SEMESTER-I

MAJOR MANDATORY
INTRODUCTION TO BUSINESS

PROGRAM	**B.COM**
SEMESTER	**I**
COURSE TITLE	**INTRODUCTION TO BUSINESS**
VERTICLE /CATEGORY	**A/MAJOR MANDATORY (CORE)**
COURSE LEVEL	**4.5**
COURSE CODE	
COURSE CREDIT	**2**
HOURS PER WEEK THEORY	**2**
HOURS PER WEEK PRACTICAL/TUTORIAL	NA

COURSE OBJECTIVE
This course provides an overview of the business, understanding and significance of the Business Environment, Project Planning and Business Strategy.
COURSE OUTCOMES
CO1: Learners will recognize the fundamental components of the business
CO2: Learners will be able to apply theoretical knowledge to real world scenarios within the Business Environment.
CO3: Learners would understand the concept and importance of project planning and would get hands on through case studies
CO4: To create comprehensive understanding among the learners about Business Strategies

ORGANISATION OF THE COURSE

UNIT NO	COURSE UNITS AT A GLANCE	TOTAL HOURS
1	Business and Business Environment	15
2	Project Planning and Business Strategies	15
	TOTAL HOURS	30

COURSE DESIGN
COURSE UNIT TITLE 1: BUSINESS and BUSINESS ENVIRONMENT (15)
a. Business Introduction - Traditional and Modern Concept of business.:, Functions, Scope and Significance of business. Objectives of Business: Steps in setting business objectives, b. Business Environment Concept and Importance of business environment, Constituents of Business Environment, Educational Environment and its impact, International Environment – Current Trends in theWorld, Climate change and its impact
PEDAGOGICAL APPROACH: Lecture Method, Case study and Assignments
COURSE UNIT TITLE 2 PROJECT PLANNING and BUSINESS STRATEGIES: (15)
a. Project Planning Introduction: Business Planning Process; Concept and importance of Project Planning; ProjectReport; feasibility Study types and its importance Business Unit Promotion: Concept and Stages of Business Unit Promotion, Location – Factors determining location, and Role of Government in Promotion. Statutory Requirements in Promoting Business Unit. b. Business Strategy Introduction :- Concept of Business strategy, New Trends in Business strategy: Impact of Liberalization, Privatization and Globalization, Strategy alternatives in the changing scenario, Restructuring and turnaround strategies
PEDAGOGICAL APPROACH: Lecture Method, Assignments and Case Studies

REFERENCES:-

- Business Organisation Management Maheshwari, Rajendra P, Mahajan, J.P. International Book House
- Business Organisation, Maheshwari, Rajendra P, Mahajan, J.P., International Book House
- Introduction to Commerce, Vikram, Amit, Atlantic Pub
- A Course Book on Business Environment, Cherunilam, Francis, Himalaya Pub
- Business Environment, Cherunilam,Francis, Himalaya Pub
- Essentials of Business Environment, Aswathappa K., Himalaya Pub
- Essentials of Business Environment, Aswathappa, Himalaya Pub
- Strategic Management, Kapoor, Veekkas, Taxmann

Total 50 Marks: with 2 Credits
30 Marks External and 20 Marks Internal

30 Marks External

DURATION: 1 Hour MARKS: 30

Any 2 out of 3

Q. 1 Answer the following (15 Marks)
a.
b.

Q. 2 Answer the following (15 Marks)
a.
b.

Q. 3 Answer the following (15 Marks)
a.
b.

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20 Marks Internal

Any 4 out of 6

1) Class Test (05 Marks)
2) Assignment (05 Marks)
3) Presentation (05 Marks)
4) Group Discussion (05 Marks)
5) Quiz (05 Marks)
6) Case Study (05 Marks)

Note: 1) Any Four out of the above can be taken for the internal Assessment.
2) The internal Assessment shall be conducted throughout the Semester.

VSC Semester 1

Business Etiquettes and Corporate Grooming

PROGRAM	**B.COM**
SEMESTER	**I**
COURSE TITLE	**Business Etiquette and Corporate Grooming**
VERTICLE /CATEGORY	**VSC 1**
COURSE LEVEL	**4.5**
COURSE CODE	
COURSE CREDIT	**2**
HOURS PER WEEK THEORY	**2**
HOURS PER WEEK PRACTICAL/TUTORIAL	NA

COURSE DESCRIPTION
The course in business etiquette and corporate grooming introduces concepts related to business etiquette and corporate grooming and its applications in the contemporary context.
COURSE OBJECTIVES
At the end of the course, students will be able to 1. Identify basic concepts related to business etiquette and corporate grooming. 2. Discuss the concepts in the context of effective writing and business correspondence. 3. Discuss its applications in different settings and appreciate the key minimum standards required by etiquette practice Level of Knowledge: Conceptual and application
COURSE OUTCOME
CO1: Enable the learners to understand the etiquette required in business
CO2: Help the learners know the concept of corporate grooming
CO 3: Enable the learners to understand the application of business etiquette and corporate grooming

ORGANISATION OF THE COURSE		
UNIT NO	COURSE UNITS AT A GLANCE	TOTAL HOURS
1	Business Etiquettes	15
2	Corporate Grooming	15
	TOTAL HOURS	30

COURSE DESIGN
Unit 1 –Business Etiquettes – (15)
• Business Etiquettes- Concept, Principles, Significance of Business Etiquettes in 21st Century Professional Advantage; Need and Importance of Professionalism Minimum standards required by etiquette practice. • Workplace Etiquette, E-Mail Etiquette, Telephone Etiquette Dining Etiquette, Meeting Etiquette and Presentation Etiquettes.
PEDAGOGICAL APPROACH: Lecture Method, Role Play and Assignments
Unit 2 – Corporate Grooming (15)
• Corporate Grooming - Concept, Hygiene and Grooming Guide - Posture and Gesture – Yes's and NO's of Grooming, Appearance and Attire, Clothes Encounters - Gauge in brain (Formal vs informal), Connecting and Building Rapport - Listening Skills, Conversational Skills, Body Language. • Emotional intelligence: Importance, concept, theory and measurements. Stress Management: Strategies for preventing and relieving stress. Time management: Meaning; Techniques and styles.
PEDAGOGICAL APPROACH: Lecture Method, Case study and Role Play
REFERENCES:- • Lillian H. Chaney, Jeanette S. Martin. The Essential Guide to Business Etiquette • Sarvesh Gulati (2012), Corporate Grooming and Etiquette, Rupa Publications India Pvt. Ltd. • Thomas Means (2009), Business Communication. • Nancy R. Mitchell Etiquette Rules Wellfeet Press 2017 A filed guide to modern manners

Total 50 Marks: with 2 Credits
30 Marks External

DURATION: 1 Hour MARKS: 30

Any 2 out of 3

Q. 1 Answer the following (15 Marks)
a.
b.

Q. 2 Answer the following (15 Marks)
a.
b.

Q. 3 Answer the following (15 Marks)
a.
b.

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20 Marks Internal

1) Class Test (05 Marks)
2) Assignment (05 Marks)
3) Presentation (05 Marks)
4) Group Discussion (05 Marks)
5) Quiz (05 Marks)
6) Case Study (05 Marks)

Note: 1) Any Four out of the above can be taken for the internal Assessment.

2) The internal Assessment shall be conducted throughout the Semester.

AC – 28.06.2024
Item No. – 8.1 (N)

As Per NEP 2020

University of Mumbai

Syllabus for Indian Knowledge System	
Board of Studies in Indian Knowledge System	
UG First Year Programme	
Semester	**I OR II**
Title of Paper	**Credits**
I) Indian Knowledge System	**2** **(either I or II Semester)**
From the Academic Year	**2024-2025**

Sr. No.	Heading	Particulars
1	**Description the course : Including but Not limited to :**	Introduction, relevance, Usefulness, Application, interest, connection with other courses, demand in the industry, job prospects etc.
2	**Vertical :**	Major/Minor/Open Elective /Skill Enhancement / Ability Enhancement/Indian Knowledge System (Choose By √)
3	**Type :**	Theory / Practical
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	100 Marks
7	**Course Objectives**: (List some of the course objectives) 1. To sensitize the students about context in which they are embedded i.e. Indian culture and civilisation including its Knowledge System and Tradition. 2. To help student to understand the knowledge, art and creative practices, skills and values in ancient Indian system. 3. To help to study the enriched scientific Indian heritage. 4. To introduce the contribution from Ancient Indian system & tradition to modern science & Technology.	
8	**Course Outcomes**: (List some of the course outcomes) 1. Learner will understand and appreciate the rich Indian Knowledge Tradition 2. Lerner will understand the contribution of Indians in various fields 3. Lerner will experience increase subject-awareness and self-esteem 4. Lerner will develop a comprehensive understanding of how all knowledge is ultimately intertwined	
9	**Modules**:-	
	Module 1: (10 Hours)	

	1. Introduction to IKS (What is knowledge System, Characteristic Features of Indian Knowledge System) **2.** Why IKS? (Macaulay's Education Policy and its impact, Need of revisiting Ancient Indian Traditions) **3.** Scope of IKS (The Universality of IKS (from Micro to Macro), development form Earliest times to 18th Century CE) **4.** Tradition of IKS (Ancient Indian Education System: Home, Gurukul, Pathashala, Universities and ancient educational centres)

	5. Relevant sites in the vicinity of the Institute (Water Management System at Kanheri, Temple Management of Ambarnath, etc.)	
	Module 2: (10 Hours)	
	1. Medicine (Ayurveda) **2.** Alchemy **3**. Mathematics **4.** Logic **5.** Art of Governance (Arthashastra)	
	Module 3: **(10 Hours) (Select Any FIVE out of the following)**	
	1. Aesthetics **2.** Town Planning **3**. Strategic Studies **4.** Krishi Shastra **5.** Vyakaran & Lexicography **6**. Natyashastra **7**. Ancient Sports **8**. Astronomy **9**. Yoga and Wellbeing **10.** Linguistics **11.** Chitrasutra **12.** Architecture **13.** Taxation **14.** Banking **15.** Trade and Commerce	
10	**Reference Books** **1.** Concise history of science in India- D.M. Bose, S.N Sen, B.V. Subbarayappa. **2.** Positive sciences of the Ancient Hindus- Brajendranatha seal, Motilal Banrasidas, Delhi 1958. **3.** History of Chemistry in Ancient India & Medieval India, P.Ray- Indian Chemicals Society, Calcutta 1956 **4.** Charaka Samhita- a scientific synopsis, P. Ray & H.N Gupta National Institute of Sciences of India, New Delhi 1965. **5.** MacDonnell A.A- History of Sanskrit literature **6.** Winternitz M- History of Indian Literature Vol. I, II & III **7.** Dasgupta S.N & De S.K- History of Sanskrit literature Vol. I. **8.** Ramkrishna Mission- cultural heritage of India Vol. I, II & III. **9.** Majumdar R. C & Pushalkar A.D- History & culture of the Indian people, Vol. I, II & III. **10.** Keith A.B- History of Sanskrit literature. **11.** Varadachari V- History of Sanskrit literature Chaitanya Krishna- A new History of Sanskrit	
11	**Continuous Internal Assessment: 40%**	**Semester End Examination : 60%**
12	**Continuous Evaluation through:** Assignment/ Presentations/ Projects (Group/Individual) / Field Visit Report **20 Marks,** class Test / MCQ Test **10 Marks,** Overall Conduct and Class Participation **10**	

	Marks	
13	**Format of Question Paper:** for the final examination Q1. Attempt any TWO Questions out of FIVE. **10 Marks** Q2. Attempt any FIVE Questions out of TEN **25 Marks** Q3. Attempt any FIVE Questions out of FIFTEEN. **25 Marks**	

Sign of the BOS Chairman
Name of the Chairman
Name of the BOS

Sign of the Offg. Associate Dean
Name of the Associate Dean
Name of the Faculty

Sign of the Offg. Dean
Name of the Offg. Dean
Name of the Faculty

AC –28.06.2024

Item No. – 5.5 (N)

University of Mumbai

Syllabus for Extension Work in Vertical VI - CC	
Board of Studies in Extension Work	
UG First Year Program	
Semester	**I**
Title of Paper	**Credit**
Extension Work	**2 Credits**
From the Academic Year	**2024-25**

Introduction

The National Education Policy (NEP) 2020 is a comprehensive framework introduced by the Government of India to revamp the country's education system. It has replaced the previous National Policy on Education, which has aim to ensure universal access to quality education from preschool to higher education, including vocational education. NEP 2020 emphasizes a more holistic, multidisciplinary, and flexible curriculum which lay emphasis on conceptual understanding rather than rote learning allowing students to choose subjects across disciplines without strict boundaries.

