Academic Council Meeting No. and Date: 11/ June 27 2025
Agenda Number: 02 **Resolution Number:** 50, 51 / 2.2, 2.8

Vidya Prasarak Mandal's
B. N. Bandodkar College of Science
(Autonomous), Thane

Syllabus for

Programme Code: BUHS

Programme: Bachelor of Science

Specific Programme: Human Science

T.Y.B.Sc. Human Science

Level 5.5

CHOICE BASED GRADING SYSTEM

Revised under NEP

From academic year 2025-2026

Preamble

- The basic thoughts and understanding in the programmeof B.Sc. with Human Science is many or around 60 % students after their graduation leave higher education and opt for jobs. These jobs are in Government offices, Municipal Corporations, private companies or, in schools as teachers. They are absorbed as science graduates. Even when the students opt for management carriers they are considered as science graduates at entry level. Thus the specialization or the major subject does not have relevance unless the students want to pursue the carrier in the field of research or higher education.
- Among all higher studies Masters in management is a most preferred option because of availability of lucrative jobs. Among the specializations in management studies Human Resource Management is one among the preferred choice. When a person works in any office it is needed that the concerned understands the psychology of organization, the co-workers, the officers and also the customers.
- With all these requirements of job market University has decided to introduce the graduation course in Arts and science as B. A. /B. Sc. Human science. In this the topics considered are Origin of Human Science, Evolution of human being, Cultural evolution, Social evolution, Development of communication and language, Anthropology, Family culture, Organization culture, Management techniques and many more. The Bachelor's Degree B.A./B.Sc. Human Sciences is a three year (six semesters) innovative interdisciplinary programme that focuses on understanding the human being holistically from biological, psychological and social perspectives. It helps in comprehending the human being from birth to death with a whole gamut of perspectives from origin, ancient history, its evolution to modern times. It is an amalgamation of various disciplines of sciences namely psychology, sociology, anthropology, paleontology, neuroscience, genetics, home science and other allied spheres of knowledge. A learner with such a vast knowledge and understanding of Human Science will be fit to work in any industry/ Government offices/ Schools or any other place.
- A learner if wish to go for higher education he can opt for Masters in Psychology, Anthropology or Masters in Management.

Prof. Dr. V.D.Mnajramkar
Chairperson, Bos Human Science
VPM's B.N.Bandodkar College of Science (Autonomous), Thane

PROGRAMME OUTCOMES (POs) OF BACHELOR OF SCIENCE (B.Sc.)

The Undergraduate Programs of Science are intended to cater quality education and attain holistic development of learners through the following programme outcomes:

PO1 - Disciplinary Knowledge

Lay a strong foundation of conceptual learning in science. Instil ability to apply science in professional, social and personal life.

PO2 - Inculcation of Research Aptitude

Ignite spirit of inquiry, critical thinking, analytical skills and problem-solving approach which will help learners to grasp concepts related to research methodology and execute budding research ideas.

PO3 - Digital Literacy

Enhance ability to access, select and use a variety of relevant information e-resources for curricular, co-curricular and extracurricular learning processes.

PO4 - Sensitization towards Environment

Build a cohesive bond with nature by respecting natural resources, encouraging eco-friendly practices and creating awareness about sustainable development.

PO5 - Individuality and Teamwork

Encourage learners to work independently or in collaboration for achieving effective results through practical experiments, project work and research activities.

PO6 - Social and Ethical Awareness

Foster ethical principles which will help in developing rational thinking and becoming socially aware citizens. Build an attitude of unbiased, truthful actions and avoid unethical behavior in all aspects of life.

Eligibility: Passed SYBSc Human Science

Duration: 3 years (Syllabus for Second Year semester V & VI)

Mode of Conduct: Offline lectures/ Online lectures

Discipline/Subject: Human Science

Specific Programme: B.Sc. Human Science

Qualification Title: UG certificate

Discipline/Subject: Human Science

Program Specific outcomes

1.	Recall and explain core principles and theories from psychology, sociology, anthropology, neuroscience, and allied subjects, demonstrating foundational knowledge of human behavior and social systems.	L1
2.	Interpret and compare key concepts across disciplines such as genetics, home science, paleontology, and law to appreciate interdisciplinary connections and their real-world relevance.	L2
3.	Apply discipline-specific methods and analytical techniques to solve practical problems in health, community settings, and legal contexts using appropriate theories and tools.	L3

4.	Analyze complex human and societal phenomena by breaking down data, patterns, and case studies to critically evaluate evidence and underlying causes.	L4
5.	Critically assess policies, research findings, and ethical implications within and across fields like law, neuroscience, and social sciences, justifying conclusions based on criteria.	L5
6.	Design and propose innovative solutions, research projects, or interventions that integrate multidisciplinary knowledge to address societal challenges effectively.	L6
Specific Programme: T.Y.B.Sc. (Human Science)		

Assessment: Weightage for assessments (in percentage) For Major and Minor

Type of Course	Formative Assessment / IA	Summative Assessment
Theory	40%	60%

Curriculum Structure for the Undergraduate degree
Programme T.Y.B.Sc Human Science

	SEMESTER – V		
Course Code	**Major Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS5T01	**Industrial Psychology**	**30**	**02**
25BUHS5T02	**Constitutional Law**	**30**	**02**
25BUHS5T03	**Nutritional Biochemistry**	**30**	**02**
25BUHS5P01	**Practical Based on 25BUHS5T01**	**60**	**02**
25BUHS5P02	**Practical based on 25BUHS5T02**	**60**	**02**
25BUHS5P03	**Practical based on 25BUHS5T03**	**60**	**02**
Course Code	**DSE Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS5TE1	**Human Development and Ageing**	**30**	**02**
25BUHS5PE1	**Practical Based on 25BUHS5TE1**	**60**	**02**
25BUHS5TE2	**Introduction to Anthropology and Archeology**	**30**	**02**
25BUHS5PE2	**Practical based on 25BUHS5TE2**	**60**	**02**
	Total	**90**	**04**
Course Code	**Minor - Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS5TMN	**Entrepreneurship Management**	**30**	**02**
	Total	**30**	**02**
Course Code	**Vocational & Skill Enhancement Courses (VSEC)- Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS5VSC	**Forensic Science**	**15**	**01**
25BUHS5VSC	**Practical based on Forensic Science**	**30**	**01**
	Total	**45**	**02**
Course Code		**No. of Lectures in hrs**	**Credits**
25BUHS5OJT /25BUHS5FPR	**On Job Training in Human Science I/ Field Project in Human Science III**	**60**	**02**

