### BOARD OF STUDIES, DEPARTMENT OF YOGA SCIENCE UNIVERSITY OF PATANJALI, HARIDWAR

### Approval of Agenda proposed by Dean Faculty of Yoga Science and approved by Hon'ble Pro-Vice Chancellor.

	UNIVERSITY of PATANJALI
	Established by Uttarakhand State Legislature Under the University of Patanjali Act No. 4, Year 2006
	" manual
	दिनांकः28.07.2023
	नोट शीट
	विषयः अध्ययन मण्डल की बैठक आहूत किये जाने के सबंध में।
	विषयांतर्गत पतंजलि विश्वविद्यालय के योग विज्ञान विभाग के सत्र 2023–24 हेतु
	अध्ययन मण्डल की बैठक किया जाना को प्रस्तावित है। बैठक की कार्यावली अधोलिखित है।
	पद कं० 1. संचालित पाठ्यकमों की समीक्षा।
	पद कं0 2 लघु शोध प्रबंध संचालन प्रकिया पर विचार।
,0	पद कंo 3. यू०जी०सी० के पत्रानुसार IKS को विश्वविद्यालय के पाठ्यकमों में समाहित करने पर विचार।
	पद कं0 4. नये पाठ्यकमों की योजना बनाता।
	पद कं0 5. वर्तमान में संचालित पाठ्यकमों के सबंध में विचार विमर्श ।
	पद कं0 6. सत्र 2022–2023 में विषय विशेषज्ञों की सूची तैयार करना।
	पद कं0 7. प्रायोगिक कक्षाओं और प्रायोगिक परीक्षाओं के सबंध में विचार विमर्श करना।
	पद कंo 8. विद्या परिषद् की दसवीं बैठक में लिये गये निर्णयों के संबंध में विचार विमर्श करना।
	पद कंठ 9. योग विज्ञान विभाग में आयोजित की जाने वाली कार्याशाला हेतु विषय की समीईक्वा एवं क्षेत्र निर्श्वारण।
	पद कं0 10. अध्यक्ष महोदय की अनुमति से अन्य प्रश्न।
	उपरोक्त कार्य सूची के विषयों के सबंध में निर्णय हेतु अध्ययन मण्डल की बैठक बुलार
	जाना आवश्यक स्वीकृतार्थ एवं आदेशानार्थ प्रस्तुत।
	संकायाध्यक्ष (योग विज्ञान संकाय)
1	
	(माननीय प्रति–कुलपति)
	29/07/22

विभागाध्यक्ष योग विज्ञान विभाग पतंजलि विश्वविद्यालय, हरिद्वार



### UNIVERSITY OF PATANJALI, HARIDWAR Department of Yoga Science

Letter No: DYS/Office /2023-24/17

Dated: 21.09.2023

### **Notice**

As per the directions of Dean, Faculty of Yoga Science, Board of Studies (BOS) Meeting of Dept. of Yoga Science is proposed on 25<sup>th</sup> Sept 2023. Accordingly, all the faculty members of Dept. of Yoga Science are hereby requested to submit their suggestions, if any, for the academic development of the department by 22<sup>nd</sup> Sept 2023 to prepare the agenda of the meeting.

09.23

Head, Dept. of Yoga Science University of Patanjali, Haridwar विभागाज्यक्ष योग विज्ञान विभाग बर्त्तजलि विश्वविद्यालय, हरिद्वार

Copy to:

1. Dean, Faculty of Yoga Science

1. Dr. Bipin Duby EBipin 2. Dr. Arti Pal 3. Dr. Sandeep Rumar Sim 4. Dr. Aloni En Sherme 5. Sh. Sushash Sterme 6. Dr. Arti Yadav Attyo 3@ 15:17 Hrs.

विभागाध्यक्ष योग विज्ञान विभाग पतंजलि विश्वविद्यालय, हरिद्वार

### BOARD OF STUDIES, DEPARTMENT OF YOGA SCIENCE UNIVERSITY OF PATANJALI, HARIDWAR

2023-24

#### PRESENCE SHEET

Second Meeting of Board of Studies of the Dept. of Yoga Science for the academic Year 2023-24 has been convened today on **25<sup>th</sup> of Sept 2023 at 02.00 PM** in the office of Dean, Faculty of Yoga Science.