The National Education Policy (NEP) 2020 of India addresses the role of higher education institutions in fostering community engagement and extension work. It highlights the social responsibility of higher education institutions towards their communities. It encourages institutions to engage with local communities, address societal challenges, and contribute to sustainable development. The policy promotes the implementation of outreach programs by higher education institutions to disseminate knowledge, provide services, and support community development. These programs may include literacy campaigns, career development programs, social issues awareness programs, health and hygiene initiatives, skill development workshops, and technology-oriented activities. The policy suggests integrating extension work into the curriculum of higher education programs. This allows learners to gain practical experience, develop leadership skills, and contribute to community development while pursuing their studies. It recognizes incentives to encourage active engagement in community service and extension activities.

Overall, NEP 2020 recognizes the significant role of higher education institutions in promoting community engagement, social responsibility, and sustainable development through extension work. By integrating extension activities into their mission and operations, institutions can contribute in building inclusive and resilient societies.

Extension work in the context of education refers to the activities and programs conducted by educational institutions to engage with communities, address societal needs, and promote social development.

Aim of Extension Work under NEP:

- Extension work aims to identify and address the specific needs and challenges faced by communities. NEP 2020 encourages higher education institutions to engage with local communities and contribute to their development by offering programs and services that

address social needs, such as literacy programs, health awareness campaigns, and vocational training.

- Extension work aims to empower communities by providing them with the knowledge, skills, and resources they need to address their own requirements and improve their quality of life.

Key objectives of Extension Work under NEP:

- To ensure equal access to quality education and educational opportunities to aspirants.
- To support the government initiatives in achieving universal foundational literacy and numeracy as per sustainable development program.
- To organize remedial programs to address the learning breaches among the youth and provide unending education opportunities.
- To offer more holistic, multidisciplinary, and flexible curricular activities with an emphasis on conceptual understanding and personality development.
- To offer a wide range of activities & promote critical thinking, creativity and innovation.
- To provide aspirants with multiple pathways for skill development and employment.
- To implement outreach programs to disseminate knowledge, provide services, and support community development.

Extension Work Activities:

Extension Work activities introduced by DLLE are a crucial aspect of the educational environment, offering multifaceted benefits that extend beyond academic learning. Many extension activities focus on social issues, sustainability, and environmental conservation. These activities educate the communities on sustainable practices which promote inclusivity and social justice. These activities focus especially on training women in various skills, including entrepreneurship and digital literacy through various vocational skill-oriented projects offered by the department. These activities have significantly contributed to skill development among community members, leading to improved employment opportunities and personality development. Learners participate in extension work activities as part of their curriculum, to gain practical experience and to contribute to community development. Thus, engaging in extension work fosters a sense of social responsibility and civic engagement among the learners and facilitators.

THE EXTENSION DIMENSION (Reach to Unreached)

The college students are enrolled for extension work projects and perform various activities for the **social awareness based on various issues / problems in the society such as Save Girl Child, Pollution, Aids, Global Warming, Environment, Tree Plantation, Importance of Education, Illiteracy, Child Labour, Dowry Deaths, Malnutrition, Watershed Management and so many.** The students are creating awareness about these social problems / issues through various activities such as Street Play, Exhibition, Poster Making, Songs, Speech, Survey, Elocution, and participation in Seminar & Conferences. For this purpose, students are going to remote areas and involve the community and make them aware of our role in eradicating social problems faced by the society and trying to convince the people human duties as an ideal citizen.

To facilitate the sensitization of the student to the socio-cultural realities, the Department offers extension work projects encompassing social issues for the student. There are many Extension Work Projects being offered by the department under the two different units for enhancing the employability and IT skills of the student. The projects are given below for which the details are available on DLLE website at www.mudlle.ac.in.

I) Vocational Career Oriented Projects

1. Career Project [CP]
2. Industry Orientation Project [IOP]
3. Anna Poorna Yojana [APY]
4. Skill Development (SD)

II) Community Oriented Projects

1. Population Education Club (PEC)
2. Survey Research
3. Education for All (EFA- NIOS, IDOL)
4. Environment Education
5. Civic Sense (CS)
6. Consumer Guidance

Given below are the activities / programs to be conducted by the colleges as a part of 10 Extension Work Projects as listed above. The learner will select any one extension work project for this academic year and participate in following activities to complete 60 hours of activities during Semester I in this academic year.

ACTIVITIES FOR SEMESTER I = TOTAL 60 HOURS – 2 Credits

1. Exhibit your talent (Talent Search Program) **(practice session to presentation-05 hours)**
   A talent search program is a critical component of modern human resource management that compel sensitization of self-awareness. By systematically identifying, attracting, and nurturing talent, the colleges can build a workforce that is capable, diverse, and aligned with their strategic goals to achieve objectives of extension work. The following talents / skills are expected from learners to conduct training, extension work and field outreach activities as per the project assigned to the students. (Organization, Crowd control, Storytelling, Stage performance (singing, acting, musical instrument playing), Script writing, Poetry composition, Drawing & painting, Collage, Drafting and writing report, PPT presentation and Video Making.

2. Organizing & Participation in Training Session and Note Making **(05 hours)**
   Every learner should attend the training session organized by their college for orientation of annual extension work program. Attendance is compulsory. In this session the learners will be oriented about all the extension work projects followed by question-and-answer session. The learner must read resource material and guidelines carefully and understand the structure Extension Work under NEP 2020 and accordingly plan for participation in various programs, college level and field outreach activities. Documentation of the activity and report preparation needs to be completed by the learners.

3. Self- Introductory Video / Stage Performance **(practice session to presentation-05 hours)**
   All learners enrolled in Extension Work can make self-introductory video or stage performance (3-4 minutes duration) stating his / her name, college, areas of interest, reason to join DLLE, goals, why did he / she choose the particular project, how will he/she perform & achieve his/ her objectives etc. followed by 2 page report writing.

4. Participation in Project /Activity (as per selected extension work project) **(35 hours)**

- Organize and participate in programs related to projects / government policies.
- P*articipation in*
  - Seminar /conferences, discussion sessions, debate, rallies
  - Competitions (essay/creative writing, elocution, poster/ video/ rangoli making etc.
  - Extension Work group activities of other groups in the college.
- Prepare your PPT, design your posters / charts.
- Survey / short term academic courses / innovative programs.

Learners should perform and participate in the activities as stated in the extension work project chosen by him / her and strictly follow the guidelines. All the programs must be related to extension work projects to fulfil the DLLE objectives.

5. Report Writing and Final submission of projects / report **(10 hours)**

- Every learner will prepare final report as per format given by DLLE
- Present your report during the college program.
- College will organize a program in the hall / classroom for all learners and give them opportunity to present their report with PPT presentation followed by question answer session / test / interview by the college.

Monitoring and Evaluation:

Monitoring and Evaluation will be conducted by College Teacher and Field Coordinators (Senior Teachers in Extension Work) deputed by DLLE on the basis of attendance, punctuality, completion of hours, participation in programs and proficiency in required skill sets, feedback and student's overall performance and additionally on the basis of written report and presentations. Approval of Principal, Field Coordinator and Director, DLLE will be final for granting academic credit to the students.

Sign of the BOS Chairman	**Sign of the Offg. Associate Dean**	**Sign of the Offg. Dean**
Name of the Chairman	**Name of the Associate Dean**	**Name of the Offg. Dean**
Name of the BOS	**Name of the Faculty**	**Name of the Faculty**

As Per NEP 2020

University of Mumbai

Title of the Program

Introduction to Cultural Activities

SEM I

Syllabus for Two Credit

(With effect from the academic year 2024-25)

Aims and Objectives

- To study the importance of cultural activities in India.
- To discuss the historical importance of cultural activities.
- To define and describe the overview of cultural practices at Indian and Global level.
- To list the various forms of cultural activities and its applied skills.
- To describe the role of organizations for organizing cultural activities in India.

Learning Outcomes

- Understand the significance of cultural activities
- Sensitize students towards Indian culture and its preservation
- Apply the knowledge and skills of the cultural activities in their practical life
- Participate in the various cultural activities

Modules at Glance Semester I

Module No.	Unit	Content	No. of Hours
1	I	Overview to Cultural Activities	05
	II	History of Student Cultural Activities	05
2	III	Forms / Types of Literary and Fine Arts Activities and its Applied Skills	10
	IV	Forms / Types of Performing Arts Activities and its Applied Skills	10
Total No. of Hours			**30**

Module No.	Unit	Content	No. of Hours
1	**I**	**1.1 Overview to Cultural Activities** • Definition of culture and its manifestations • Understanding cultural diversity and inclusivity • The role of cultural activities in preserving heritage • Overview of Indian cultural practices • Overview of global cultural practices	05
	II	**2.1 History of Student Cultural Activities** □ Role of student cultural activities □ History of student cultural activities in India	05

		• Role of AIU in preserving cultural heritage of India • History of student cultural activities in Maharashtra • Student Cultural activities at University of Mumbai	
2	**III**	**3.1 Forms / Types of Literary and Fine Arts Activities and its Applied Skills** **3.1.1 Various Forms of Literary Arts** • **Elocution**: Reading Skills, Soft Skills, Languages, Communication Skills, etc. • **Debate**: Reading Skills, Soft Skills, Languages, Communication Skills, etc. • **Story Writing**: Introduction, Plot, Characterization, Presentation, Relevance, Language Style, etc. • **Story Telling**: Introduction, Plot, Characterization, Presentation, Relevance, Language Style, etc. • **Quiz**: General Knowledge skills **3.1.2 Various Forms of Fine Arts** • **Painting:** Visualization, Delivery of the Subject, Composition, Colour Application, Presentation and Overall Impact • **Collage:** Visualization, Delivery of the Subject, Handling of Medium, Composition, Presentation and Overall Impact • **Poster Making:** Visualization, Delivery of the Subject, Presentation, Tagline and Overall Impact • **Clay Modeling:** Visualization, Delivery of the Subject, Handling of Medium, Composition, Presentation and Overall Impact • **Cartooning:** Visualization, Delivery of the Subject, Characters, Synchronization, Colour Application, Composition, Presentation and Overall Impact • **Rangoli:** Visualization, Delivery of the Subject, Colour Scheme, Elements, Presentation and Overall Impact • **Mehendi Designing:** Originality, Creativity, Decorative Art with Aesthetic Sense, Presentation and Overall Impact	**10**

		• **Spot Photography:** Impact, Composition, Technical Quality and Suitability for the Specific Theme • **Installation:** Visualization, Delivery of the Subject, Handling of Medium, Synchronization, Composition, Presentation and Overall Impact	
	IV	**4.1 Forms / Types of Performing Arts Activities and its Applied Skills** **4.1.1 Various Forms of Dance** • **Folk Dance:** History and Origin of Folk Dance In India, Types and their Uniqueness, Significance of Folk Dance, Folk Dances in Maharashtra • **Classical Dance:** History of Classical Dance, Types and their Peculiarities, Significance of Classical Dances in India **4.1.2 Various Forms of Theatre** • History of Indian Theatre • Types and their Uniqueness • Significance of Indian Theatre • **Various Forms of Theatre**: One Act Play, Skit, Mime, Mimicry **4.1.3 Various Forms of Music** • History of Indian Music, • Types and their Uniqueness, • Significance of Music in India • **Various Forms of Music**: Classical Singing, Light Vocal, Percussion, Non-Percussion, Natyasangeet, Western Vocal, Western Instrumental	**10**

Scheme of Evaluation

The Scheme of Examination shall be of 50 marks. It will be divided into Internal Evaluation (20 marks) and Semester End Examination (30 Marks).

Semester I (50 Marks, 2 Credits) Internal Evaluation (20 Marks)

Sr. No.	Particulars	Marks

1	Presentation **OR** Project **OR** Assignment	15
2	Participation in Workshop / Conference / Seminar (as decided by the Teacher) **OR** Participation in Online Workshop / Conference / Seminar (as decided by the Teacher) **OR** Field Visit **OR** Attendance	5
Total		**20**

Semester End Examination (30 Marks)

Question No.	Particulars	Marks
1	**Objective Type Questions (All Units)**	6
2	**Descriptive Question(s) on Unit I** [This question may be divided into sub questions like (a) (b) for 3 Marks + 3 Marks or 4 Marks + 2 Marks pattern]	6
3	**Descriptive Question(s) on Unit II** [This question may be divided into sub questions like (a) (b) for 3 Marks + 3 Marks or 4 Marks + 2 Marks pattern]	6
4	**Descriptive Question(s) on Unit III** [This question may be divided into sub questions like (a) (b) for 3 Marks + 3 Marks or 4 Marks + 2 Marks pattern]	6
5	**Descriptive Question(s) on Unit IV** [This question may be divided into sub questions like (a) (b) for 3 Marks + 3 Marks or 4 Marks + 2 Marks pattern]	6
Total		30

Reference Books

1) Rabindranath Tagore, The Centre of Indian Culture. Rupa and Co, India, 2017.
2) Chopra, J. K. Indian Heritage and Culture. Unique Publisher, India, 2013.
3) Patnaik Devdatta, Indian Culture, Art and Heritage. Pearson, India, 2021.
4) Cassady Marsh, An Introduction to the Art of Theatre: A comprehensive test- Past, Present and Future. Colorado Springs, Colo, 2017.
5) Pingle Bhavanrav A., History of Indian Music: with particular reference to theory and practice, Dev Publishers and Distributors, India, 2021.
6) Popley Herbert A., The Music of India. Central Archaeological Library, New Delhi, 1921.

