful research

Course Contents/Syllabus:

	Weightage (%)
Module I	**15**
Descriptors/Topics **Introduction**: Definitions and types of research; invention, innovation and research; Research, Invention and Axioms, Problem Identification, Research process and steps in conducting research; Review of literature; Planning research – Preparing the Research Proposal, Elements of Research Proposal, Evaluating Research Proposal; Research design; Applications of Research. Science of Logic and Entropy, Macro and micro factors of research environment, Discussion of different classical research papers in different domain, Importance of doctoral confluence or colloquium, Reading Comprehending research papers in leading journals	
Module II	

Designs Exploratory Designs: In-Depth Interviews and Focus Groups; Descriptive Research Designs: Survey Methods and Errors; Observation Techniques, Experiments, and Test Markets; Experimental Designs: Validity and Reliability Concerns with Experimental Research Designs, Improving the Internal and External Validity of Experimental Designs. Types of Experimental Research Designs- Pre-experimental Designs, True Experimental Designs and Quasi-experimental Designs	10
Module III	
Gathering and Collecting Accurate Data Sampling: Theory, Designs, and Issues in Research – Sampling Terminology, Determining Appropriate Sample Sizes, Probability and Nonprobability Sampling, Steps in Developing a Sampling Plan. Overview of Measurement: Construct Development - Abstractness of the Construct, Determining Dimensionality of the Construct, Construct Validity. Scale Measurement - The Nature of Scale Measurement, Properties of Scale Measurements, Four Basic Levels of Scales - Nominal Scales, Ordinal Scales, Interval Scales, Ratio Scales, Attitude Scale Measurements Used in Survey Research. Questionnaire Design and Issues	15
Module IV	20
Descriptors/Topics **Modeling and Validation:** Introduction to Model, Metaphors, Constructs, Relationships, Spatial and Temporal Testing of Model, Predictive Adequacy, Empirical Validity, Falsifiability and Utility, Poppers' Modeling Method, Transformational Modeling, Assumptions Validations, Clinical Validation, Boundary and Components of Models, Measurement Issues of Variables, Logical Adequacy, Explanatory Potential, Utility of the Model, Back Testing, Stress Testing	
Module V	20
Descriptors/Topics **Analytical Tools and Simulation** Quantitative Tools and Qualitative methods of data analysis; Grey Coefficient, Parametric tests, Non Parametric Tools (Sign Test, Mann Whitney U Test, Kolmognovsmirnov Test, KruskalWhalley test), Data Envelopment Analysis, Taguchi Optimization, Bivariate Analysis, Logit and Probit Analysis, Monte Carlo Simulation, Decision Tree Analysis;Advance Multivariate analysis - discriminant analysis, cluster analysis, factor analysis and conjoint analysis; Qualitative Methods:Grounded Theory, Narrative Analysis, Thematic Analysis, Discourse Analysis, Content Analysis, Conversation Analysis, Ethnography, Participant Observation, Interview, Focus Group Discussions, Case Studies, Textual Material: Autobiographical Accounts, Document Analysis	
Module VI	20
Descriptors/Topics	

Report/ Thesis writing: Research Communication, Sources of Publication, API Grading and Publication, Impact Factor and Publication, Abstract, Executive Summary, JEL Classification, Reference Methodology,Dissertation, Research Paper, Working Paper, Conceptual Framework, Indexing, Piracy Status, Authentication Tools, Case Studies, Report Writing, Authentication of Conclusion, Relation between review of literature and finding, Gap analysis, Objectives formulation, Methodological issues, International standard of research report	

Pedagogy for Course Delivery:

- ➤ **Case study**
- ➤ **PPT**

Lab/ Practicals details, if applicable: NA

List of Experiments:

Assessment/ Examination Scheme:

Theory L/T (%)	Lab/Practical/Studio (%)	End Term Examination
100%	-	100%

Theory Assessment (L&T):

Continuous Assessment/Internal Assessment					End Term Examination
Components (Drop down)	Class Test	Assignment	Viva	Attendance	External Exam
Weightage (%)	15	05	05	05	70

- Internal Components includes: Case study/ Presentations/ Fieldwork/ Viva voce
- **At least two internal components must be included**