#### Attendance Sheet

Designation	Membership	Signature
Dean Faculty of Yoga Science,	Chairman	357005)
HOD Dept of Yoga Science, DSVV,	Member	-ABSENT-
HOD Dept of Yoga Science, USU	Member	M 25.9,23
Dept of Yoga Science, SRHU,	Member	(P.)
HOD Dept of Yoga Science,UOP, Haridwar	Member Secretary	25/19/
	Dean Faculty of Yoga Science, UOP Haridwar HOD Dept of Yoga Science, DSVV, Haridwar HOD Dept of Yoga Science, USU Haridwar Dept of Yoga Science, SRHU, Jollygrant HOD Dept of Yoga Science, UOP,	Dean Faculty of Yoga Science, UOP HaridwarChairmanHOD Dept of Yoga Science, DSVV, HaridwarMemberHOD Dept of Yoga Science, USU HaridwarMemberDept of Yoga Science, SRHU, JollygrantMemberHOD Dept of Yoga Science, UOP,Member





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### BOARD OF STUDIES, DEPARTMENT OF YOGA SCIENCE UNIVERSITY OF PATANJALI, HARIDWAR

2023-24

### BOARD OF STUDIES MINUTES OF MEETING

Few agenda for the academic up gradation and as per the suggestions of the students and staff of Dept. of Yoga Science was proposed by the Dean, Faculty of Yoga Science, UOP on 28.07.2023, the same was approved by the Pro- Vice Chancellor on 29.07.2023 with directions to convene the meeting.

Accordingly, a notice has been issued to all the faculty members on 21 Sept 2023 to put up the suggestions as per the agenda item to convene the BOS Meeting on 25. Sept 2023. Few suggestions were also received.

Meeting of Board of Studies of the Dept. of Yoga Science for academic year 2023-24 has been convened today on 25th of Sept 2023 at 02.00 PM in the office of Dean, Faculty of Yoga Science.

Following Members were present in the meeting:

Paallannannan

- 1. Prof. Om Narayan Tiwari, Dean Faculty of Yoga Science, UOP-Offline
- 2. Prof. Suresh Barnwal, HOD Dept of Yoga Science, DSVV, Haridwar-Online Member (Absert)
- 3. Dr Kamakhya Kumar, HOD Dept of Yoga Science, USU Haridwar-Offline
- 4. Dr Ram Narayan Mishra, Asst Prof. Dept of Yoga Science, SRHU, Jollygrant Member Member Secretary
- 5. Dr. Nidheesh Yadav, Asst Prof, Dept of Yoga Science, UOP

Meeting started with the welcome note of the Dean, Faculty of Yoga Science and detailed the agenda to the member. Agenda were then discussed in length.

S.No	AGENDA ITEM	DISCUSSION	ALLOCATION OF RESPONCIBILITY
1	To review the running syllabus of Department	<ul> <li>To incorporate Paper Course Indian Knowledge System as MSY AECT-C- 305.</li> <li>To incorporate Yogic &amp; Ayurvedic therapeutic techniques as MSY-AECT-C-405.</li> <li>Partial rectification the Research Methodology &amp; Statistics (MS-CT 205)</li> </ul>	HOD. Dept. of Yoga Science Ho papers with custend Semeste Dr. Nicheesh Ya
2	Regulations of Dissertation/Project Work/field Work	Members suggested for constructing a Committee for formulation of respective policy.	Dr. Rudra Bhandari-Member. Dr. Sandip Singh- Member Dr. Ram Narayan Mishra- BoS Member
3	Accommodation of Indian Knowledge System (IKS) in all syllabus as per UGC guideline	Applied in the syllabus of MSc Yoga Science as per the direction of 10 <sup>th</sup> Academic Council Meeting dt. 06.07.2023.	-
Kr. K	Ser Q:	(BNBr (chairnan) lamNancyan)	5-61-28