7) Tomory Edith, History of Fine Arts in India and the West. Orient Longman, Mumbai, 1989. 8) Arthur Schopenhauer, The Art of Literature, S. Sonnenschein and co London. 1981.
9) M. Keith Booker, A Practical Introduction to Literary theory and Criticism. Routledge.Michigan, 1996.
10) Vatsyayan Kapila, Indian Classical Dance. Publications Division, Ministry of Information and Broadcasting, Govt. of India, 1992.
11) Phyllia S. Weikart, Teaching folk dance: successful steps. High/Scope Press, Mchigan, 1997.
12) Gosvami O., The story of Indian Music, its growth and synthesis. Bombay, New York, Asia Pub. House, 1961.

AC – 24/11/2023
Item No. – 8.2 (N) -5

As Per NEP 2020

University of Mumbai

Title of the Course

Foundation of Behavioural skills – Basic level

Semester – Sem I

Syllabus for Two Credit

(With effect from the academic year 2024-25)

PROGRAM	BA /BSc/ BCOm
SEMESTER	I
COURSE TITLE	Foundation of Behavioural skills Basic level
VERTICLE /CATEGORY	E (Value Education Course)
COURSE LEVEL	50
COURSE CODE	
COURSE CREDIT	2
HOURS PER WEEK THEORY	2
HOURS PER WEEK PRACTICAL/TUTORIAL	

COURSE OBJECTIVE

1. To develop understating about behavioural Skills.

2. To develop communication skills of students through experiential learning.

3. Life skill development through work life balance and stress management training.

4. To developing effective leadership quality among the learners.

COURSE OUTCOME

CO1: Learners will be able to Define and Identify different life skills required in personal and professional life

CO2: Learners will develop an awareness of the self and apply well-defined techniques to cope with emotions and stress.

CO3: Learners will be able to explain the basic mechanics of effective communication and demonstrate these through presentations and take part in group discussions

CO4: Learners will be able to use appropriate thinking and problem-solving techniques to solve new problems

ORGANISATION OF THE COURSE		
UNIT NO	COURSE UNITS	HOURS PER WEEK
1	Module 1: Behavioural skills	2*5=10
2	Module 2: Stress Management	2*2=04
3	Module 3: 21st-century skills	2*5=10
4	Module 4: Understanding Value Education	2*3=6
	TOTAL HOURS	30

COURSE DESIGN

UNIT TITLE	OUTCOME	DESCRIPTION	PEDAGOGICAL APPROACH
Behavioural skills	Learners will be able to Define and Identify different life skills required in personal and professional life.	Overview of Life Skills: Meaning and significance of life skills, skills identified by WHO: Self-awareness, Empathy, Critical thinking, Creative thinking, Decision making, problem solving, Effective communication, interpersonal relationship, coping with stress, coping with emotion. Life skills for professionals: positive thinking, right attitude, attention to detail, having the big picture, learning skills, research skills, perseverance, setting goals and achieving them, helping others, leadership, motivation, self-motivation, and motivating others, personality development, IQ, EQ, and SQ2.	Examples, TED Talks, videos.

Stress Management	Learners will develop an awareness of the self and apply well-defined techniques to cope with emotions and stress.	Stress, reasons and effects, identifying stress, stress diaries, the four A's of stress management, techniques, Approaches: action-oriented, emotion-oriented, acceptance-oriented, resilience, Gratitude Training, Coping with emotions: Identifying and managing emotions, harmful ways of dealing with emotions, PATH method and relaxation techniques.	Examples, Role Plays, Behavioral Simulations and Games
21st-century skills	Learners will be able to explain the basic mechanics of effective communication and demonstrate these through presentations and take part in group discussions	Creativity, Critical Thinking, Collaboration, Problem Solving, Decision Making, Need for Creativity in the 21st century, Imagination, Intuition, Experience, Sources of Creativity, Lateral Thinking, Myths of creativity, Critical thinking Vs Creative thinking,	Case Discussions, Games and simulations, Group discussions.
Understanding Value Education	Learners will be able to use appropriate thinking and problem-solving techniques to solve new problems	Introduction – Definition, Importance, Process & Classifications of Value Education: Understanding the need, basic guidelines, content and process for Value Education Understanding the thought-provoking issues; need for Values in our daily life Choices making – Choosing, Cherishing & Acting, Classification of Value Education: understanding Personal Values, Social Values, Moral Values & Spiritual Values.	Case Discussions, Games and simulations, Community Service, Presentations

CONTINUOUS ASSESSMENT TESTS (CAT) & SEMESTER END EXAMINATION (SEE)			
NATURE OF ASSESSMENT	**MARKS**	**METHODOLOGY**	**COURSE OUTCOME**
CAT 1 *	10	Online Quiz, Open book test, Presentations, Projects and Viva	CO1
CAT 2 *	05	Presentations, Projects and Viva	CO1, CO2
CAT 3 *	10	Online Quiz, Open book test, Presentations, Project Assignment and Viva	CO3
CAT 4 *	05	Presentations, Projects and Viva	CO4
SEE	30	Five questions of 10 marks each (from each course unit), to be attempted any 3, 10 marks may be subdivided into two sub questions of 5 marks	CO1, CO2,CO3, CO4

*Any Two for 20 marks

ESSENTIAL READINGS	**1.** R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics. 2. Shiv Khera, "You Can Win" , Macmillan Books, New York, 2003. 3. Barun K. Mitra, "Personality Development & Soft Skills", Oxford Publishers, Third impression,2017.
ADDITIONAL READINGS	The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change Stephen Covey Free Press (first published August 15th 1989)

Syllabus Drafting Committee

Prof. Dr. Aruna Deshpande

Prof. Dr. Tejashree Deshmukh

Mr. Nitin Vazirani

Signature

Prof. Kavita Laghate

Mr. Bhooshan Mailkani — Chairman of Board of Studies in Value Education

Dr. Vinita Pimple

AC – 24/05/2024
Item No. – 6.3 Sem. I (1a)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE	
Board of Studies in Mathematics	
UG First Year Programme	
Semester	**I**
Title of Paper	**Credits 2/ 4**
I) Financial Mathematics I	**2**
From the Academic Year	**2024-25**

Name of the Course: Financial Mathematics - I

Sr. No.	Heading	Particulars
1	**Description the course:** **Including but not limited to:**	This course offers a comprehensive exploration of key concepts in finance, statistics, and mathematical modeling. Through this course students delve into topics such as interest, annuities, measures of central tendency, and dispersion. It focuses on financial mathematics, covering simple and compound interest, Equated Monthly Installments (EMI), and annuity calculations. It also offers statistical analysis, learning about various measures of central tendency and dispersion. The course aims to equip students with practical analytical skills and mathematical tools applicable to real-world scenarios in finance and statistics.
2	**Vertical:**	OE
3	**Type:**	Theory
4	**Credits:**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted:**	30 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives (CO):** This course provides a thorough examination of finance and statistics fundamentals. Covering interest, annuities, and statistical measures like central tendency and dispersion, it equips students with practical skills for real-world applications in finance and data analysis. By the end, students gain a strong understanding of these concepts for effective decision-making. CO1: To understand the concepts of simple interest, compound interest and Equated Monthly Instalments (EMI) enabling complex financial analysis. CO2: To introduce students to various measures of central tendency such as arithmetic mean, weighted mean, mode, combined mean, and its relevance in statistical analysis. CO3: To calculate measures of dispersion including median, quartiles, deciles, and percentiles, providing insight into data spread. CO4: To use standard deviation and its relative measures, facilitating a deeper understanding of data variability.	
8	**Course Outcomes (OC):**	

	After completion of the course, students will be able to. OC1: apply simple interest, compound interest, EMIs formulas for various scenarios, including multiple compounding periods for effective loan management. OC2: compute present and future values of annuities, aiding in long-term financial planning. OC3: calculate and interpret different measures of central tendency, providing insight into data distribution. OC4: understand the importance of mode as a measure of central tendency and its application in real-world scenarios. OC5: develop a solid understanding of standard deviation and its relative measures, facilitating advanced statistical analysis and interpretation.
9	**Modules: -** **Module 1: Interest and Annuity** • Simple Interest and Compound Interest, Compounded more than once a year. • Calculations involving up to 4 time periods. • Annuity, Immediate and due, Present value, Future value of an Annuity • Equated Monthly Instalments (EMI) using reducing & flat interest system.
	Module 2: Measures of Central Tendency and Dispersion • Arithmetic mean, Weighted mean, Combined mean • Median, Quartiles, Deciles, Percentiles • Mode • Range, Quartile deviation, Mean deviation from mean, median, mode • Standard deviation and their relative measures.
10	**Text Books** 1. Fundamentals of Mathematical Statistics,12th Edition, S. C. Gupta and V. K. Kapoor, Sultan Chand & Sons, 2020. 2. Statistics for Business and Economics, 11th Edition, David R. Anderson, Dennis J. Sweeney and Thomas A. Williams, Cengage Learning, 2011. 3. Introductory Statistics, 8th Edition, Prem S. Mann, John Wiley & Sons Inc., 2013.
11	**Reference Books** 1. A First Course in Statistics, 12th Edition, James McClave and Terry Sincich, Pearson Education Limited, 2018. 2. Introductory Statistics, Barbara Illowsky, Susan Dean and Laurel Chiappetta, OpenStax, 2013.
	<u>Scheme of the Examination</u>
	The performance of the learners shall be evaluated into two parts. • Internal Continuous Assessment of 20 marks for each paper.

<table>
<tr><td></td><td colspan="2">Semester End Examination of 30 marks for each paper.
Separate head of passing is required for internal and semester end examination.</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%
Semester End Examination: 60%</td><td></td></tr>
<tr><td>13</td><td>Continuous Evaluation through: Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments etc.
(at least 3)
<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Marks</th></tr>
<tr><td>1</td><td>A class test of 10 marks is to be conducted during each semester in an Offline mode.</td><td>10</td></tr>
<tr><td>2</td><td>Project on any one topic related to the syllabus or a quiz (offline/online) on one of the modules.</td><td>05</td></tr>
<tr><td>3</td><td>Seminar/ group presentation on any one topic related to the syllabus.</td><td>05</td></tr>
</table>
Paper pattern of the Test (Offline Mode with One hour duration):
Q1: Definitions/Fill in the blanks/ True or False with Justification. (04 Marks: 4 x 1).
Q2: Attempt any 2 from 3 descriptive questions. (06 marks: 2 × 3)</td><td></td></tr>
<tr><td>14</td><td colspan="2">Format of Question Paper:
The semester-end examination will be of 30 marks of one hour duration covering the entiresyllabus of the semester.
<table>
<tr><td colspan="4">Note: Attempt any TWO questions out of THREE.</td></tr>
<tr><td>Q.No.1</td><td>Module 1 and 2</td><td>Attempt any THREE out of FOUR.
(Each question of 5 marks)
(a) Question based on OC1/OC2
(b) Question based on OC3
(c) Question based on OC4
(d) Question based on OC5</td><td>15 Marks</td></tr>
<tr><td>Q.No.2</td><td>Module 1 and 2</td><td>Attempt any THREE out of FOUR.
(Each question of 5 marks)
(a) Question based on OC1/OC2
(b) Question based on OC3</td><td>15 Marks</td></tr>
</table></td></tr>
</table>

	(c) Question based on OC4 (d) Question based on OC5		
Q.No.3	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5	15 Marks

Sign of the BOS Chairman
Dr. Bhausaheb S Desale
The Chairman, Board of Studies in Mathematics

Sign of the Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of the Offg. Dean
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. I (2b)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE	
Board of Studies in Information Technology	
UG First Year Programme	
Semester	**I**
Title of Paper	**Credits 2/ 4**
I. **IT_Google Workspace** (Open Elective) [OE]	**2**
From the Academic Year	**2024-2025**