	SEMESTER – VI		
Course Code	**Major Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS6T01	**Clinical Psychology**	**30**	**02**
25BUHS6T02	**Environmental Management**	**30**	**02**
25BUHS6T03	**Information Technology**	**30**	**02**
25BUHS6T04	**Home Science**	**30**	**02**
	Total	**120**	**08**
Course Code	**Practicals**	**No. of Lectures in hrs**	**Credits**
25BUHS6P01	**Practical based on 25BUHS6T01**	**60**	**02**
25BUHS6P02	**Practical based on 25BUHS6T02 & 25BUHS6T03**	**60**	**02**
25BUHS6P03	**Practical based on 25BUHS6T04**	**60**	**02**
	Total	**180**	**06**
Course Code	**DSE Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS6TE1	**Food Service Management and Entrepreneurship Management**	**30**	**02**
25BUHS6PE1	**Practical based on 25BUHS6TE1**	**60**	**02**
25BUHS6TE2	**Introduction to Tourism**	**30**	**02**
25BUHS6PE2	**Practical based on 25BUHS6TE2**	**60**	**02**
	Total	**90**	**04**
Course Code	**Vocational & Skill Enhancement Courses (VSEC)- Course Title**	**No. of Lectures in hrs**	**Credits**
25BUHS6VSC	**Toxicology**	**15**	**01**
25BUHS6VSC	**Practical based on 25BU6VSE04**	**30**	**01**
	Total	**90**	**04**
Course Code		**No. of Lectures in hrs**	**Credits**
25BUHS6OJT /25BUHS6FPR	**On Job Training in Human Science II/ Field Project in Human Science II**	**60**	**02**
	Total	**60**	**02**

Semester - V

MAJOR COURSE CODE: 25BUHS5T01	(02 Credits)	No of lecture in Hrs. 30

Industrial Psychology

COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO1	Analyze core concepts of I/O psychology	L4
CO2	Evaluate training programs by applying principles of need assessment ,training delivery, and outcome evaluation	L5
CO3	Explain major theories of employee motivation along with their relationship to job satisfaction, organizational commitment and workplace emotions	L2
CO4	Evaluate concepts of motivation, job satisfaction, and emotional experiences at work to predict employee performance, commitment and overall organizational effectiveness	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	3	0
CO 2	0	0	0	0	3	0
CO 3	0	0	0	0	3	0
CO4	0	0	0	0	3	0

Unit	Description	No. of Hours.
I	**Introduction to I/O Psychology:** ● What is I/O psychology? ● Assessment of Jobs, Performance and People: ● Job Analysis ● Performance appraisal ● Need assessment, Training design ● Delivery of training program ● Evaluation of training program	**15**
II	**Individual and organization:** ● Theories of employee motivation ● Feelings about work- Job satisfaction, ● Effects of job satisfaction, organization commitment, ● Emotions at work	**15**

REFERENCES	
25BUHS5T01	
1.	Psychology and Work Today by Schultz.
2.	Industrial/ Organizational psychology: An applied approach by Michael Aamodte.
3.	Work in the 21St century: An Introduction to Industrial/Organizational Psychology by Frank . Landy and Jeffrey. Conte

MAJOR COURSE CODE: 25BUHS5T02	**(02 Credits)**	**No of lecture in Hrs. 30**

Constitutional Law

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO1	What are fundamental right and fundamental duties?	L1
CO2	What is UCC, RTI and PIL and directive principles of state policy	L2
CO3	Summarize different types of drafts use in daily life	L2
CO4	Summarize different types of marriage law, woman empowerment laws, laws for offenses against woman and children.	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

Unit	**Description**	**No. of Hours**
I	Indian Constitution • Indian Constitution -An Overview • Fundamental Rights and Duties • Directive Principle of State Policy • UCC, RTI, PIL	**15**

II	**Human Right and legal agreement** • Family Law – (Hindu and Muslim) Marriage & Divorce • Women empowerment • Offences against women and children and corrective measures • 138 of N.I. Act, 1881 • Will • Gift Deed • Agreement • POA	**15**

REFERENCES	
25BUHS5T02	
1.	Introduction to the constitution of India by Durga Das Basu
2.	Indian Polity by M . Laxmikanth
3.	Our Constitution by Subhash Kashyap

MAJOR COURSE CODE: 25BUHS5T03	**(02 Credits)**	**No of lecture in Hrs. 30**

Nutritional Biochemistry

COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO1	Classify composition, properties, sources and functions of carbohydrates	L2
CO2	Summarize classification, function, significance of lipids	L2
CO3	Categorize proteins on the basis of its composition, sources, structure and functions	L4
CO4	Analyse enzymology	L4

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO4	3	0	0	0	0	0

Unit	**Description**	**No. of Hours .**

I	**Carbohydrates & Lipids** • Composition and Classification, • Physical & chemical properties, • Source • Biological role • Nutritional significance of dietary fibres. • Deficiency and excess, fatty acids- essentials and non-essential, • Significance of Fatty acids. .	**15**
II	**Proteins** • Proteins: • Composition, classification, sources, and functions. Nutritional • Classification of amino acids. • Enzymes: Classification and factors affecting enzyme activity and enzymes of clinical significance	**15**

REFERENCES	
25BUHS5T03	
1.	Lehninger Principles of Biochemistry by David L.Nelson and Michael Cox.
2.	Biochemistry by U. Satyanarayana and U. Chakrapani
3.	Biochemistry by Pamela Champe , Richard Harvey and Denise Ferrier.

MAJOR COURSE CODE: 25BUHS5P01	**(02 Credits)**	**No of lecture in Hrs. 60**
Practical based on 25BUHS5T01		
COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO 1	Discuss key tools of employee assessments, including job satisfaction, performance appraisal and burnout.	L6
CO 2	Assess psychological assessment tools	L5
CO 3	Discuss practical exposure by integrating knowledge of appraisal techniques, workplace assessments	L6
CO 4	Evaluate workplace dynamics using practical exercises	L5
Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping		

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO 4	3	0	0	0	0	0

1.	Biases in performance appraisal
2.	Conflict management styles
3.	Maslach Burnout Inventory (MBI)
4.	Brief resilience scale
5.	Kessler Psychological Distress scale (K10)
6.	Job satisfaction assessment
7.	Beck Anxiety Inventory.(BAI)
8.	Ethics and practicality in I/O
9.	Ten item personality inventory (TIPI)
10.	Performance appraisal techniques
11.	Work preference inventory (WEIMS)
12.	Case study - Work Stress and Burnout.
13.	Johari Window.
14.	Small scale Industrial Visit.
15.	Large scale Industrial Visit.

REFERENCES

24BUHS5P01

1.	Schultz, D. P., & Schultz, S. E. Psychology and Work Today. Pearson.
2.	Aamodt, M. G. Industrial/Organizational Psychology. Cengage.
3.	Cohen, R. J., & Swerdlik, M. E. Psychological Testing and Assessment. McGraw Hill.
4.	Anastasi, A., & Urbina, S. Psychological Testing. Pearson.