Chairman



1. GOA 101



5Review Current SyllabusThe norms of Yoga Manual Department has initiated Sem 1 and Sem 2 of BA with Yoga & BA Yoga ScienceTime tobe merker be implemented per N.E.F. guid Dean, Faculty of Yoga Science6Preparation of Subject Experts List/ Examiners for academic session 2023- 24List has been submitted among the board members to finalize through the Dean Dept of Yoga Science.Dean, Faculty of Yoga Science7Discussion in relation to Practical sessions & Practical ExaminationsSuggested to change the internal examiner other than the subject teacher/Yoga Instructor. To establish CIA (Continue Internal Assessment)Dean Faculty of Yoga Science/8To conclude the outcomes of 10th Academic Council.• The entire syllabus has to be approved by the Board of Faculty. • Brij Course, Certificate, Diploma & Graduation program in Yoga has been proposed though distance learning.•9To discuss the area & topics for workshops & seminars under the department.The organizers of National Workshop on India Meditation System for Holistic Health have been appreciated by the committee.Dean, Faculty of Yoga Science/10Any other issue with due permission to Chairman• D. Lit'and D. Sc. in the Dept has to be initiated. • Du Lit'and D. Scholars of the department.Dean, Faculty of Yoga Science.	4	To initiate new programs/Courses,	Ji suggested to establish different allied department of Yoga as per	Dean, Faculty & Yoga Science to Jinitiate.
•Induction6Preparation of Subject Experts List/ Examiners for academic session 2023- 24List has been submitted among the board members to finalize through the Dean Dept of Yoga Science.Dean, Faculty of Yoga Science7Discussion in relation to Practical sessions & Practical ExaminationsSuggested to change the internal examiner other than the subject teacher/Yoga Instructor. To establish CIA (Continue Internal Assessment)Dean Faculty of 	5	Review Current Syllabus	the norms of Yoga Manual	Time table has I be implemented
10Automic ProcessionSuggested to change the internal examiner other than the subject teacher/Yoga Instructor. To establish CIA (Continue 	6	Dumonte LIST/ EXaminers	List has been submitted among the	Yoga Science
8To conclude the outcomes of 10th Academic Council.• The entire syllabus has to be approved by the Board of Faculty. • Brij Course, Certificate, Diploma & Graduation program in Yoga has been proposed though distance learning.9To discuss the area & topics for workshops & seminars under the department.The organizers of National Workshop on India Meditation System for Holistic Health have been appreciated by the committee.• D. Lit and D. Sc. in the Dept has to be initiated. • Departmental procedural guidelines for PhD scholars of the department.• Dean, Faculty of Yoga Science.	7	24 Discussion in relation to Practical sessions &	Suggested to change the internal examiner other than the subject teacher/Yoga Instructor. To establish CIA (Continue	Dean Faculty of Yoga Science/
9       To discuss the area & topics for workshops & seminars under the department.       The organizers of National Workshop on India Meditation System for Holistic Health have been appreciated by the committee.         10       Any other issue with due permission to Chairman       • D. Lit and D. Sc. in the Dept has to be initiated.       Dean, Faculty of Yoga Science.         • Departmental procedural guidelines for PhD scholars of the department.       • Students App is required for       • Students App is required for	8	To conclude the outcomes of 10 <sup>th</sup> Academic Council.	<ul> <li>The entire syllabus has to be approved by the Board of Faculty.</li> <li>Brij Course, Certificate, Diploma &amp; Graduation program in Yoga has been proposed though</li> </ul>	-
10       Any other issue with due permission to Chairman       • D. Lit and D. Sc. in the Dept has to be initiated.       Yoga Science.         10       Departmental procedural guidelines for PhD scholars of the department.       • Students App is required for	9	for workshops & seminars	s The organizers of National Workshop on India Meditation System for Holistic Health have been appreciated by the	
Policy. Diploma in Yoga & Ayurveda coordinated by faculty of Science has to be shifted to Dept of Yoga Science	10	Any other issue with due permission to Chairman	<ul> <li>D. Lit and D. Sc. in the Dept has to be initiated.</li> <li>Departmental procedural guidelines for PhD scholars of the department.</li> <li>Students App is required for fulfilment of New Education Policy.</li> <li>Diploma in Yoga &amp; Ayurveda coordinated by faculty of Science has to be shifted to Dep</li> </ul>	Yoga Science.

विभागाध्यक्ष योग विज्ञान विभाग पतंजलि विश्वविद्यालय, हरिद्वार

2023-24

#### Course Name: Indian Knowledge System Course Code: In Place of MSY-AECT-C-305 Course Objective: To Understand the basic concepts of Indian Knowledge System

		Theory	Tutorial	Practical
Total Number of Hrs:	Theory	Tutoria	0	
Credits		3	1	0
		3	1	0
Hrs/Week	SCHEME OF E	XAMINA'	TION	
	Scrimins	1		
Total Marks:				
100			Pra	actical:
Thero	Elas Eve	am (SSE)	Internal Assessment	
Fianl Exam (SSE)	Internal Assessment (CT+TA)	Final Exa		(CT+TA/PR)
70	30			

# UNIT 1:- Indian Philosophical Systems-Part (a)

Four Vedas-s- Rigveda, Yajurveda, Samaveda and Atharvaveda; introductory information on them. Six vedanga-s: (Siksa, Vyakarana, Nirukta, Chanda, Jyotisa, Kalpa). Vedic Vangnaya: Caturdasa vidyasthana-s: 14 branches of learning in ancient India-Purana, Nyaya, Mimamsa, Dharmasastra.