Name of the Course: IT_Google Workspace

Sr.No.	Heading	Particulars
1	**Description the course : Including but Not limited to:**	Google Workspace is a collection of cloud-based productivity tools that are designed to help individuals and organizations to work and collaborate efficiently. This course will provide an introduction to applications such as Gmail, Google Drive, Google meet and Google Calendar Google Docs, Google Sheets, Google Slides, Google Forms, Google Classroom.
2	**Vertical :**	**Open Elective**
3	**Type :**	Practical
4	**Credits :**	2 credits
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives(CO):** CO 1. Understand Google Workspace and its applications. CO 2. Gain proficiency in key features of Google workspace application. CO 3. Acquire proficiency in Google workspace to collaborate, manage tasks and communicate effectively. CO 4. Leverage possibilities of Google workspace tolls to enhance productivity and streamline workflow.	
8	**Course Outcomes (OC):** OC 1. Manage email communications with Gmail. OC 2. Schedule and organize meetings and events using Google Calendar. Arrange and attend video meetings with Google Meet, Communicate with others using Google Chat. OC 3. Save , manage, and share files with Google Drive. OC 4. Generate and collaborate documents, spreadsheets and presentations. OC 5. Design Google Forms and collect data for surveys . Generate reports based on the collected data and integrate it with other Google Workspace applications. OC 6. Use Google Classroom to digitally organize, distribute, and gather assignments, course materials, and feedback. OC 7. Navigate confidently and make use of the numerous functionalities of Google Maps. OC 8. Able to design, develop, and maintain informative and visually appealing websites using Google Sites.	
9	**Modules:-** **Module 1:**	

1. **Google Workspace & Mastering email communication with Gmail**: Overview of Google Workspace, Setting up a Google account and accessing Google Workspace, Set Profile information and Photo, Send and Receive emails, Organize emails using labels, filters, and stars for easy retrieval and management, Utilize Gmail's advanced features like scheduling emails, snoozing emails, and setting reminders.
   a. Create a Gmail account. Write a brief email to your friends inviting them to a meeting to discuss a possible industrial visit. Attach a document file with the many options for places to visit.
2. **Google Calendar , Meet and Chat** : Create a new calendar, Create an event in Google Calendar, Set remainders and alarms , Share a Calendar with Other People ,Integrate with Gmail and other apps. Scheduling and managing Google Meet events, Features in Google Meet like screen sharing, chat, annotations and recording, Creating public and private Google Chat rooms ,Inviting and managing participants in Google Chat rooms, Utilizing Chat room features like sharing files, links, and multimedia, pinning messages, and polls.
   a. Create a new event in Google Calendar for an event happening on a specific date and time. Set a reminder to alert you one day prior to the event. Share your Google Calendar with a specific email address and grant them view-only access.
   b. Set up a meeting with your project partners, choose the suggested security configurations, and send a meeting invite to the participants via email. Begin the meeting by letting everyone into the meeting room. To demonstrate to them the project's progress, share your screen. Use chats to send brief messages and share relevant documents.
3. **Google Drive** :Managing files and folders in Google Drive, Sharing files and folders with collaborators and setting access permissions.
   a. Create a project folder in Google drive. Add a PowerPoint presentation detailing project milestones and a Word document with project guidelines to the folder. Share the folder and allow the project team members to edit it.
4. **Google Docs**: Document creation with Google Docs, Apply Basic Formatting to Text , Inserting Images, Creating tables, Format a document with styles, Using Find and Replace, Using Regular Expressions for Advanced Searching, Sharing and Collaborating on files.
   a. Create a one page document which best describes you. Add the document's heading and page numbers. Make a list of your hobbies using bullet points. Employ formats and typefaces to give the document an elegant look. To highlight your skills, use hyperlinks to other documents in the folder. Include a picture of yourself on the page as well. Add a table with your educational background in it. Write about your positive college experiences by voice typing. After that, translate the document's content into a different language of your choice.
5. **Google Sheets** :Insert, delete and manage sheets , Insert a Function, Format Spreadsheets, Cells, and Ranges, Apply Number Formatting

	and Conditional Formatting, Insert and View Notes, Choose Spreadsheet Settings, Merge Cells, Wrap and Rotate Cell Contents, Inserting Objects in Google Sheets, Sort and Filter Data, Apply Data Validation to Your Sheets, Protect Ranges in a Sheet, Protect a Sheet, Create and Manage Macros. a. Create a Personal budget sheet, list all your expenses and incomes of the month in the sheet. Use sum function to total the income and expenses. Use IF function to find if the budget is in deficit or not.
	Module 2:
	1. **Google Slides**: Add a Slide to a Presentation, Import Slides from an Existing Presentation, Understanding and Using Views, Work with Text Boxes, Add Audio and Video to a Slide, Insert Shapes and Word Art, Add a Transition and Animations, Edit a Slide Master, Organize the Slides in a Presentation a. Open a new Google Slides presentation titled “Project Presentation”. Add slides to provide a summary of your project. Use themes and transitions to make the slide experience better. 2. **Google Forms**: Create a Form, Choose Settings for a Form, Add Questions to a Form, Add Images to a Question, Add a Video to a Question, Import Questions from an Existing Form, Create a Form with Multiple Sections, Control Progression Based on Answers, Add Collaborators to a Form, Preview and Test a Form, Send a Form to Its Respondents, View the Responses to a Form, Analyse form responses and generate reports. a. Create a Google Form to accept participation entries for the various events your department is organizing on the annual day. Mention the details of event in the form description. Include a dropdown menu to select the events they wish to participate in. Insert relevant multimedia to make the Google Form attractive. b. Create an online evaluation quiz using Google Form. Include a variety of question formats, such as ones with pictures, videos, etc. Assign points to the questions. Share the link with your friends and check out the the summary of the responses. 3. **Google Classroom**: Create and set up a Google Classroom, Add Students and Co-Teachers, Using Google Classroom to share resources, Create assignment, Set due dates and points, Use rubrics for grading, Integrate quizzes created using Google Form with Google Classroom. a. Create a Google Classroom for a certain subject that includes a range of topics, resources, and activities. Include resources for each topic, such as Word docs, PowerPoints, and YouTube links. Include elements that encourage participation and interaction, such as assignments and discussions. 4. **Google Maps:** Search on Maps, Different Map Views (Satellite, Terrain, Street View), Customizing Maps, Get to your destination, Sharing Maps with Others. a. Use google maps to explore local landmarks in your area. Find directions from your current location to a nearby restaurant. Use Maps to check the places you have visited on a particular day.

	5. **Google Sites**: Creating and building simple websites using Google Sites, Adding content, images, and widgets to websites. a. Assume you runs a small business. Create a visually appealing website which includes the following pages: Home page , About the business, Products page, Announcement of discounts.	
10	**Text Books and Online Resources** 1. **Hart-Davis, G. (2021). Teach Yourself Visually Google Workspace. Visual.** 2. **https://support.google.com/a/users#topic=9247638** 3. **https://support.google.com/edu/classroom#topic=10298088** 4. **https://support.google.com/maps/?hl=en#topic=9729258**	
11	**Reference Books** **1. Team, Z. (2017). The Ultimate Guide to G-Suite. Lean Pub G-Suite.** **2. Iyer, b. (2022). Google workspace user guide: a practical guide to using google apps efficiently while integrating them with your data.**	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.(at least 3)	
14	**Format of Question Paper: Duration 2 hours. Certified copy of Journal is compulsory to appear for the practical examination** Practical Slip: Q1. From Module 1 13 marks Q2. From Module 2 12marks Q3. Journal and Viva 05 marks	

Sign of Chairperson
Dr. Mrs. R. Srivaramangai
Ad-hoc BoS (IT)

Sign of the
Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of Offg. Dean,
Prof. Shivram S. Garje
Faculty of Science & Technology

AC –20.04.2024
Item No. –5.6 (N) Sem I (1d)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of AEC	
Board of Studies in English	
UG First Year for B.Com. Programme	
Semester	**I**
Title of Paper	**Credits**
Business Communication Skills I for B.Com.	**2**
From the Academic Year	**2024-2025**

Sr. No.	Heading	Particulars
1	**Description the course:** **Including but Not limited to:**	**Business Communication Skills I (B.Com.)** Business communication is an integral part of the commercial and corporate world. The growth of commercial organizations is directly linked to the effectiveness of their methods of communication with all their stakeholders. The success of an organization is also closely linked to its image building. As a discipline, business communication has changed diametrically and exponentially because of the rapid changes in information technology. In this scenario, it is imperative that all corporate professionals should have command over the various dimensions of business communication including the intentional and unintentional, the verbal and non-verbal, the in-person and the digital. The systematic study of business communication prepares the learners to become capable entrepreneurs, professionals, team-members and managers in today's competitive, networked and digitized business world.
2	**Vertical :**	**Ability Enhancement Course**
3	**Type :**	Theory
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: 1. To make learners familiar with the basics of business communication theory. 2. To make learners aware of digital communication for personal and business use. 3. To improve learners' understanding of verbal and non-verbal communication. 4. To enable learners with effective business correspondence skills.	

8	**Course Outcomes**: At the end of the course, learners will be able to: 1. Understand the basics and significance of business communication theory. 2. Adapt to and use digital communication methods for personal and business purposes. 3. Grasp and effectively use the nuances of verbal and non-verbal communication. 4. Improve their skills in business correspondence.
9	**Modules**:- Per credit One module can be created
	Module 1: Introducing the Theory of Business Communication (15 Lectures)
	1. Concept of Communication - Definition and meaning of communication - Process of communication - Need of communication - Feedback 2. **Communication at the Workplace** - Channels of communication: Downward, Upward, Horizontal, Grapevine - Methods of communication: Verbal and non-verbal **3. Impact of Digital Technology on Communication** - Internet-enabled communication; Email - Social media: FaceBook, Twitter, Instagram, WhatsApp
	Module 2: Business Correspondence (15 Lectures)
	1. - Parts of a business letter - Layouts of a business letter 2. - Job application with bio-data - letter of appointment - letter of appreciation - letter of resignation

	3. - Emails: Job application via email - writing and responding to official emails
10	**Text Books: N.A.**
11	**Reference Books:** **1**. Ashley, A. *A Handbook of Commercial Correspondence*. New Delhi: Oxford University Press, 1992. **2**. Aswalthapa, K. *Organisational Behaviour*. Mumbai: Himalaya Publications, 1991. **3**. Balan, K.R. and Rayudu, C. S. *Effective Communication*. New Delhi: Beacon Books, 1996. **4**. Bangh, L. Sue, Fryar, Maridell and Thomas David A. *How to Write First Class Business Correspondence*. N.T.C. Publishing Group USA, 1998. **5.** Benjamin, James. *Business and Professional Communication Concepts and Practices*. New York: Harper Collins College Publishers, 1993. 6. Britt, Deborah. *Improving Business Communication Skills*. Kendall Hunt Publishing Co., 1992. **7.** Bovee Courtland, L. and Thrill, John V. *Business Communication Today*. McGraw Hill, New York, Taxman Publication, 1989. **8.** Drucher, P.F. *Technology, Management and Society.* London: Pan Books, 1970. **9**. Eyre, E.C. *Effective Communication Made Simple*. Kolkata: Rupa and Co.,1985. **10**. Ecouse, Barry. *Competitive Communication: A Rhetoric for Modern Business*. New Delhi: OUP, 1999. **11**. Fisher, Dalmar. *Communication in Organisation*. Mumbai: Jaico Publishing House, 1999. **12.** Frailley, L.E. *Handbook of Business Letters*. Revised Edn. New Jersey: Prentice Hall Inc., 1982. 13. Flyn, Nancy. *The Social Media Handbook*. Wiley, 2012. **14.** Gartside, L.E. *Modern Business Correspondence.* Plymouth: McDonald and Evans Ltd, 1980. **15**. Ghanekar, A. *Communication Skills for Effective Management.* Pune: Everest Publishing House, 1996. **16**. Labade, Sachin, Katre Deepa et al. *Communication Skills in English*. Orient Blackswan, Pvt Ltd, 2021. **17**. Shainesh, G. and Githa Heggde. *Social Media Marketing: Emerging Concepts and Applications*. Springer Nature Singapore, 2018

12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination 60%** **Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** • Performance in activities: 10 marks (The class may be divided into batches to conduct the oral activities by creating formal schedule for the same before the semester End Examination.) • Written assignments or projects: 10 marks (Learners will have to write and submit written assignments in a timely manner.) **Suggested Activities:** • Use of social media accounts for purpose of business communication • Making short presentations on given topics • Official letter writing/ email writing exercises • Role play focusing on channels and methods of communication	
14	**Format of Question Paper:** for the final examination ***External / Semester End Examination Marks: 30 Time: 1 Hours*** Q.1. Essay Type Questions (Any One out of two on Unit I) Marks 10 Q.2. Essay Type Questions (Any One out of two on Unit II) Marks 10 Q.3. Short Notes/Problem (Any Three out of five on all Units) Marks 10	

Sign of BOS Chairman **Prof. Dr. Shivaji Sargar** **Board of Studies in English**	**Sign of the Offg. Associate Dean** **Dr. Suchitra Naik** **Faculty of Humanities**	**Sign of the Offg. Associate Dean** **Dr. Manisha Karne** **Faculty of Humanities**	**Sign of the Dean** **Prof. Dr. Anil Singh** **Faculty of Humanities**

Major-Credit (2)

Course	**Fundamentals of Management -I (Semester 1: Level 4.5)**	**Credits**	**02**
Type	**Major: Mandatory**	**No of Teaching hours**	**30**
Evaluation/ Assessment	**50 marks- 30 marks semester end evaluation and 20 marks continuous evaluation**		

Learning objectives	a) To enable the learners to understand the basic concepts & functions of management
	b) To familiarize the students with management theory and its practical applications.
	c) To explore and understand the changing organization structures.