MINOR COURSE CODE: 25BUHS5P02	**(02 Credits)**	**No of lecture in Hrs. 60**

Practical based on 25BUHS5T02

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Summarize case study related to fundamental right & duty	L2
CO 2	Summarize case study related to consumer protection act & environmental	L2

	law	
CO 3	Summarize case study related to different religion marriage act	L2
CO 4	Plan a visit to district court/ magistrate court/civil court/labour court/family court/consumer court/ central jail	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO 4	3	0	0	0	0	0

1.	Case study- 1. M C Mehta VS Union of India 2. Vishakha & other VS State of Rajasthan 3. Nirbhaya Case study
2.	Case studies -Related to violation of fundamental rights- 1.IC Golaknath v/s state of Punjab 2.Keshwananand Bharti v/s state of Kerala (related to prisoners' rights)
3.	Case studies - Related to consumer protection act 1986 1.Murli Deora v/s union of India (ban on smoking at public places) 2.Shriram fertilizer v/s union of India
4.	Visit to District court/ Magistrate court/ Civil Court
5.	Case studies related to environmental law 1.M.C Mehta v/s union of India (Bhopal gas tragedy) 2.Minrva mill v/s union of India
6.	Visit to labour Court/ Family Court/ Consumer Court
7.	Visit to central jail
8.	Case studies related RTI & PIL
9.	Case studies related to fundamental rights & duties
10.	Case studies related to muslim marriage act 1. Mohd. Ahmed Khan Vs Shah Bano Begum Shayara Bano Vs Union of India
11.	Case studies related to parsi marriage act 1.Manekabai Nadirshaw Vachha vs Nadishaw Jamshedji Vaccha
12.	Case studies related to hindu marriage act 1. Yamunabai Adhav Vs Anantrao Adhav Bhaurao Shankar Lokhande Vs State of Maharashtra
13.	Case study related to special marriage act 1. Geeta @Nilofer Vs Ram Beti Rajesh Francis Vs Preethi Roslin
14.	Case study related to Christian marriage act- Geo Vs State of Kerala

REFERENCES

24BUHS5P02

1. Basu, D. D. Introduction to the Constitution of India. LexisNexis.
2. Jain, M. P. Indian Constitutional Law. LexisNexis.

3.	Diwan, P. Family Law. Allahabad Law Agency.

MINOR COURSE CODE: 25BUHS5P03	(02 Credits)	No of lecture in Hrs. 60

Practical based on 25BUHS5T03

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Estimate factors affecting enzymes activity	L6
CO 2	Discuss qualitative estimation and separation of amino acids and lipids	L5
CO 3	Evaluate presence of vitamin C, maltose, casein from different samples	L5
CO 4	Summarize clinical disorders due to carbohydrate, protein and lipids imbalance	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO 4	3	0	0	0	0	0

1.	Separation of amino acid by paper chromatography
2.	Estimation of lipid by phosphovanilline method from the given sample of serum
3.	Effect of pH on amylase activity
4.	Effect of temperature on amylase activity
5.	mEffect of substrate concentration on amylase activity
6.	Effect of inhibitor on acid phosphatase
7.	Study of rancidity of lipid by titrimetric method
8.	Study of clinical disorders due to carbohydrates, proteins & lipids imbalance a. Hyperglycemia & Hypoglycemia Thalassemia , Kwashiorkor & Marasmus
9.	Extraction of casein from milk & it's qualitative estimation
10.	Qualitative estimation of Vitamin C by Iodometric method
11.	Estimation of maltose from brown/white bread
12.	Estimation of plasma proteins
13.	Estimation of blood sugar level
14.	Colorimetric estimation of total lipids from egg yolk of two different varieties
	Colorimetric estimation of total fat in milk of different varieties (FeCl 3 method)

REFERENCES

24BUHS5P03

1.	Satyanarayana, U., & Chakrapani, U. Biochemistry. Elsevier.
2.	Plummer, D. T. Practical Biochemistry. McGraw Hill.
3.	Sadasivam, S., & Manickam, A. Biochemical Methods. New Age.

4.	Varley, H. Practical Clinical Biochemistry. CBS.

DSE COURSE CODE: 25BUHS5TE1	**(02 Credits)**	**No of lecture in Hrs. 30**

Human Development and Ageing

COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO1	Explain types and factors influencing human development	L2
CO2	Outline different stages of human development	L2
CO3	Summarize physiology and causes of aging	L2
CO4	Relate problems in aging amongst population	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO4	3	0	0	0	0	0

Unit	**Description**	**No. of Hours.**

I	**Human Development** ● Human development – Biological, psychological, behavioral ● Factors influencing biological and psychological development (Mother and Foetus) ● Post -Traumatic Stress Disorder- Social, Psychological, Biological, Treatment. ● Human dev. Stages (prebirth, birth, infancy, early, middle and late childhood, adolescence, early, middle and late adulthood, death)	**15**
II	**Ageing** ● Ageing – Meaning, natural process, physiology of aging, apoptosis Causes of aging – Oxidative loss, concept of telomere, ● Problems- Eye, Ear, Memory, Strength, Arteries, Stamina, Neuro- degenerative disorders ● Aging and population- In context to Global, India, other developing Countries	**15**

REFERENCES	
25BUHS5TE1	
1.	Sigelman, C. K., & Rider, E. A. Life-Span Human Development. Cengage Learning.
2.	Kail, R. V., & Cavanaugh, J. C. Essentials of Human Development. Cengage.
3.	Berk, L. E. Development Through the Lifespan. Pearson.

DSE COURSE CODE: 25BUHS5PE1	**(02 Credits)**	**No of lecture in Hrs. 60**
Practical based on 25BUHS5TE1		
COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO 1	Apply assessment tools to evaluate development and emotional intelligence. (L3)	L3
CO 2	Analyze cases related to aging and developmental disorders. (L4)	L4
CO 3	Interpret psychological and social issues across life stages. (L4)	L4
CO 4	Evaluate ethical and legal aspects of human development	L5
Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping		

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO 4	3	0	0	0	0	0

1.	Schutte self – Report Emotional intelligence scale
2.	Study of common teratogenic drugs
3.	Study case studies related to infertility.
4.	Examine histological slides of developing organs.
5.	Identification of age-related disorders
6.	Study of placentae
7.	Study of Different types of Sexually transmitted Diseases- Viral (Photographs)
8.	Identification on Human development embryo (Photographs)
9.	Identification of Different types of birth control- Hormonal (Photographs)
10.	Identification of different types of birth control other than hormonal (Photographs)
11.	Case study based on cognitive development
12.	Study of Different types of Sexually transmitted Diseases- Bacterial (Photographs)
13.	Solve case studies on the effect of post-traumatic stress disorder on an individual.
14.	MTP Act Related Rules
15.	Surrogacy related cases

REFERENCES

25BUHS5PE1

1.	Sigelman, C. K., & Rider, E. A. Life-Span Human Development. Cengage.
2.	Berk, L. E. Development Through the Lifespan. Pearson.
3.	Santrock, J. W. Life-Span Development. McGraw Hill.