18 puransas-s, their names and five general characteristics of purana-s-sarga, pratisarga, vamsa, manvantara and vamsanucarita.

## UNIT 2:- Indian Philosophical Systems-Part (b)

Introduction and Contribution of Ancient Indian gurukula System: nalanda, taksasila, vikramasila, valabhi, odantapuri, mithila, kanci, nadiya, puspagiri, nagarjunakomda, saradapitha (kasmira), ujjain, jagaddala aura somapura.

Dharma, artha and Society: Four purusartha-dharma, artha, kama and moksa. Definitions of each of the purusarth-s and meaning of dharma- Root and derivation of the word dharma. dharma: Definitions and Meanings from various texts (mahabharata, manusmrti, vaisesika sutra). kamya, nitya, nisiddha, naimittika, prayascita & upasana. Meaning of the word artha-purusarhta; Root and derivation and meaning. Social outlook for tirthayatra, festivals, saptapuri, 12 jyotirlinga-s and unity of India.

### UNIT 3:- Health and Well-being

Scope: 1. Folk and Tribal Medicines and Siddha. 2. Ayurveda. 3. Siddha.

Folk and classical streams of medical knowledge in India: folk and tribal medicine-8000 plants, home remedies, primary health care, bone setting, traditional birth attendants, poison healers.

Ayurveda .: Foundational concepts of ayurveda- Dosadhatumalasiddhanta. Definition of health (svastha), daily routine (dinacarya), seasonal routine (rtucarya).

Siddha: Historical development and milestones, personalities, textual sources. Foundational concepts- Tridosa. pulse diagnosis. Varma treatment. Herbo-mineral formulations. Concepts of health and disease, Preventive Medicine. Approaches to management of diseases. Current status of the siddha system of medicine in India and the world.

(2mb)

विभागाध्यक्ष योग विज्ञान विभाग पतंजलि विश्वविद्यालय, हरिद्वार





Prostore

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UNIT 4:- Contribution of Indian Yogi's in Yoga Promotion & Research The impact of yoga on the World: philosophers who left an impact on the West-Swami Vivekananda, Paramahansa Yogananda, Sri Aurobindo, Maharishi Mahesh Yogi, Acharya Rajneesh, J. Krishnamurti, Swami Sivananda, BKS Iyengar, Sri Krishnamachari.

The impact of yoga on diverse fields: influence on Western art, culture and film from the 18th century, influence on Western literature.

#### Reference books:

- An Introduction to Indian Knowledge Systems: Concepts and Applications, B Mahadevan, V R Bhat, and Nagendra Pavana R N; 2022 (Prentice Hall of India).
- 2. Indian Knowledge Systems: Vol I and II, Kapil Kapoor and A K Singh; 2005 (D.K. Print World Ltd).
- 3. Baladev Upadhyaya, Samskrta Śāstrom ka Itihās, Chowkhambha, Varanasi, 2010.
- 4 The Beautiful Tree: Indigenous India Education in the Eighteenth Century, Dharampal, Biblia Impex, New Delhi, 1983. Reprinted by Keerthi Publishing House Pvt Ltd., Coimbatore, 1995.
- 5 Indian Science and Technology in the Eighteenth Century, Dharampal. Delhi: Impex India, 1971. The British Journal for the History of Science.
- D. M. Bose, S. N. Sen and B. V. Subbarayappa, Eds., A Concise History of Science in India, 2nd Ed., Universities Press, Hyderabad, 2010.
- Dharampal, Some Aspects of Earlier Indian Society and Polity and Their Relevance Today, New Quest Publications, Pune, 1987.

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Total Number of H	Theory	Tutorial	Practical		
Credits	3	1	0		
Hrs/Week	3	1	0		
	SCHEME O	EXAMINA	TION		
Total Marks: 100					
The		Practical:			
Fianl Exam (SSE) Internal Ass (CT+TA)		ent Final Ex	am (SSE)	Internal Assessment (CT+TA/PR)	
70	30		1		

Course Name: Yogic and Ayurvedic Theraputic Techniques Course Code: In Place of MSY-AECT-C-405 Course Objective: To Understand the concepts of Yogic and Ayurvedic theraputic technique.