Course Outcomes	
CO1	Learners will summarize the elementary concepts, principles and theories of management.
CO2	Learners can think critically and strategically about management theories and issues, which will enable them to develop their decision-making and analytical skills
CO3	Learners will evaluate & create a roadmap to derive concrete managerial decisions in order to lead to solutions

Modules At Glance

Module No.	Content	No. of Hours
1	Introduction to Management & Managerial Thoughts	15
3	Functions of Management -I	15
		30

	Content	No. of Hours
	Module No. 1	
Unit 1	**Introduction to Management & Managerial Thoughts** a. Concept & Features of Management – 6M's of Management — Need for management in business & non-business organizations b. Levels of Management – Management competencies & Skills - Management Ethics (Types, Importance) – Management vs Administration c. Indian Management Thoughts – Contribution of Kautilya & Mahatma Gandhis Principle of Trusteeship	15
	Module No. 2	
Unit 2	**Functions of Management -I** a) Planning – Meaning – Significance – Components (Strategic, Single Use & Stranding Plans) b) Decision Making – Concept – Essentials of sound decision making – Process and techniques of Decision- making in Management c) Organising – Concept Organisational Design (concept & Elements) -Types of Organization Structure -Line & Staff, Matrix Organization Structure – Features – Formal v/s Informal	15

References:

- *Principles of Management, Tripathi Reddy, Tata Mc Grew Hill*
- *Management Text & Cases, VSP Rao, Excel Books, Delhi*
- *Management Concepts and OB, P S Rao & N V Shah , AjabPustakalaya*
- *Essentials of Management, Koontz II & W , Mc. Grew Hill , New York*
- *Principles of Management-Text and Cases -Dr..M.SakthivelMurugan, New Age Publications*

☐ *Management Today Principles& Practice- Gene Burton, ManabThakur, Tata McGraw- Hill PublishingCo.Ltd.*

☐ *Management – JamesA.F. Stoner, Prentice Hall, Inc .U.S.A.*

☐ *Management: Global Prospective –Heinz Weihrich& Harold Koontz, Tata McGraw- Hill, Publishing Co.Ltd.*

☐ *Essential of Database Management Systems -AlexisLeon ,MathewsLeon Vijay Nicole, Imprints Pvt Ltd.*

☐ *Management –Task ,Resp, Practices – PetaDruche "willian Heinemann LTD.*

Paper Pattern (Any two out of four questions are expected to be attempted by the students)

Time: 1 Hr

Question No	Questions	Total Marks: 30
Q1		***15***
Q2		***15***
Q3		***15***
Q4		***15***

Note:

a) Equal Weightage to be given to all the modules.
b) 15 marks questions may be subdivided into 7/8 marks each.
c) Q1 and Q2 will be from Module 1, Q3 and Q4 will be from Module 2.
d) Any two out of four questions are expected to be attempted by the students.

Continuous Evaluation: Internal (20 marks)

	Assessment/ Evaluation	Marks
1	Class Test during the lectures. (Physical/ Online mode) (Short notes/ MCQ's/ Match the Pairs/ Answer in one sentence/ Puzzles)	10
2	Participation and paper presentation in Workshop/ Conference/Seminar, Assignment & Viva. (Physical/Online mode)	10

VSC

Programme Name: B.Com. (Business Management) Course

Name: Presentation skill for business managers MS-Power Point

Course	**Presentation skill for Business Managers- MS Power Point (Semester 1: Level 4.5)**	**Credits**	**02**
Type	**VSC, SEC: (VSEC)**	**No of Teaching hours**	**30**
Evaluation/ Assessment	**50 marks - 30 marks semester end evaluation and 20 marks continuous evaluation**		

Learning objectives	a) To learn basic PowerPoint presentations and its role in management of business.
	b) To understand the basic concepts of creating, formatting the slides.
	c) To enable the learners to add visual tools, charts, smart arts, media.
	d) To demonstrate proficiency in navigating the PowerPoint interface.
Course Outcomes	
CO1	Learners will be acquainted to different applications of power point presentation in business**.**
CO2	Learners will develop the professional presentation skill.
CO3	Develop learners understanding of the technologies and business model presentation for effective communication to stakeholders.

Module At Glance

	Content	No. of Hours
Module No. 1		
Unit 1	**Introduction to MS-PowerPoint for effective communication in Business**	15
	Module No 2	
Unit 2	**Dealing to Visual and PowerPoint interface**	15

	Content	No. of Hours
	Module No. 1	
Unit 1	**Introduction to MS-PowerPoint for effective communication in Business** **a) Create and Manage presentation:** Create a Presentation, Insert and Format Slides, Modify Slides, Handouts, and Notes, Configure and Present a Slide Show **b) Insert and Format Text, Shapes, and Images: Insert and Format Text,** Insert and Format Shapes and Text Boxes, Insert and Format Images	**15**
	Module No. 2	
Unit 2	**Dealing to Visual and PowerPoint interface** a) **Insert Tables, Charts, SmartArt, and Media**: Insert and Format Tables, Insert and Format Charts, 3 Insert and Format SmartArt graphics, Insert and Manage Media, Insert and Format SmartArt graphics b) **Apply Transitions and Animations**: Apply Slide Transitions, Animate Slide Content, Set Timing for Transitions and Animations	**15**

References

- ☐ Microsoft Powerpoint Quick Start 2024 Guide by Jexonia Graneer
- ☐ Microsoft Powerpoint 2024 Guide For Beginners by Zecherry Wudare
- ☐ The Microsoft Office 365 Bible by Todd Finkle
- ☐ Microsoft Powerpoint Guide For Success by Kevin Pitch
- ☐ Microsoft Office 365 Bible by freddy Beverly
- ☐ Microsoft PowerPoint 365 Pro by Isaac Lemmings
- ☐ Microsoft Office 365 For Beginners 2024 by Henry C. Altoff

Paper Pattern (Any two out of four questions are expected to be attempted by the students.)

Time: 1 Hr.

Question No	Questions	Total Marks: 30
Q1		***15***
Q2		***15***
Q3		***15***
Q4		***15***

Note:

a) Equal Weightage to be given to all the modules.
b) 15 marks questions may be subdivided into 7/8 marks each.
c) Q1 and Q2 will be from Module 1, Q3 and Q4 will be from Module 2.
d) Any two out of four questions are expected to be attempted by the students.

Continuous Evaluation: Internal (20 marks)

	Assessment/ Evaluation	**Marks**
1	Computer lab Test	20

Course	Accountancy & Financial Management -I (Semester I; Level 4.5)	Credits	02
Type	Major: Mandatory	No of Teaching hours	30
Evaluation/ Assessment	Total 50 Marks = 30 Marks Semester End Evaluation and 20 Marks Continuous Evaluation		

Preface

India is experiencing a surge in entrepreneurial endeavors. For young minds planning to start their businesses or manage family businesses, a deep understanding of accounting principles is vital for financial management, decision-making, and ensuring the growth and sustainability of their enterprises. Accounting serves as the cornerstone of commerce education. It is the language of business and forms the basis for understanding financial transactions, records, and statements. Learning accounting is fundamental for students pursuing careers in commerce. Many commerce learners aspire to become Chartered Accountants (CAs), Cost and Management Accountants (CMAs), or Company Secretaries (CS) in India. A strong foundation in accounting and financial management is a prerequisite for pursuing these prestigious and highly regarded professional qualifications. The present course designed imparts a foundation of knowledge and skills that are not only pertinent to academic success but also invaluable for successful careers in the complex and dynamic business landscape of India. Whether students aim to become accountants, opt for administrative services of government, entrepreneurs, financial analysts, or professionals in any related field, this course provides the necessary tools to excel in their chosen paths while contributing to India's financial stability.

Aims and Objectives

CO1	To recognize the fundamental accounting concepts and conventions in financial reporting and understand its applicability.
CO2	To articulate the applicability and valuation of selected Accounting Standards.
CO3	To ascertain the process of preparation of final accounts for a proprietary manufacturing firm.

Learning Outcomes

LO1	The learner will be able to identify and explain the various accounting concepts and conventions applicable to the accounting system.
LO2	The learner will be able to identify, summarize, distinguish the purpose of policies and commute the valuation of inventory as per Accounting Standards 2
LO3	The learner will be able to calculate the profit/loss of the manufacturing firm and prepare its final accounts.

MODULES AT GLANCE

Module No	Content	No of Hours
1	Introduction to Accounting Concepts and Accounting Standards.	15
2	Final Accounts of Manufacturing Concern.	15
		30

Module No	Content	No of Hours
1	**Introduction to Accounting Concepts & Accounting Standards.** • Accounting Concepts and Conventions. • Meaning and Classification - Capital, Revenue: Expenditure and Receipts, Profit and Loss. • Accounting Standard (AS) and Ind-AS & IFRS – An Introduction, Concepts and Benefits. • AS – 1 Disclosure of Accounting Policies. • AS – 2 Valuation of Inventories. • AS - 9 Revenue Recognition. • Inventory Valuation and Experiential Learning- Physical Stock Taking Activity and Recording. • Practical Problems on preparation of Stock Ledger Account using First in First Out (FIFO Method) and Weighted Average Cost method. • Short practical problems on Valuation of Inventory as per AS 2.	15
2.	**Final Accounts of Manufacturing Concern** • Introduction and meaning. • Final Accounts of Manufacturing Concern (Proprietary Firm). • Closing and Adjustment Entries in Final Accounts of Manufacturing Concern. • Preparation of Trading Account, Manufacturing Account, Profit & Loss Account and Balance Sheet. (Note: For Semester End Examination not more than 5 adjustments to be asked in one practical problem)	15

Reference Books

1. Introduction to Accountancy by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi.
2. Advanced Accountancy by R. L Gupta and M Radhaswamy, S. Chand and Company (P) Ltd., New Delhi.
3. Modern Accountancy by Mukherjee and Hanif, Tata Mc. Grow Hill & Co. Ltd., Mumbai Financial Accounting by Lesile Chandwichk, Pentice Hall of India Adin Bakley (P) Ltd.

4. Financial Accounting for Management by Dr. Dinesh Harsalekar, Multi-Tech. Publishing Co. Ltd., Mumbai.
5. Financial Accounting by P. C. Tulsian, Pearson Publications, New Delhi.
6. Accounting Principles by Anthony, R.N. and Reece J.S., Richard Irwin Inc.
7. Financial Accounting by Monga, J.R. Ahuja, Girish Ahuja and Shehgal Ashok, Mayur Paper Back.
8. Compendium of Statement & Standard of Accounting, ICAI.
9. Guidance Notes on Accounting Standard, ICAI
10. Indian Accounting Standards, Ashish Bhattacharya, Tata Mc. Grow Hill & Co. Ltd., Mumbai Financial Accounting by Williams,Tata Mc. Grow Hill & Co. Ltd., Mumbai
11. Company Accounting Standards: Shrinivasan Anand, Taxman.
12. Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi.
13. Introduction to Financial Accounting by Horngren, Pearson Publications.
14. Financial Accounting by M. Mukherjee. M. Hanif. Tata McGraw Hill Education Private Ltd; New Delhi.