DSE COURSE CODE: **25BUHS5TE2**	**(02 Credits)**	**No of lecture in Hrs. 30**
Introduction to Anthropology and Archaeology		

COURSE OUTCOME	
Students will be wanted to learn OR on completion of this course, students will be able to learn:	

CO1	Summarize the history concept and scope of anthropology (L2)	L2
CO2	Explain the branches and other sciences related to anthropology (L2)	L2
CO3	Define archaeology, exploration, excavation and dating antiquities (L1)	L2
CO4	Outline history of archaeology, folklore and food (L2)	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO4	0	0	0	0	0	3

Unit	Description	No. of Hours.
I	**Introduction to Anthropology & Archaeology** ● History of anthropology ● Anthropology: Definition, Concept, Scope ● Branches of anthropology ● Study of anthropology through archaeology ● Archaeology & History: Archaeology and other sciences	**15**
II	**Archaeology** ● Definition and aims of archaeology. ● Branches of archaeology. ● Archaeology and History, archaeology and other sciences. Field ● Archaeology, exploration, excavation and dating antiquities. ● Folklores and food.	**15**

REFERENCES

25BUHS5TE2

1. Introducing Anthropology by Michael Alan Park.
2. An introduction to social anthropology by D.N.Majumdar and T.N. Madan

DSE COURSE CODE: 25BUHS5PE2	(02 Credits)	No of lecture in Hrs. 60

Practical based on 25BUHS5TE2

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Identify archaeological antiquities and dating methods	L3
CO 2	Organize heritage site review	L3
CO 3	Assess museums, exhibition and heritage site	L3
CO 4	Compare coins, weapons, and vessels found in excavation site	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

1.	Antiquities from archaeological site
2.	Identification of Excavation site in India
3.	Identification of Archaeological site in India
4.	Identification of coins & ornaments found in excavation site
5.	Film review of heritage site & it's presentation
6.	Field visit to Heritage site – Monument
7.	Monuments- Identification & location on map
8.	Identification of Excavation site in world
9.	Identification of Archaeological site in world
10.	Identification of vessels & weapons found in excavation site
11.	Museum visit
12.	Visit to Archeological Exhibition
13.	Identification of different dating methods
14.	Field visit to Heritage site – Temple

REFERENCES

25BUHS5PE2

1.	Park, M. A. Introducing Anthropology. McGraw Hill.
2.	Ember, C. R., Ember, M., & Peregrine, P. Anthropology. Pearson.
3.	Renfrew, C., & Bahn, P. Archaeology. Thames & Hudson.

	Minor	Credits 02
Course code 25BUHS5TMN:	**Course title - Entrepreneurship Management – I**	**No of lectures in hrs 30**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Recall concepts of management, levels, departments and entrepreneurship fundamentals	L1
CO 2	Explain entrepreneurial motivation, business plans, ownership forms, franchising and licensing	L2
CO 3	Label financial issues, cash flow management, and financial planning in entrepreneurship	L1
CO 4	Identify marketing strategies, ecommerce, and staffing functions for new ventures	L3

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	3	0
CO 2	0	0	0	0	3	0
CO 3	0	0	0	0	3	0
CO 4	0	0	0	0	3	0

	Course: Minor	
Unit I	**Introduction to Entrepreneurship Management**	**No. of Lectures**
I	• Concept of management • Level of management • Types of Departments and their Duties. • General concept of entrepreneurship: Definition and Challenges • Entrepreneurial Motivation • Building business plan: Strategic management Form of ownership Franchising • Licence in Entrepreneurship	**15**

II	**Marketing** • Financial issues: Managing Cash Flows Financial Plan • Marketing the company: Marketing Plan Creativity E-commerce and New internet Entrepreneurs • Staffing and Leading	**15**

REFERENCES

25BUHS5TMN

1.	Hisrich, R. D., Peters, M. P., & Shepherd, D. A. Entrepreneurship. McGraw Hill.
2.	Barringer, B. R., & Ireland, R. D. Entrepreneurship. Pearson.
3.	Drucker, P. F. Innovation and Entrepreneurship. Harper Business.

	VSEC -Vocational & Skill Enhancement Courses	Credits 02
Course code 25BUHS5VSC	**Course title - Forensic Science**	**No of lectures in hrs 45**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	List basic principles, significance and role of forensic officers	L1
CO 2	Summarize biological fluids, viscera and bite marks	L2
CO 3	Outline hair, diatoms, fibres as forensic evidence	L2
CO 4	Explain diatoms, CSM, DNA and fingerprints as forensic evidence	L4

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	3	0	0	0	0	0
CO 2	3	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO 4	3	0	0	0	0	0

	Course: VSEC	
Unit I	**Intelligence & Behavior**	**No. of Lectures**
I	• Basic Principles & Significance • Crime Scene Evidences • Blood, Semen & other Biological fluids • Viscera, Bite Marks • Hair – Animal & Human, Fibres & Fabrics • Diatoms • Crime scene management • DNA,Fingerprints • Anthropology – Skeletal Remains • Role of Police officers, • Role of Forensic scientists • Role of medico-legal doctors	**15**

VSEC Practical	
1.	Crime scene management: Primary survey, barrication, documentation (note making)
2.	Study of handwriting characteristics & examination of signature
3.	Microscopic examination of- Fiber Hair & Pollen
4.	Preliminary and Confirmatory test for biological samples (Blood, Urine, Saliva)
5.	Collection and identification of fingerprint patterns
6.	Collection of evidences at scene of crime- Physical, chemical & biological
7.	Searching of scene and marking of physical evidences , sketching (rough and final sketchimg)
8.	Determination of age, sex & ethnicity (Skull, Dental structure, pelvic girdle and long bones)
9.	Examination of various forged documents
10.	Visit to DFSL/ Institute of forensic science

REFERENCES

25BUHS5VSC

1.	James, S. H., & Nordby, J. J. Forensic Science. CRC Press.
2.	Saferstein, R. Criminalistics. Pearson.
3.	Sharma, B. R. Forensic Science in Criminal Investigation. Universal.