#### UNIT 1: Purification Techniques in Hath Predipika, Gherand Samhita and Hath Ratnavali

Shatkarma- Dhauti, Basti, Neti, Trataka, Nauli and Kapalbhati, Yama and Niyama, Pathya and Apathya, Mitahara, health benefits of Mudra and Bandha.

### UNIT 2: Acupressure and Hydrotherapy

Acupressure (origin, meaning, definitions, principles) five elements theory, disease specific acupoints (low back pain, hyper-hypotension, migration, insomnia, anxiety), sujok theraphy. Hydrotherapy (Colon Hydrotherapy) - Types and health benefits of Hydrotherapy.

### UNIT 3: Basic Principles of Ayurvedic Treatment

Raktamokshan: 1. Leech therapy 2.Shringi therapy 3.Cupping (dry, wet, fire), Nasya, Nadisvedan, Role of mud therapy in disease prevention.



### UNIT 4: Marma therapy and Massage

Fundamentals and history of Marma therapy, Classification of Marma points, Technique of activation of Marma points, Correlation marma through yogic activities like Asanas, Pranayama and Shatchakra. Massage: Definition, scope, history, its principles and manipulative technique, different types of massages and their role in disease prevention and health promotion.

### Reference books:

1. Gheranda Samhita: Kaivalyadhama

2.Asana, Pranayama, Mudra, Bandha - Swami Satyanand Saraswati , yoga publication trust, Munger 2006

3. Swami Kuvalyananda and Shukla, S.A Gorakshasatkam, Kaivalyadhama

4.Sharma, S. (2013) Chikitsa upchar ke vividh ayam

(35m) Br

5.Hathratnavalli: Kaivalyadhama (Publication)

6.Goyal, B.B. (2013). Secrets of Naturopathy and Yoga (UK Ed)

7.M.K.Gandhi : My Nature Cure

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8.Dr.Jitendra Arya; Nature Cure, Pune

9. Patanjali Wellness: Upchaar paddhati

10.Marma Chikitsavijnana- Prof.Sunil Kumar Joshi, Mrityunjaya Mission, Aadi arts, Haridwar

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#### Name of the Course: Research Methodology and Statistics Course Code: MSY-CT-205

#### **Course Objectives:**

Following the completion of the course students will:

- 1. Recognize theoretical concepts of conducting scientific research apply them to pursue higher research.
- 2. Use Research methodology and knowledge of various statistical procedures
- 3. Identify and operate research tools/software to conduct research on contemporary issues/needs.

Course Outcomes: Study of this course will enable learners to

- 1. Recognize qualitative and quantitative research process and ethics and its regulatory
- system/mechanism.
- 2. Design and carry out mini research projects.
- Analyze and interpret data by using software.
- 4. Draft dissertation and research paper.

	Structure of the Credit	s and its distribution	of the Marks		
	per of Hours: 60	Theory	Tutorial	Practical	
	ber of fiburs, ov	3	1	0	
Credits			1	0	
Hours/ week		3	1		
		OF EXAMINATION			
	То	tal Marks: 100			
The	ory : 100		Practical		
Final Exam (SEE	Internal Assessmer (CT+TA)	Final Exam (SEE)	Internal Assessment (CT+TA/PR)		
70	30				

### UNIT 1: Research Methodology Concepts –I

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#### [15Hrs]

Introduction to research methodology: definition, types, need for Yoga research; The research process; Literature review: Purpose, Process; Digital sources: Google Scholar, PubMed, Science Direct, Springer, Wiley, Cochrane Library; Formation of Literature Review Table: Synthesis of information from Research Review Table, Presentation of Literature Review; Data collection methods: Observation, Interview, psychological tests, questionnaire, physiological tests, and archives; Scales of measurement: nominal, ordinal, interval, ratio; Ethics of research: Laboratory ethics, Publication ethics; Ethical bodies, IEC, IRB and guidelines for good clinical practice; Issues of bias and confounding; Selection bias, Recall bias, Observer bias, measurement bias, Publication bias.

### UNIT 2: Research Methodology Concepts –II

#### [15Hrs]

Sampling Methods: Concept, Types: Probability and Non-Probability Sampling, Simple Random Sampling, Systematic Sampling, Stratified Sampling, Cluster Sampling, Convenience Sampling, Quota Sampling, Snow-Ball Sampling; Methods of controlling biases: Randomization, Matching, Cross over design, Restriction/ Blocking, Stratification, Factorial design; Types of variables: Independent, Dependent, Confounding; Types of research design: Differential, Pre & Post, Experimental, Pure Experimental, Factorial, Descriptive, Relational & Mixed, Cross-Sectional, Case Study, Survey; Reliability: Test- Retest Reliability, Internal Consistency, Inter rater Reliability; Validity: Construct Validity, Face Validity, Content Validity, Criterion; Validity, Convergent and Discriminate Validity. Internator reliability.