Semester End External - 30 Marks **Time: 1:00 Hour**

QUESTION PAPER PATTERN **Attempt any 2 out of 3 questions.**

Question No	Questions	Marks
Q1	Practical/ Theory	15
Q2	Practical/ Theory	15
Q3	Practical/ Theory	15
	TOTAL	**30**

Note

1. Equal Weightage is to be given to all the modules.
2. 15 marks question may be subdivided into 8 marks + 7 marks, 10 marks + 5 marks and 5 marks + 5 marks + 5 marks. Internal options may be given however it is not mandatory.
3. Use of simple calculator is allowed in the examination.
4. Wherever possible more importance is to be given to the practical problems.

Continuous Evaluation: Internal (20 marks)

	Assessment/ Evaluation	Marks
1	Class Test during the lectures. (Physical/ Online mode). (Short notes/ MCQ's/ Match the Pairs/ Answer in one sentence/ puzzles)	10
2	Participation in Workshop/ Conference/Seminar/ Case Study/Field Visit/ Certificate Course/Projects/Assignments etc. (Physical/Online mode)	10

Course	Recent Trends in Accounting -I (Semester I; Level 4.5)	Credits	02
Type	VSC, SEC: (VSEC)	No of Teaching hours	30
Evaluation/ Assessment	Total 50 marks = 30 Marks Semester End Evaluation and 20 Marks Continuous Evaluation		

Preface

Agriculture plays a pivotal role in the Indian economy being one of the dominant contributors to Gross Domestic Product (GDP) and Employment. In an era of increasing economic and climate uncertainty and fluctuating commodity prices, it is essential for farmers to have strong financial management skills to ensure the long-term sustainability of their operations. Furthermore, modern agriculture is becoming increasingly data-driven, with technologies like precision agriculture, IoT, and data analytics playing a significant role. This calls for increased accountability and transparency in its work.

Farm accounting thereby provides the foundation for collecting, analysing, and interpreting financial data, enabling farmers to make data-driven decisions that can optimize their operations and increase efficiency. Also, the 21st-century agricultural landscape is ripe for innovation and entrepreneurship. Knowledge of farm accounting can help learners explore new business models, such as Organic farming, Agri-tourism, or Value-added processing, and manage the financial aspects of their ventures.

Learners with knowledge of farm accounting can procure jobs in accounting positions in Food Production Companies, Food Processing Companies, Farming Industries, Farming Equipment Manufacturing Industries, Agrochemical Industries Public and Private Sectors, Chartered Accounting firms handling their accounts etc. They would also be able to venture their start-ups in Agribusiness supporting rural economy.

Aims and Objectives

CO1	To articulate the significance and necessity of farm accounting in modern agricultural practices.
CO2	To summarize and interpret the principal requirements of Ind AS 41.
CO3	To demonstrate the preparation and maintenance of different types of farm records through specimen examples.
CO4	To demonstrate the application of various accounting principles in preparation of final accounts of a farm.

Learning Outcomes

LO1	The learner will be able to summarize the role and importance of farm accounting and discuss the application of technology in context of farm accounting.
LO2	The learner will be able to evaluate the scope, objectives and accounting treatment of Ind

Semester – I

Major-Credit (2)

Course	**Fundamentals of Management -I (Semester 1: Level 4.5)**	**Credits**	**02**
Type	**Major: Mandatory**	**No of Teaching hours**	**30**
Evaluation/ Assessment	**50 marks- 30 marks semester end evaluation and 20 marks continuous evaluation**		

Learning objectives	a) To enable the learners to understand the basic concepts & functions of management
	b) To familiarize the students with management theory and its practical applications.
	c) To explore and understand the changing organization structures.

Course Outcomes	
CO1	Learners will summarize the elementary concepts, principles and theories of management.
CO2	Learners can think critically and strategically about management theories and issues, which will enable them to develop their decision-making and analytical skills
CO3	Learners will evaluate & create a roadmap to derive concrete managerial decisions in order to lead to solutions

Modules At Glance

Module No.	Content	No. of Hours
1	Introduction to Management & Managerial Thoughts	15
3	Functions of Management -I	15
		30

	Content	No. of Hours
	Module No. 1	
Unit 1	**Introduction to Management & Managerial Thoughts** a. Concept & Features of Management – 6M's of Management — Need for management in business & non-business organizations b. Levels of Management – Management competencies & Skills - Management Ethics (Types, Importance) – Management vs Administration c. Indian Management Thoughts – Contribution of Kautilya & Mahatma Gandhis Principle of Trusteeship	15
	Module No. 2	
Unit 2	**Functions of Management -I** a) Planning – Meaning – Significance – Components (Strategic, Single Use & Stranding Plans) b) Decision Making – Concept – Essentials of sound decision making – Process and techniques of Decision- making in Management c) Organising – Concept Organisational Design (concept & Elements) -Types of Organization Structure -Line & Staff, Matrix Organization Structure – Features – Formal v/s Informal	15

References:

- *Principles of Management, Tripathi Reddy, Tata Mc Grew Hill*
- *Management Text & Cases, VSP Rao, Excel Books, Delhi*
- *Management Concepts and OB, P S Rao & N V Shah , AjabPustakalaya*
- *Essentials of Management, Koontz II & W , Mc. Grew Hill , New York*
- *Principles of Management-Text and Cases -Dr..M.SakthivelMurugan, New Age Publications*

☐ *Management Today Principles& Practice- Gene Burton, ManabThakur, Tata McGraw- Hill PublishingCo.Ltd.*

☐ *Management – JamesA.F. Stoner, Prentice Hall, Inc .U.S.A.*

☐ *Management: Global Prospective –Heinz Weihrich& Harold Koontz, Tata McGraw- Hill, Publishing Co.Ltd.*

☐ *Essential of Database Management Systems -AlexisLeon ,MathewsLeon Vijay Nicole, Imprints Pvt Ltd.*

☐ *Management –Task ,Resp, Practices – PetaDruche "willian Heinemann LTD.*

Paper Pattern (Any two out of four questions are expected to be attempted by the students)

Time: 1 Hr

Question No	Questions	Total Marks: 30
Q1		***15***
Q2		***15***
Q3		***15***
Q4		***15***

Note:

a) Equal Weightage to be given to all the modules.
b) 15 marks questions may be subdivided into 7/8 marks each.
c) Q1 and Q2 will be from Module 1, Q3 and Q4 will be from Module 2.
d) Any two out of four questions are expected to be attempted by the students.

Continuous Evaluation: Internal (20 marks)

	Assessment/ Evaluation	Marks
1	Class Test during the lectures. (Physical/ Online mode) (Short notes/ MCQ's/ Match the Pairs/ Answer in one sentence/ Puzzles)	10
2	Participation and paper presentation in Workshop/ Conference/Seminar, Assignment & Viva. (Physical/Online mode)	10

VSC

Programme Name: B.Com. (Business Management) Course

Name: Presentation skill for business managers MS-Power Point

Course	**Presentation skill for Business Managers- MS Power Point (Semester 1: Level 4.5)**	**Credits**	**02**
Type	**VSC, SEC: (VSEC)**	**No of Teaching hours**	**30**
Evaluation/ Assessment	**50 marks - 30 marks semester end evaluation and 20 marks continuous evaluation**		

Learning objectives	a) To learn basic PowerPoint presentations and its role in management of business.
	b) To understand the basic concepts of creating, formatting the slides.
	c) To enable the learners to add visual tools, charts, smart arts, media.
	d) To demonstrate proficiency in navigating the PowerPoint interface.
Course Outcomes	
CO1	Learners will be acquainted to different applications of power point presentation in business**.**
CO2	Learners will develop the professional presentation skill.
CO3	Develop learners understanding of the technologies and business model presentation for effective communication to stakeholders.

Module At Glance

	Content	No. of Hours
Module No. 1		
Unit 1	**Introduction to MS-PowerPoint for effective communication in Business**	15
	Module No 2	
Unit 2	**Dealing to Visual and PowerPoint interface**	15

	Content	No. of Hours
	Module No. 1	
Unit 1	**Introduction to MS-PowerPoint for effective communication in Business** **a) Create and Manage presentation:** Create a Presentation, Insert and Format Slides, Modify Slides, Handouts, and Notes, Configure and Present a Slide Show **b) Insert and Format Text, Shapes, and Images: Insert and Format Text,** Insert and Format Shapes and Text Boxes, Insert and Format Images	**15**
	Module No. 2	
Unit 2	**Dealing to Visual and PowerPoint interface** a) **Insert Tables, Charts, SmartArt, and Media**: Insert and Format Tables, Insert and Format Charts, 3 Insert and Format SmartArt graphics, Insert and Manage Media, Insert and Format SmartArt graphics b) **Apply Transitions and Animations**: Apply Slide Transitions, Animate Slide Content, Set Timing for Transitions and Animations	**15**

References

- ☐ Microsoft Powerpoint Quick Start 2024 Guide by Jexonia Graneer
- ☐ Microsoft Powerpoint 2024 Guide For Beginners by Zecherry Wudare
- ☐ The Microsoft Office 365 Bible by Todd Finkle
- ☐ Microsoft Powerpoint Guide For Success by Kevin Pitch
- ☐ Microsoft Office 365 Bible by freddy Beverly
- ☐ Microsoft PowerPoint 365 Pro by Isaac Lemmings
- ☐ Microsoft Office 365 For Beginners 2024 by Henry C. Altoff

Paper Pattern (Any two out of four questions are expected to be attempted by the students.)

Time: 1 Hr.

Question No	Questions	Total Marks: 30
Q1		***15***
Q2		***15***
Q3		***15***
Q4		***15***

Note:

a) Equal Weightage to be given to all the modules.
b) 15 marks questions may be subdivided into 7/8 marks each.
c) Q1 and Q2 will be from Module 1, Q3 and Q4 will be from Module 2.
d) Any two out of four questions are expected to be attempted by the students.

Continuous Evaluation: Internal (20 marks)

	Assessment/ Evaluation	**Marks**
1	Computer lab Test	20

AC –20.04.2024
Item No. –5.6 (N) Sem I (1a)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of AEC	
Board of Studies in English	
UG First Year Programme B.Sc	
Semester	**I**
Title of Paper	**Credits**
Introduction to Communication **Skills in English I**	**2**
From the Academic Year	**2024-2025**

Sr. No.	Heading	Particulars
1	**Description of the course: Including but Not limited to:**	**Introduction to Communication Skills in English I** Effective academic communication skills are essential for success in scholarly pursuits. In the academic realm, proficiency extends beyond verbal articulation to encompass precise and coherent written expression. Students are not only required to engage in thoughtful discussions and articulate complex ideas verbally but must also demonstrate their understanding through well-crafted written assignments, and presentations. Academic communication involves the mastery of scholarly conventions, such as adherence to academic writing styles, and the ability to engage in dialogue with peers and scholars. It encompasses the skillful navigation of academic discourse, fostering an environment where ideas are shared, challenged, and refined. Developing strong academic communication skills empower individuals to contribute meaningfully to intellectual conversations, enriching both their academic journey and the broader scholarly community. This course with its 30:20 pattern will also help in accomplishing this goal. The course is aimed at honing their cognitive, analytical, linguistic and creative skills. It is hoped that by the end of the academic year, the learners will have developed confidence in using the English language both for oral and written communication as well as develop interest in enhancing these skills later on.
2	**Vertical:**	AEC (Ability Enhancement Course)
3	**Type:**	Theory
4	**Credit**:	2 credits (1credit=15 Hours for Theory in a semester)
5	**Hours Allotted:**	30Hours
6	**Marks Allotted**:	50Marks
7	**Course Objectives:** 1. To cultivate a comprehensive understanding of communication skills 2. To enhance reading proficiency with a diverse range of written texts with different genres and styles of written communication. 3. To develop proficiency in grammatical accuracy with specific focus on common grammatical errors and provide targeted exercises for improvement. 4. To equip learners with proficient presentation and conversation skills by integrating practical exercises for public speaking and interpersonal communication. 5. To provide practical experience in formal writing, including Statement of Purpose (SoP) preparation.	

8	**Course Outcomes**: At the end of the course, learners will: • Demonstrate an understanding of essential aspects of communication skills • Exhibit the ability to Read a variety of written text using subskills such as skimming and scanning. • Identify and rectify common grammatical errors in English. • Show competence in delivering compelling presentations and engage in articulate and effective conversations in English across different contexts. • Display advanced formal writing skills in crafting job application letters, CVs, and Statements of Purpose.