	On Job Training in Human Science I	Credits 02
Course code 25BUHS5OJT	**Course title - On Job Training in Human Science I**	**No of lectures in hrs 60**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Describe the organizational structure, roles, and work processes at the training organization.	L2
CO 2	Apply theoretical knowledge of Human Science in real workplace situations.	L3
CO 3	Analyze workplace practices, professional ethics, and interpersonal dynamics.	L4
CO 4	Evaluate personal skill development and professional competencies gained during training.	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

	On Job Training in Human Science I	

	Field Project in Human Science III	Credits 02
Course code 25BUHS5FPR	**Course title - Field Project in Human Science III**	**No of lectures in hrs 60**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Identify a relevant field problem related to Human Science.	L1
CO 2	Apply appropriate data collection tools such as surveys, interviews, or observations.	L3
CO 3	Analyze field data using basic qualitative and quantitative techniques.	L4
CO 4	Prepare a structured field project report with findings and conclusions.	L6

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

	Field Project in Human Science III	

Semester - VI

MAJOR COURSE CODE: 25BUHS6T01	(02 Credits)	No of lecture in Hrs. 30

Clinical Psychology

COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO1	Explain the concepts of abnormality, psychological disorders, along with their treatment approaches	L5
CO2	Apply the fundamental principles, stages, and outcome goals of counselling	L3
CO3	Analyse the scope and importance of health psychology, health compromising behaviours, and role of placebo in healing	L4
CO4	Explain diverse approaches to pain management	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	2	0	0	0	0	0
CO 2	2	0	0	0	0	0
CO 3	3	0	0	0	0	0
CO4	3	0	0	0	0	0

Unit	Description Clinical Psychology	No. of Hours.
I	● Introduction to DSM and ICD. ● Defining Abnormality and historical perspectives of abnormality. ● Panic Disorder and treatments ● Phobias-Types, Treatment. ● Obsessive Compulsive Disorder- Symptoms, Treatment. Mood Disorders- Unipolar and Bipolar Disorder, Treatment. ● Fundamental precepts of effective counselling ● Stages and outcome goals of counselling ● Counsellor Actions that hamper communication with clients. ● Ethical principles of professional counselling (Termination) and violation	**15**

II	**Health Psychology** ● Definition and Importance of Health Psychology ● Health Compromising Behaviour and its Characteristics ● Placebo as healer ● Pain and it's Management: 1- Clinical issues in pain management 2- 2- Pain and Personality 3- Pain control techniques- (Pharmacological, Surgical, sensory, biofeedback) ● Alternative Techniques in pain management: Relaxation, Hypnosis, Acupuncture, Yoga, Distraction and guided imagery.	**15**

REFERENCES	
25BUHS6T01	
1.	Butcher, J. N., Hooley, J. M., & Mineka, S. Abnormal Psychology. Pearson.
2.	Sue, D., Sue, D. W., & Sue, S. Understanding Abnormal Behavior. Cengage.
3.	Corey, G. Counseling and Psychotherapy. Cengage.
	American Psychiatric Association. DSM-5-TR. APA.

MAJOR COURSE CODE: 25BUHS6T02	**(02 Credits)**	**No of lecture in Hrs. 30**

Environmental Science

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO1	Explain environmental concepts and impact assessment.	L2
CO2	Apply environmental management tools.	L3
CO3	Analyze causes and impacts of disasters.	L4
CO4	Evaluate sustainability and disaster management strategies.	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**

CO 1	2	0	0	0	0	0
CO 2	2	0	0	0	0	0
CO 3	2	0	0	0	0	0
CO 4	2	0	0	0	0	0

Unit	**Description** **Environment Impact Assessment:**	**No. of Hours**
I	• Concept & process of EIA: Need of EIA; Scope and objectives; • Types of environmental impacts; Steps involved in conducting the EIA Studies • Concept of Carbon footprints& Carbon credits. • Concept of Life Cycle Assessment and Environmental Quality Monitoring: ISO-14000	**15**
II	**Disaster Management** • Concept of disaster • Natural Hazards (Forest Fire, Volcanic eruption, Landslides,Hilstorms): Causes, Impacts and mitigation • Industrial hazards (fire, explosion, toxic release and dispersion): Causes, Impacts and mitigation • Industrial Hygiene and Safety	**15**

REFERENCES	
25BUHS6T02	
1.	Bharucha, E. Environmental Studies. Universities Press.
2.	Mishra, D. D. Fundamentals of Environmental Studies. S. Chand.
3.	Cunningham, W. P., & Cunningham, M. A. Principles of Environmental Science. McGraw Hill.

MAJOR COURSE CODE: 25BUHS6T03	**(02 Credits)**	**No of lecture in Hrs. 30**
Information technology		

COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO1	Explain basic programming concepts. (L2)	L2
CO2	Apply Python programming logic. (L3)	L3
CO3	Analyze program structure and outputs. (L4)	L4
CO4	Develop simple Python programs. (L6)	L6

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping						
	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	0	0	3	0	0	0
CO 2	0	0	3	0	0	0
CO 3	0	0	3	0	0	0
CO4	0	0	3	0	0	0

Unit	**Description**	**No. of Hours.**
I	**Introduction to Programming** • Introduction, A program, programming languages • The Role of Programming Language, Language Description, elements of program,variable, constats, compilation, compilers, assemblers, Data types, flow chart, Condition checking, loops, functions • AI & IOT	**15**
II	**Introduction to Python Programming** • Python basics, Conditional Statements: if, if-else, if-elif, if-elif-else, Building loops: while, for, range(), in, iterating through sequences, controlling loop execution: break, continue • Python List • Python Tuple • Python Dictionaries	**15**

REFERENCES

25BUHS6T03

1. Halterman, R. Programming Fundamentals. Pearson.
2. Felleisen, M. et al. How to Design Programs. MIT Press.
3. Downey, A. B. Think Python. O'Reilly.

MAJOR COURSE CODE: 25BUHS6T04	**(02 Credits)**	**No of lecture in Hrs. 30**

Home Science

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO1	Explain the microbial flora, sources of contamination, spoilage mechanisms, and food adulterants associated with vegetables, fruits, meat, seafood, milk, and milk products.	L2
CO2	Apply appropriate food preservation techniques such as thermal processing, Dehydration, irradiation, and microwave heating to enhance food safety and shelf life.	L3
CO3	Analyze the effects of different types of exercise (endurance, resistance, and Flexibility) on body composition, muscle physiology, and skeletal fitness.	L4
CO4	Design suitable exercise and weight-management programs for special populations Considering cardiovascular, pulmonary, and musculoskeletal health conditions.	L6

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	2	0	0	0	0	0
CO 2	2	0	0	0	0	0
CO 3	2	0	0	0	0	0
CO 4	2	0	0	0	0	0

Unit	Description Home Science	No. of Hours
I	**Microbiology of food:** ● **Microbial flora, spoilage, sources, characteristics and contamination in the following foods** Vegetables, fruits, sea foods, meat products, milk and milk products. ● **Techniques of food preservation –** Temperature (High and low). Use of ionizing radiations and microwave heating: ● **Use of dehydration and concentration** Methods and techniques used (Air convection, Drum dryers and Vacuum dryers) • **Food Adulteration:** Common food adulterants, detection and safe limits.	**15**
II	**EXERCISE PHYSIOLOGY:** **Body composition and sports performance** i. An overview of human body composition ii. Factors influencing body composition-age, sex, etc.with special emphasis on exercise. **Muscle physiology and skeletal fitness** i. Types of muscle exercise- endurance, resistance and flexibility; and their effect on the composition and strength of muscle. ii. Effect of training on muscle iii. Muscle and bone injury during exercise. **Cardiovascular & pulmonary response to exercise** i. Physiology of cardiovascular system i. Effect of aerobic and anaerobic exercise training on pulmonary and cardiovascular fitness. iii. Role of exercise in the diseases of CV & pulmonary system	**15**

	Suitable exercise programme for special conditions; therapeutic conditions, Weight reduction and Weight Management.	