विभागाध्यक्ष योग विज्ञान विभाग पतंजलि विश्वविद्यालय, हरिद्वार

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#### UNIT 3: Statistical Concepts – I

[15Hrs]

Statistics: Concept and Significance; Types: Descriptive statistics, Inferential statistics; Frequency distributions (Individual, Discrete and Continuous), Graphical Representation of the data (Histogram, pie chart and bar graph); Measures of Central Tendency: (Arithmetic Mean, Median and Mode): Concept and Computation for grouped and ungrouped data; Measure of Dispersion: Concept and computation of Range, Quartiles, Standard Deviation, and Mean Deviations; Normal Distribution: Concept, Proportions, and Applications of Normal Distribution; Statistic and Parameter: Sample and Population, Generalization, Hypothesis: null hypothesis; Concept: Type I and Type II Errors; One tailed, two tailed hypothesis, Types of Errors and its control, Central Limit Theorem.

#### **UNIT 4: Statistical Concepts - II**

#### [15Hrs]

Point estimate and interval estimate, Power analysis: Effect size, sample size, p-value, Confidence interval; Statistical tests and design, Assumptions of tests, Statistical tests for Various designs: Correlation: computation of correlation coefficient by product moment method, coefficient of Determination; Regression: Concept and Computation, Interpretation; Parametric and Non-Parametric Tests; proportions, paired sample, and independent sample t-tests, Chi- Square, ANOVA, Repeated Measures ANOVA, ANCOVA. Using SPSS.

#### TEXT BOOK

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Kothari, C. R. (2011). Research Methodology: Methods and Techniques (2nd ed.). New Delhi, India: New Age International Private Limited Publishers.

Suleman, M. (1997). Sankhyiki ke mool tatwa. Patna: Shukla Book Depot. Varanasi, India: Motilal Banarasi Das.

#### **REFRENCE BOOKS**

R. L. Bijlani. (2008). Medical Research: All You Wanted to Know But Did Not Know Who to Ask. Jaypee Brothers Medical Publishers Pvt. Ltd. New Delhi

Breakwell,G.M., Hammon, S., Fife-Shaw, C., & Smith, J. (2006). Research methods in psychology (3rd ed.) London: Sage.

Bryman, A. (2008). Social Research Method (3rd ed.). Oxford: Oxford University Press.

Garrett, H.E. (1993). Shiksha evam manovigyan mein sankhyiki. New Delhi, India: Kalvani Publishers.

Garrett. H.E. (1988). Statistics in Psychology and Education. Bombay, India: Vikils, Feiffer & Semen's Ltd. Guilford, J. P. & Fruchter, B. (1988). Fundamental Statistics in Psychology and Education. New Delhi, India:

- McGraw Hill. Unit-I Guilford, J. P., & Fruchter, B. (1973). Fundamentals of statistics in psychology and education. Tokyo, Japan:
- Kogakusha.

Gupta, S. P. (2004). Statistical Methods (33rd ed.). New Delhi, India: Sultan Chand & Sons.

Haslam, S. A., & McGarty, C. (2003). Research methods and statistics in psychology. London: Sage.

Kapil, H. K. (1980). Sankhyaki ke mool tatwa. Agra, India: Vinod Pustak Mandir.

Kerlinger, F.N. (1978). Foundation of Behaviour Research. Delhi, India: Surject Publications.

Kumar, R. (2011). Research Methodology (2nd ed.). Noida, India: Dorling Kindersley Pvt. Ltd, licensces of Pearson Education in South Asia.

Lioyd, D. F. & Gerald, V. B. (1993) : Biostatistics: A Methodology for the Health Science. John Wiley & sons. Inc. Longman.

Maylor, H. & Blackmon, K. (2005). Researching Business and Management. New York, NY: Palgrave Macmillan.

Minium, E. W., King, B. M., & Bear, G. (1993). Statistical reasoning in psychology and education (3rd ed.). New York: John Willey.

Mohsin, S.M. (1981). Research Methods in Behavioral Sciences. Calcutta, India: Orient

Ruxton, G. D. and Colegrave, N. (2003). Experimental Design for LifeScience. Oxford University Press.