9	**Modules**: -
	Module1: (15 Lectures)
	A) Introduction to Communication Skills • The Seven Cs of Effective Communication • Verbal and Non-Verbal Communication • Cross-cultural communication • Technology-enabled Business Communication • Features of Effective Written Communication • Characteristics of an Effective Speech • Effective Listening Skills **B) Reading Skills:** • Scanning a text for information • Skimming a passage to look for main ideas, understanding text type • Guessing meaning of an expression (word/phrase/clause) • Building inference skills Passages from academic, professional, and literary domains around 200- 250 words, could be chosen in this section. **C) Grammar** • Subject Verb Agreement • Tenses • Question Tag • Change the Voice • Framing Interrogative sentence • Synonyms and Antonyms • Misplaced modifiers Grammar should be taught with a remedial approach so as to enable learners to avoid common errors in their written and spoken communication.

Module 2: (15 Lectures)

A) Speaking Skills in English

Conversation skills

- Opening a conversation
- Introducing oneself in various contexts
- Introducing others formally and informally

Presentation Skills

- Introduction: Essentials of Presentation skills
- Analysis of model Presentations
- Planning and Delivering the Presentation
- Developing & Displaying Visual Aids
- Handling Questions from the Audience

B) Formal Writing Skills:

- Interpreting and describing different types of visual information
- Job applications with bio data (solicited and unsolicited)
- Statement of Purpose

10 **Text Books: N.A.**

11 **References:**

- Bellare, Nirmala. *Reading & Study Strategies*. Books. 1 and 2. Oxford University Press, 1997, 1998
- Bellare, Nirmala. *Easy Steps to Summary Writing and Note-Making.* Amazon Kindle Edition, 2020
- Comfort, Jeremy, et al. *Speaking Effectively: Developing Speaking Skills for Business English*. Cambridge University Press, 1994.
- Das, Bikram K., et. al. *An Introduction to Professional English and Soft Skills.* Cambridge University Press India Pvt. Ltd., 2010
- Das, Yadjnaseni & R. Saha (eds.) *English for Careers*. Pearson Education India, 2012.
- Dimond-Bayir, Stephanie. *Unlock Level 2 Listening and Speaking Skills* Student's Book and Online Workbook: Listening and Speaking Skills Student's Book+ Online Workbook. Cambridge University Press, 2014.
- Doff, Adrian and Christopher Jones. *Language in Use* (Intermediate and Upper Intermediate). CUP, 2004.
- Glendinning, Eric H. and Beverley Holmstrom. Second edition. *Study Reading: A Course in Reading Skills for Academic Purposes*. CUP, 2004
- Goodale, Malcolm. P*rofessional Presentations Video Pack: A Video Based Course*. Cambridge University Press, 1998.
- Grellet, F. *Developing Reading Skills.* Cambridge: Cambridge University Press, 1981
- Grussendorf, Marion. *English for Presentations.* Oxford University Press, 2007.

- Hamp- Lyons, Liz and Ben Heasiey. Second edition. *Study Writing: A Course in Writing Skills for Academic Purposes*. CUP, 2006
- Labade, Sachin, Katre Deepa et al. *Communication Skills in English*. Orient Blackswan, Pvt Ltd, 2021.
- Lewis, N. *How to Read Better & Faster*. New Delhi, Goyal Publishers & Distributors Pvt. Ltd, 2006.
- McCarthy, Michael and Felicity O'Dell. English *Vocabulary in Use*. Cambridge: Cambridge University Press, 2001.
- Mohan, RC Sharma Krishna. *Business Correspondence and Report Writing*. Third edition. Tata McGraw-Hill Education, 2002.
- Murphy, Raymond, et al. *Grammar in use: Intermediate*. Cambridge University Press, 2000
- Raman, Meenakshi, and Singh, Prakash. *Business Communication*. India, Oxford University Press, 2006.
- Richards, Jack C., and Chuck Sandy. *Passages* Level 2 Student's Book. Cambridge University Press, 2014.
- Sadanand, Kamlesh & S. Punitha. *Spoken English: A Foundation Course*. (Part 1 & 2). Orient Blackswan. 2009.
- Sasikumar, V., et al. *A Course in Listening & Speaking I*. 2005. Cambridge University Press India Pvt. Ltd. (under the Foundation Books Imprint), 2010
- Savage, Alice, et al *Effective Academic Writing*. Oxford: OUP, 2005
- Sethi, J. *Standard English and Indian usage: Vocabulary and grammar*. PHI Learning Pvt. Ltd., 2011.
- Taylor, Grant. *English Conversation Practice*. 1967. Tata McGraw-Hill, 2013
- Turton, Nigel D. *A B C of Common Grammatical Errors*. 1995. Macmillan India Ltd., 1996
- Vas, Gratian. *English Grammar for Everyone*. Mumbai, Shree Book Centre, 2015
- Watson, T. *Reading Comprehension Skills and Strategies*: Level 6. Saddleback Educational Publishing, 2002

Web link Resources:

- A conversation about household appliances: https://youtu.be/rAPl0fSborU 13. Video on psychology: Why do we dream? https://youtu.be/2W85Dwxx218
- Video on social media: What is a social media influencer? https://youtu.be/39A3og7enz8
- Tips on communication (TED Talk): The Secrets of Learning a New Language https://youtu.be/o_XVt5rdpFY
- Expressing opinions: If Cinderella Were a Guy: https://youtu.be/p4OyCNctKXg
- Video on the English language: Where did English come from? https://youtu.be/YEaSxhcns7Y

12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:** • Participation in an activity based on Presentation Skills and Conversation skills each (Module 2 A) (10 marks) The class may be divided into batches by creating formal schedule for the same before the semester End Examination. • Participation in two classroom activities involving skills other than presentation and conversation skills (05 marks) • Overall attendance (05 marks) (Percentage of learners' attendance in class to be considered) **Suggested Activities:** ▪ Listening to audio clips/ books to enhance listening skills ▪ Reading aloud from newspapers, magazines, stories, non-fiction followed by classroom discussion on these to enhance reading and speaking skills	
14	**Format of Question Paper:** for the final examination Q.1. Short notes (2 out of 4) – On Module 1 (A) 10 marks Q.2. A. Unseen Passage (200-250 words) (Module 1 B) 06 marks B. Questions on grammar (Module 1 C) 04 marks Q. 3. Writing Skills (1 out of 2) on Module 2 (B) 10 marks	

Sign of BOS Chairman **Prof. Dr. Shivaji Sargar** **Board of Studies in English**	**Sign of the Offg. Associate Dean** **Dr. Suchitra Naik** **Faculty of Humanities**	**Sign of the Offg. Associate Dean** **Dr. Manisha Karne** **Faculty of Humanities**	**Sign of the Dean** **Prof. Dr. Anil Singh** **Faculty of Humanities**

AC – 24/05/2024
Item No. – 6.3 Sem. II (1a)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE	
Board of Studies in Mathematics	
UG First Year Programme	
Semester	**II**
Title of Paper	**Credits 2/ 4**
I) Financial Mathematics II	**2**
From the Academic Year	**2024-25**

Name of the Course: Financial Mathematics - II

Sr. No.	Heading	Particulars
1	**Description the course:** **Including but not limited to:**	This course offers a comprehensive exploration of finance and statistical analysis. It covers essential topics such as shares, mutual funds, time series analysis, and index numbers. Students learn about shares and mutual funds, including concepts like face value, market value, and dividends, and how to calculate net income considering various factors. Additionally, they delve into time series analysis, where they explore trend estimation methods like Moving Average and Least Squares, and forecasting techniques using the Least Squares Method. The significance of index numbers in economic analysis is also emphasized, providing students with practical skills and knowledge applicable to real-world scenarios in finance and statistics.
2	**Vertical:**	OE
3	**Type:**	Theory
4	**Credits:**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted:**	30 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives (CO):** (List the course objectives) This course takes a comprehensive look at important ideas in finance and statistical analysis. Students learn about the complexities of financial instruments like stocks and mutual funds, as well as the principles of time series analysis and index numbers, throughout this course. CO1: To offer a thorough understanding of shares and mutual funds, including their types, components and calculations. CO2: To learn the concepts of time series and index numbers, including trend estimation methods and forecasting techniques. CO3: To develop proficiency in calculating various index numbers and understanding their significance in economic analysis. CO4: To acquire skills in averaging prices through Systematic Investment Plan (SIP) and interpreting its implications in mutual fund investments.	
8	**Course Outcomes (OC):**	

	After completion of the course, students will be able to. OC1: demonstrate a comprehensive understanding of financial instruments such as shares and mutual funds, enabling them to make informed investment decisions. OC2: calculate various index numbers, enabling them to measure price changes and cost of living accurately. OC3: apply statistical tools such as averaging prices through SIP in mutual fund investments, enhancing their practical understanding of financial markets. OC4: analyze time series data and estimating trends using appropriate statistical methods. OC5: develop the ability to forecast future trends using the Least Squares Method, enhancing their predictive capabilities.
9	**Modules:-** **Module 1: Shares and Mutual Funds:** • Concepts of shares, face value, market value, dividend, equity shares preferential shares, bonus shares, Simple examples. • Mutual Funds, Simple problems on calculation of Net Income after considering entry load, dividend, change in Net Asset Value (N.A.V) and exit load. • Averaging of price under the 'Systematic Investment Plan (S.I.P)'.
	Module 2: Time Series and Index Numbers • Concept and Components of time series. Estimation of Trend using Moving Average Method & Least Squares Method (only Linear Trend). • Concept of Forecasting using Least Squares Method. • Concept and uses of Index Numbers. Simple and Composite Index Nos. (unweighted, weighted). • Laspeyre's Price Index No., Paasche's Price Index No. Fisher's Price Index No., Dorbish-Bowley's Index Number, Marshall and Edgeworth Index Number. • Cost of Living Index No., Real Income
10	**Text Books** 1. Fundamentals of Mathematical Statistics,12th Edition, S. C. Gupta and V. K. Kapoor, Sultan Chand & Sons, 2020. 2. Statistics for Business and Economics, 11th Edition, David R. Anderson, Dennis J. Sweeney and Thomas A. Williams, Cengage Learning, 2011. 3. Introductory Statistics, 8th Edition, Prem S. Mann, John Wiley & Sons Inc., 2013.
11	**Reference Books** 1. A First Course in Statistics, 12th Edition, James McClave and Terry Sincich, Pearson Education Limited, 2018. 2. Introductory Statistics, Barbara Illowsky, Susan Dean and Laurel Chiappetta, OpenStax, 2013.
	<u>Scheme of the Examination</u>
	The performance of the learners shall be evaluated into two parts. • Internal Continuous Assessment of 20 marks for each paper. • Semester End Examination of 30 marks for each paper. • Separate head of passing is required for internal and semester end examination.

12	**Internal Continuous Assessment: 40%** **Semester End Examination: 60%**	
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments etc. (at least 3)	

Sr. No.	Particulars	Marks
1	A class test of 10 marks is to be conducted during each semester in an Offline mode.	10
2	Project on any one topic related to the syllabus or a quiz (offline/online) on one of the modules.	05
3	Seminar/ group presentation on any one topic related to the syllabus.	05

Paper pattern of the Test (Offline Mode with One hour duration):
Q1: Definitions/Fill in the blanks/
True or False with Justification.
(04 Marks: 4 x 1).
Q2: Attempt any 2 from 3
descriptive questions. (06 marks: 2
× 3)

14 **Format of Question Paper:**
The semester-end examination will be of 30 marks of one hour duration covering the entiresyllabus of the semester.