REFERENCES	
25BUHS6T04	
1.	Srilakshmi, B. Food Science. New Age International.
2.	Potter, N. Food Science. CBS Publishers.
3.	Fennema, O. Food Chemistry. CRC Press.

MAJOR COURSE CODE: 25BUHS6P01	**(02 Credits)**	**No of lecture in Hrs. 60**

Practical based on 25BUHS6T01

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Interpret standardized psychological assessments tools to evaluate mental health concerns (L5)	L5
CO 2	Develop case formulations, differential diagnosis, and treatment strategies for psychological disorders (L3)	L3
CO 3	Analyse real world perspectives on mental health through experiential learning, reflective reports and media based evaluations (L4)	L4
CO 4	Estimate on the historical evolution of mental health practices and ethical principles	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	2	0	0	0	0	0
CO 2	2	0	0	0	0	0
CO 3	2	0	0	0	0	0
CO 4	2	0	0	0	0	0

1.	Mental Health Timeline.
2.	Ethics in Counseling.
3.	Beck Depression Inventory (BDI)
4.	5Ps model – Case Formation.
5.	Treatment plan for Phobias.
6.	Unethical Counseling Practices – Case Analysis.
7.	Rehabilitation Center Visit.
8.	General Health Questionnaire (GHQ)
9.	Depression, Anxiety, Stress scale (DASS-21)
10.	Differential Diagnosis Practical.

11.	Report on Personality Tests.
12.	Defense Mechanism – Identification.
13.	Media Analysis Report on “Stigma”
14.	Film/Book review on Learning Disabilities.
15.	Yale Brown Obsessive Compulsive Scale (YBOCS).

REFERENCES

24BUHS6P01

1.	Butcher, J. N., Hooley, J. M., & Mineka, S. Abnormal Psychology. Pearson.
2.	Corey, G. Counseling and Psychotherap0y. Cengage.
3.	Cohen, R. J., & Swerdlik, M. E. Psychological Testing. McGraw Hill.
4.	American Psychiatric Association. DSM-5-TR. APA.

MINOR COURSE CODE: 25BUHS6P02	**(02 Credits)**	**No of lecture in Hrs. 60**

Practical based on 25BUHS6T02

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Apply basic Python programming constructs such as operators, loops, lists, tuples, and dictionaries to solve numerical and logical problems.	L3
CO 2	Analyze program outputs related to arithmetic operations, factorials, Fibonacci series, prime numbers, patterns, and data structures.	L4
CO 3	Apply environmental science concepts to identify safety symbols, fire extinguishers, environmental pictograms, green buildings, and industrial color coding.	L3
CO 4	Evaluate environmental practices by assessing disaster management systems and calculating carbon footprint for sustainable development.	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	0	0	3	0	0	0
CO 2	0	0	3	0	0	0
CO 3	2	0	0	0	0	0
CO 4	2	0	0	0	0	0

1.	Program to enter two numbers and print the arithmetic operations like +,-,*, /, // and %.
2.	Write a Program to find factorial of the entered number.

3.	Write a Program to enter the number of terms and to print the Fibonacci Series.
4.	Write a Program to show the outputs based on the entered list.
5.	To find the maximum of list of numbers
6.	Write a program to find prime number
7.	Write python program to draw patterns 1 2 1 2 3 1 2 3 4 * * * * * * * * * *
8.	Write python program to demonstrate operations on List
9.	Write python program to demonstrate operations on Dictionaries
10.	Write python program to demonstrate operations on Tuples
11.	Studying different types and parts of Fire extinguisher / Visit to disaster management cell
12.	Studying of environment pictogram.
13.	Studying different types of safety symbols, signs, and chemicals
14.	Studying Green building.
15.	Identification of color coding. (pipes in industries)
16.	Calculating Carbon footprint.

REFERENCES

24BUHS6P02

1. Bharucha, E. Environmental Studies. Universities Press.
2. Cunningham, W. P., & Cunningham, M. A. Environmental Science. McGraw Hill.
3. Halterman, R. Programming Fundamentals. Pearson.
4. Downey, A. B. Think Python. O'Reilly.

MINOR COURSE CODE: 25BUHS6P03	**(02 Credits)**	**No of lecture in Hrs. 60**

Practical based on 25BUHS5T03

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Analyze food quality, nutritional changes, and microbial presence by interpreting results of practical tests (e.g., heat effect on vitamin C, pigment changes with pH, spoilage in eggs, probiotic isolation) and assess different exercise programs for specific health conditions.	L4
CO 2	Test for adulterants in food (milk, fats, spices, sweeteners), estimation of salt and ascorbic acid, MBRT test, phosphatase test, and identification of fitness exercises	L4

	and tests.	
CO 3	Identify the basic concepts of food adulteration, microbial contamination, food quality assessment, nutrients, pigments, and types of physical exercises along with their health benefits.	L3
CO 4	Evaluate and design appropriate dietary and exercise interventions, including weight management and therapeutic exercise programs (CVD, diabetes, arthritis), and critically assess food safety, quality, and nutritional value based on experimental findings.	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	1	0	0	0	0	0
CO 2	1	0	0	0	0	0
CO 3	1	0	0	0	0	0
CO 4	1	0	0	0	0	0

1.	Detection of glucose and starch as an adulterant in milk sample.
2.	Detection of adulterants in cheese, butter, ghee.
3.	Detection of adulterants in jaggery, honey and iodised salt.
4.	Detection of microbes from spoiled egg.
5.	Quality assessment and analysis of food i)Ice-cream ii)Yoghurt by MBRT.
6.	Phosphatase test for determination of efficiency of pasteurization.
7.	Isolation of bacterial probiotics from curd.
8.	Identification of types of exercises; (Bench press, Jumps, Push ups, Sit and Reach Test); fitness Muscle strength, endurance and flexibility exercises.
9.	Identification of pigments in fruits and vegetables and influence of pH on them.
10.	Estimation of salt content in butter
11.	Suitable exercise programme for special conditions Weight reduction and Weight Management
12.	Suitable Exercise programme for therapeutic conditions-CVD/ Diabetes /Arthritis.
13.	Estimation of ascorbic acid and effect of heat treatment on it.
14.	Detection of Adulteration of spices.
15.	Qualitative tests for hydrogenated fats, butter, and ghee.

REFERENCES

24BUHS6P03

1. Potter, N. N., & Hotchkiss, J. H. Food Science. Springer.
2. Frazier, W. C., & Westhoff, D. Food Microbiology. McGraw Hill.
3. Ranganna, S. Handbook of Analysis and Quality Control. Tata McGraw Hill.

DSE COURSE CODE: 25BUHS6TE1	(02 Credits)	No of lecture in Hrs. 30

Food service Management and Entrepreneurship Management II

COURSE OUTCOME		
Students will be wanted to learn OR on completion of this course, students will be able to learn:		
CO1	Recall types of food services, operation and systems (L1)	L1
CO2	Explain menu planning, kitchen layout and service management concepts (L2)	L2
CO3	Identify legal issues, taxation policies and food safety requirements (L1)	L1
CO4	Illustrate entrepreneurial competencies for business opportunities (L2)	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO4	0	0	0	0	0	3

Unit	Description	No. of Hours.
I	**Food Service Management** ● Classification of food service operations ● Recent trends in food service Systems . Types of food service systems Menu Planning ,Types of Menus Menu presentation, Writing, Design and format Menu Marketing ● Storage and Inventory Production: Recipe formulation, ● Kitchen Design and Layout. Styles of service and Service management. ● Food Handling and prevention of food borne illness	**15**

II	**Entrepreneurship Management II** ● Taxation ● Legal issues ● Entrepreneurs competencies: ● Decision making and problem-solving Communication ● Creativity and business opportunity identification ● Entrepreneurial success and failures	**15**

REFERENCES	
25BUHS6TE1	
1.	Sethi, M. Food Service Management. New Age.
2.	Bali, P. S. Quantity Food Production and Indian Cuisine. Oxford.
3.	Pathak, A. Legal Aspects of Business. McGraw Hill.

DSE COURSE CODE: 25BUHS6PE1	**(02 Credits)**	**No of lecture in Hrs. 60**

Practical based on 25BUHS6TE1

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Apply food preparation and service techniques.	L3
CO 2	Analyze menu planning and costing.	L4
CO 3	Evaluate food service enterprises.	L5
CO 4	Prepare a food service business plan.	L6

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

1.	Techniques in measurement of food stuff – use of standard measuring cups and spoons.
2.	Preparation of recipes from cereals, pulses.

3.	Preparation of recipes from fruits and vegetables.
4.	Preparation of recipes from milk and milk products.
5.	Preparation of beverages.
6.	Preparation of shallow and deep fried foods.
7.	Table setting & service – flower arrangement, fruit & vegetable carving & napkin folding
8.	Formulating a recipe :Indian Menu, Continental Menu, Oriental Menu.
9.	Study of preparation and presentation of : soups, snacks
10.	Preparation and Presentation of : Sandwiches, Salads, Mocktails.
11.	Measurement of different milk sample density by lactometer
12.	Case study on New Successful Startups Established Entrepreneurs
13.	Case Studies on Successful Ventures
14.	Case Studies on Failed ventures
15.	Preparation of Blueprint on Workable Business Model

REFERENCES

25BUHS6PE1

1.	Sethi, M. Food Service Management. New Age.
2.	Bali, P. S. Quantity Food Production and Indian Cuisine. Oxford.
3.	Ninemeier, J. D. Management of Food and Beverage Operations. AHLEI.
4.	Hisrich, R. D., Peters, M. P., & Shepherd, D. A. Entrepreneurship. McGraw Hill.

DSE COURSE CODE: 25BUHS6TE2	**(02 Credits)**	**No of lecture in Hrs. 30**

Introduction to Tourism

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO1	Summarize concepts, status of medical and wellness tourism (L2)	L2
CO2	List types, issues and challenges of medical tourism (L1)	L1
CO3	Explain heritage tourism, local cuisines and concept of home stay (L2)	L2
CO4	Outline tourist resources, forts and monuments (L2)	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping

	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	0	0	0	0	0	2
CO 2	0	0	0	0	0	2

CO 3	0	0	0	0	0	2
CO4	0	0	0	0	0	2

Unit	**Description**	**No. of Hours.**
I	**Health and Eco Tourism** ● Concept of health, medical and wellness tourism ● Types of medical tourism ● Status of medical tourism ● Medical tourism issues and challenges	**15**
II	**Cultural & Heritage tourism** ● Heritage tourism: Meaning, scope and importance of tourism. ● Tourist resources with special reference to heritage monuments in Maharashtra (Gharapuri, Kanheri, Ajanta, Flora) ● Forts and monuments as tourist resources in Maharashtra ● Local cuisines related to geographical diversity ● Concept of homestay	**15**

REFERENCES

25BUHS6TE2

1.	Bhatia, A. K. Tourism Principles and Practices. Sterling.
2.	Roday, S. Tourism Management. Oxford.
3.	Cooper, C. et al. Tourism: Principles and Practice. Pearson.

DSE COURSE CODE: 25BUHS6PE2	**(02 Credits)**	**No of lecture in Hrs. 60**

Practical based on 25BUHS6TE2

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Discuss biosphere reserve and physical features in map	L6
CO 2	Determine the role of international agencies, wildlife sanctuaries, national parks and protected areas	L5
CO 3	Identify treatment used in medical tourism places	L3
CO 4	Illustrate importance of yoga/ airport code and its guidelines	L4

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No mapping						
	PO 1	**PO 2**	**PO 3**	**PO 4**	**PO 5**	**PO 6**
CO 1	0	0	0	0	0	2
CO 2	0	0	0	0	0	2
CO 3	0	0	0	0	0	2
CO 4	0	0	0	0	0	2

1.	Study of biosphere reserves in India.
2.	Study of wild life sanctuaries in India.
3.	Study of national parks in India.
4.	Ecotourism guidelines.
5.	Understanding the role of National agency.
6.	Understanding the role of International agency
7.	Ecotourism in protected area.
8.	Identification of Treatments used in medical tourism.
9.	Documents required for medical tourism.
10.	Understanding and reading of map
11.	Understanding of land form and physical features.
12.	Studying of cities and airport code
13.	Identification Places for medical tourism in india.
14.	Drawing of map using symbols.
15.	Understanding importance of yoga in tourism

REFERENCES

25BUHS6PE2

1.	Bhatia, A. K. Tourism Principles and Practices. Sterling.
2.	Roday, S. Tourism Management. Oxford.
3.	Cooper, C. et al. Tourism: Principles and Practice. Pearson.

	VSEC -Vocational & Skill Enhancement Courses	Credits 02
Course code 25BUHS6VSC	**Course title – Toxicology**	**No of lectures in hrs 45**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	List toxins and drugs	L1
CO 2	Classify LC50, LD50, and petroleum products	L2
CO 3	Summarize toxicological examination of poisons and alcohol	L2
CO 4	Explain toxicological examination of viscera	L2

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	2	0	0	0	0	3
CO 2	2	0	0	0	0	3
CO 3	2	0	0	0	0	3
CO 4	2	0	0	0	0	3

	Course: VSEC	
Unit I	**Toxicology**	**No. of Lectures**
I	• Plant & animal based toxins • LC 50 & LD 50 • Drug of Abuse and narcotic drugs • Petroleum products • Toxicological examination of poisons and alcohol • Toxicological examination of viscera	**15**

VSEC Practical

1.	TLC method for differentiation of inks
2.	Study of analytical instruments in crime investigation **a.** GC-MS **b.** HPLC **c.** UV-visible Spectrophotometer **d.** TLC Electrophoresis (Horizontal/ Vertical)
3.	Demonstration of flame Photometer: Potassium or Sodium.
4.	Color test for drugs.
5.	Color test for plant poison.
6.	TLC method for differentiation of drugs.
7.	Case studies on forensic toxicological cases.
8.	Analysis of dyes.

9.	Analysis of fertilizers.
10.	Analysis of alcohol as per BIS/ASTM specification.

REFERENCES

25BUHS6VSC

1.	Hodgson, E. Modern Toxicology. Wiley.
2.	Stine, K. E., & Brown, T. M. Principles of Toxicology. CRC Press.
3.	Shetty, B. S. K. Forensic Toxicology. Elsevier.
4.	Klaassen, C. D. Casarett & Doull's Toxicology. McGraw Hill.

	On Job Training in Human Science II	Credits 02
Course code 25BUHS6OJT	**Course title - On Job Training in Human Science II**	**No of lectures in hrs 60**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Describe the organizational structure, roles, and work processes at the training organization.	L2
CO 2	Apply theoretical knowledge of Human Science in real workplace situations.	L3
CO 3	Analyze workplace practices, professional ethics, and interpersonal dynamics.	L4
CO 4	Evaluate personal skill development and professional competencies gained during training.	L5

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

On Job Training in Human Science II

	Field Project in Human Science IV	Credits 02
Course code 25BUHS6FPR	**Course title - Field Project in Human Science IV**	**No of lectures in hrs 60**

COURSE OUTCOME

Students will be wanted to learn OR on completion of this course, students will be able to learn:

CO 1	Identify a relevant field problem related to Human Science.	L1

CO 2	Apply appropriate data collection tools such as surveys, interviews, or observations.	L3
CO 3	Analyze field data using basic qualitative and quantitative techniques.	L4
CO 4	Prepare a structured field project report with findings and conclusions.	L6

Grading will be as 3: High(>60%), 2: Moderate(40%-60%), 1: Low(<40%), 0: No Mapping

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO 1	0	0	0	0	0	3
CO 2	0	0	0	0	0	3
CO 3	0	0	0	0	0	3
CO 4	0	0	0	0	0	3

Field Project in Human Science IV

VPM's B.N. Bandodkar College of Science (Autonomous), Thane
Curriculum Structure for the Undergraduate Degree Programme T.Y.B.Sc Human Science

	SEMESTER – V	Course imparts Employability (EM), Entrepreneurship (EN), Skill Development (SD)			Course integrates with Professional Ethics (PE), Gender Equity (GE), Human Value (HV), Environmental Sustainability (ES)			
Course Code	Major Course Title	EM	EN	SD	PE	GE	HV	ES
25BUHS5T01	Industrial Psychology	√	–	√	√	–	√	–
25BUHS5T02	Constitutional Law	–	–	–	√	√	√	√
25BUHS5T03	Nutritional Biochemistry	√	–	√	–	–	–	–
25BUHS5P01	Practical based on 25BUHS5T01	√	–	√	√	–	√	–
25BUHS5P02	Practical based on 25BUHS5T02	√	–	√	√	√	√	√
25BUHS5P03	Practical based on 25BUHS5T03	√	–	√	–	–	–	–
	Minor Course Title							
25BUHS5TMN	Entrepreneurship Management – I	√	√	√	√	–	–	–
Course Code	**DSE Courses - Course Title**							
25BUHS5TE1	Human Development and Ageing	–	–	√	√	–	√	–
25BUHS5PE1	Practical based on 25BUHS5TE1	√	–	√	√	–	√	–
25BUHS5TE2	Introduction to Anthropology & Archaeology	–	–	–	√	–	√	–
25BUHS5PE2	Practical based on 25BUHS5TE2	√	–	√	√	–	√	–

Semester 5 - VSEC – Value Skill Enhancement Course								
25BUHS5VSC	Forensic Science (Theory & Practical)	√	--	√	√	--	√	--
Semester 5 - Field / On Job Training								
25BUHS5OJT / 25BUHS5FPR	On Job Training – I / Field Project – III	√	--	√	√	--	√	√
44	***Total***	***09***	***01***	***09***	***08***	***03***	***09***	***05***

	SEMESTER – VI	**Course imparts Employability (EM), Entrepreneurship (EN), Skill Development (SD)**			**Course integrates with Professional Ethics (PE), Gender Equity (GE), Human Value (HV), Environmental Sustainability (ES)**			
Course Code	**Major Course Title**	**EM**	**EN**	**SD**	**PE**	**GE**	**HV**	**ES**
25BUHS6T01	Clinical Psychology	√	–	√	√	–	√	–
25BUHS6T02	Environmental Management	√	–	√	√	–	–	√
25BUHS6T03	Information Technology	√	–	√	–	–	–	–
25BUHS6T04	Home Science	√	–	√	–	√	√	–
25BUHS6P01	Practical based on 25BUHS6T01	√	–	√	√	–	√	–
25BUHS6P02	Practical based on 25BUHS6T02 & 25BUHS6T03	√	–	√	√	–	–	√
25BUHS6P03	Practical based on 25BUHS6T04	√	–	√	–	√	√	–
Course Code	**DSE Courses - Course Title**							

25BUHS6TE1	Food Service Management & Entrepreneurship Management – II	√	√	√	√	–	–	–
25BUHS6PE1	Practical based on 25BUHS6TE1	√	√	√	√	–	–	–
25BUHS6TE2	Introduction to Tourism	√	√	√	–	–	√	√
25BUHS6PE2	Practical based on 25BUHS6TE2	√	√	√	–	–	√	√
VSEC – Value Skill Enhancement Course								
25BUHS6VSC	Toxicology (Theory & Practical)	√	--	√	√	--	√	--
Field / On Job Training								
25BUHS6OJT / 25BUHS6FPR	On Job Training – II / Field Project – IV	√	--	√	√	--	√	√
53	***Total***	**11**	**04**	**11**	**09**	**04**	**08**	**06**

Prof. Dr. Vinda Manjramkar
BOS Chairman & In charge of Department of Human Science