Note: Attempt any TWO questions out of THREE.			
Q.No.1	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5	15 Marks
Q.No.2	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5	15 Marks

	Q.No.3	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5	15 Marks

Sign of the BOS Chairman
Dr. Bhausaheb S Desale
The Chairman, Board of Studies in Mathematics

Sign of the Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of the Offg. Dean
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. I (1a)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE (Scheme I)	
Board of Studies in Mathematics	
UG First Year Programme	
Semester	**I**
Title of Paper	**Credits**
I) Quantitative Techniques – I	**2**
II)	**2**
III)	**2**
From the Academic Year	**2024-25**

Name of the Course: Quantitative Techniques – I (OE – I)

Sr. No.	Heading	Particulars
1	**Description the course:** **Including but not limited to:**	This course deals with the Basic Mathematics that forms an essential component of Most of the Competitive and Entrance Examinations, such as Banking, Management Entrance, UPSC/MPSC, SET/NET, GMAT/GRE to quote a few. Although the Math-concepts involved in these examinations are of elementary level, the nature of the problems in such exams is far different, and the difficulty level of the questions is much higher, than the typical ones, based on which students are tested in schools. A person appearing for such exams is expected to have a thorough understanding of the concepts, to have ability to think logically, and to be able to interpret the data, presented in different manner.
2	**Vertical:**	Open Elective
3	**Type:**	Theory
4	**Credits:**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted:**	30 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives (CO):** This course revises the basic mathematical concepts learned during school career. However, the problems asked in this course would be mostly advanced and indirect, and would demand broader and critical thinking. The course aims to enhance the reasoning power and logical thinking of the learners and nurture their intellect so as to make them competent across all competitive exams. CO1. To reinforce the basic math concepts and ideas within the learners CO2. To enhance the reasoning power of the learners and make them think over and apply concepts/formulae to solve math problems of indirect nature, thereby developing their problem-solving capacity. CO3. To develop logical thinking of the learners CO4. To make learners competent across all competitive and entrance examinations.	
8	**Course Outcomes (OC):** After completion of the course, students will be able to. OC1: understand the integers, rational numbers, real numbers and their operations. OC2: learn the concepts of GCD, LCM. OC3: understand the concepts related to averages and percentages, such as arithmetic mean.	

	geometric mean, harmonic mean OC4: evaluate the ratios and proportions OC5: understand the Profit, Loss, Percentage Profit and Percentage Loss. OC6: learn the concepts related to Time, Speed and Distance.
9	**Modules:-** **Module 1: Elementary Arithmetic - I** 1. Numbers and BODMAS: • Review of the number systems (Integers, Whole Numbers, Rational Numbers and Real Numbers) • Review of the basic operations and their results (like odd + even = odd, odd × even = even, odd raised to even is odd etc) • Easy tricks to do fast calculations (multiplication, squares, square-roots etc) • GCD and CLM of two or more numbers. 2. Averages and Percentage: • The three different means viz. Arithmetic Mean, Geometric Mean, Harmonic Mean • Properties of the three means, such as (a) AM-GM-HM inequality, (b) The mean of two numbers lies in between the two numbers, (c) In case of several numbers, the product of AM and the number of numbers equals the addition of numbers, (d) In case of several numbers, the product of the numbers equals the GM raised to the number of numbers, (e) The effect of adding the same quantity to each number on AM, (f) The effect of multiplying each number by the same quantity on GM • Percentage 3. Ratio and Proportion: • Concept of Ratio of two quantities • Ratio related properties such as invertendo, alternendo, componendo, dividendo etc • Direct and Inverse Proportion [The problems to be asked should be of varied levels of difficulty. A few ones based on directly applying a given formula may be asked at the beginning; however, the latter ones should demand critical analysis of the given information and a thoughtful selection of the method/formula to solve the same.]
	Module 2: Elementary Arithmetic – II 1. Profit and Loss: • Definitions of Profit and Loss • The concept of Percentage Profit and Percentage Loss 2. Time, Speed and Distance: • The concept of average speed based on the total distance crossed and the total time taken • The difference between crossing a pole/tower/tree/human and crossing a tunnel/bridge/station • Crossing a stationary object versus crossing a moving object

<table>
<tr><td></td><td colspan="2">

- Moving with/against the current (in a river)

3. Work, Pipes and Cisterns:

- Work done in unit time is reciprocal of the total work done (assuming that the amount of work done in each unit time is same),
- Filling/refilling/emptying cisterns.

</td></tr>
<tr><td></td><td colspan="2"></td></tr>
<tr><td>10</td><td colspan="2">Text Books

1. Bible To Basic Mathematics, Pragati Agarwal
2. Quantitative Aptitude for Competitive Examinations, R. S. Agarwal
3. Logical and Analytical Reasoning: Useful for All Competitive Exams, A. K. Gupta</td></tr>
<tr><td>11</td><td colspan="2">Reference Books

1. Arithmetic : Subjective And Objective For Competitive Examinations, R. S. Agarwal
2. Maths Book For Competitive Exams, Vikas Bhalla
3. Reasoning For Competitive Examinations, Nishit K Sinha</td></tr>
<tr><td></td><td colspan="2"><u>Scheme of the Examination</u></td></tr>
<tr><td></td><td colspan="2">The performance of the learners shall be evaluated into two parts.
• Internal Continuous Assessment of 20 marks for each paper.
• Semester End Examination of 30 marks for each paper.
• Separate head of passing is required for internal and semester end examination.</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>Semester End Examination: 60%</td></tr>
<tr><td>13</td><td>Continuous Evaluation through: Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments etc.
(at least 3)
<table>
<tr><td>Sr. No.</td><td>Particulars</td><td>Marks</td></tr>
<tr><td>1</td><td>A class test of 10 marks is to be conducted during each semester in an Offline mode.</td><td>10</td></tr>
<tr><td>2</td><td>Project on any one topic related to the syllabus or a quiz (offline/online) on one of the modules.</td><td>05</td></tr>
<tr><td>3</td><td>Seminar/ group presentation on any one topic related to the syllabus.</td><td>05</td></tr>
</table></td><td></td></tr>
</table>

	Paper pattern of the Test (Offline Mode with One hour duration): Q1: Definitions/Fill in the blanks/ True or False with Justification. (04 Marks: 4 x 1). Q2: Attempt any 2 from 3 descriptive questions. (06 marks: 2 × 3)	

14 **Format of Question Paper:**

The semester-end examination will be of 30 marks of one hour duration covering the entiresyllabus of the semester.

Note: Attempt any TWO questions out of THREE.			
Q.No.1	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks
Q.No.2	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks
Q.No.3	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks

Sign of the BOS Chairman
Dr. Bhausaheb S Desale
The Chairman, Board of Studies in Mathematics

Sign of the Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of the Offg. Dean
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. I (1b)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE (Scheme I)	
Board of Studies in Mathematics	
UG First Year Programme	
Semester	**I**
Title of Paper	**Credits**
I) Logic and Data Interpretation – I	**2**
II)	
III)	
From the Academic Year	**2024-25**

Name of the Course: Logic and Data Interpretation – I (OE – II)

Sr. No.	Heading	Particulars
1	**Description the course:** **Including but Not limited to:**	This course deals with the Logical Thinking and Data Interpretation, that forms an essential component of Most of the Competitive and Entrance Examinations, such as Banking, Management Entrance, UPSC/MPSC, SET/NET, GMAT/GRE to quote a few. The nature of the problems and the difficulty level of the questions is quite high and a person appearing for such exams is expected to have a thorough understanding of the concepts, to have ability to think logically, and to be able to interpret the data, presented in different manner.
2	**Vertical :**	Open Elective
3	**Type :**	Theory
4	**Credits :**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives (CO):** This course revises the basic mathematical concepts learned during school career. However, the problems asked in this course would be mostly advanced and indirect, and would demand broader and critical thinking. The course aims to enhance the reasoning power and logical thinking of the learners and nurture their intellect so as to make them competent across all competitive exams. CO1. To reinforce the basic math concepts and ideas within the learners CO2. To enhance the reasoning power of the learners and make them think over and apply concepts/formulae to solve math problems of indirect nature, thereby developing their problem-solving capacity. CO3. To develop logical thinking of the learners CO4. To make learners competent across all competitive and entrance examinations.	
8	**Course Outcomes (OC):** After completion of the course, the learners will be able to OC1: think logically about the given sequence of numbers/alphabets/symbols OC2: understand the odd/unfit element amongst the set of various elements OC3: develop logical thinking to obtain relations between two people	

	OC4: understand the directions, angles between any two angles OC5: get a general idea about the concept of coding a message and how to decode a coded message OC6: develop logical thinking to check whether or not the given information is sufficient to answer a question.
9	**Modules:-** **Module 1: Fundamentals of Logical thinking - I** 1. Number/Letter/Symbol Series: • Given a finite sequence of numbers, the learners are expected to find a simple rule (difference between or the ratio of consecutive numbers, square-quantities, cube-quantities, recursive rules etc) that binds all the numbers and be able to fill in the gap either at the end or at the beginning or in between. • Given a finite sequence of objects, made up of sets of alphabets/symbols, the learners are expected to observe the pattern that is visible in each set of letters/symbols and be able to predict the missing object/s 2. Odd Man Out: • Given a finite sequence of numbers, the learners are expected to find a simple rule that binds all but one and be able to find out the odd one • Given a finite sequence of objects, made up of sets of alphabets/symbols, the learners are expected to observe the pattern that fits each except one and be able to find out the miss-fit object 3. Relations: • Understanding the terms in relations such as mother, father, son, daughter, grand-mother, grand-father, grandson, grand-daughter, brother, sister, siblings, mother-in-law, father-in-law, cousin, nephew, niece, husband, wife, life- partner, spouse, uncle, aunt. • Forming a tree/diagram based on the information given, vertical aligning of different generations, definite symbols to be used for different people viz. square for male, circle for female, triangle for those whose gender is not specified and cannot be determined, double arrow (↔) for siblings and equality (=) for married couples [The problems to be asked should be of varied levels of difficulty. A few ones based on directly applying a given formula may be asked at the beginning; however, the latter ones should demand critical analysis of the given information and a thoughtful selection of the method/formula to solve the same.]
	Module 2: Fundamentals of Logical Thinking - II 1. Directions: • The eight directions and their names • The angles between any two directions • Revision of simple Pythagorean triplets such as (3-4-5), (6-8-10), (5-12-13), (7-24-25), (8-15-17), (9-12-15), (10-24-26), and their use in finding the distance between two points, say A and B when AC and CB are perpendicular, Revision of 45-45-90 triangle.

<table>
<tr><td></td><td>2. Coding and Decoding
Alphabet Coding, Numerical Coding, Symbol based Coding, Values Coding, Substitution Coding
Deciphering a given Coding
3. Data Sufficiency:
The concept/idea of Data Sufficiency, for example, the lengths of all the sides are sufficient to find the area of a triangle but not of a quadrilateral
Problems based on insufficient data and finding the minimal info needed to obtain the answer (In such case, not the final answer, but the minimal additional required information is to be found out) – The problems may be based on elementary mathematics or day-to-day situations.</td></tr>
<tr><td></td><td></td></tr>
<tr><td>10</td><td>Text Books

1 A Modern Approach To Verbal & Non-Verbal Reasoning, R. S. Agarwal

2. Quantitative Aptitude for Competitive Examinations, R. S. Agarwal
3. Logical and Analytical Reasoning: Useful for All Competitive Exams, A. K. Gupta</td></tr>
<tr><td>11</td><td>Reference Books

1. How To Crack Test of Reasoning In All Competitive Exams, Jaikishan and Premkishan
2. Maths Book For Competitive Exams, Vikas Bhalla
3. Reasoning For Competitive Examinations, Nishit K Sinha</td></tr>
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(at least 3)<table><tr><td>Sr. No.</td><td>Particulars</td><td>Marks</td></tr><tr><td>1</td><td>A class test of 10 marks is to be conducted during each semester in an Offline</td><td>10</td></tr></table></td><td></td></tr>
</table>

	mode.	
2	Project on any one topic related to the syllabus or a quiz (offline/online) on one of the modules.	05
3	Seminar/ group presentation on any one topic related to the syllabus.	05

Paper pattern of the Test (Offline Mode with One hour duration):
Q1: Definitions/Fill in the blanks/
True or False with Justification.
(04 Marks: 4 x 1).
Q2: Attempt any 2 from 3
descriptive questions. (06 marks: 2
× 3)

14 **Format of Question Paper:**
The semester-end examination will be of 30 marks of one hour duration covering the entiresyllabus of the semester.

Note: Attempt any TWO questions out of THREE.			
Q.No.1	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks
Q.No.2	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks
Q.No.3	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks

Sign of the BOS Chairman **Dr. Bhausaheb S Desale** **The Chairman, Board of Studies in Mathematics**	**Sign of the Offg. Associate Dean** **Dr. Madhav R. Rajwade** **Faculty of Science & Technology**	**Sign of the Offg. Dean** **Prof. Shivram S. Garje** **Faculty of Science & Technology**

Signatures of Team Members

Sr.No	Name	Signature
1.		
2.		
3.		

4.		
5.		

AC – 20/04/2024
Item No. – 6.6 Sem. I (2a)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE	
Board of Studies in Information Technology	
UG First Year Programme	
Semester	**I**
Title of Paper	**Credits 2/ 4**
I. IT_Fundamentals of Computers (Open Elective)[OE]	**2**
From the Academic Year	**2024-2025**

Name of the Course: IT_Fundamentals of Computer

Sr.No.	Heading	Particulars
1	**Description the course:**	This course is designed to aim at imparting basic level knowledge about computer, input output devices and memory.
2	**Vertical:**	**Open Elective**
3	**Type:**	Theory
4	**Credits:**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted:**	30 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives (CO):** **CO 1.** To understand the basic concepts of computer **CO 2.** To understand the fundamentals of hardware, software and programming **CO 3.** To understand the concepts of operating system and internet **CO 4.** To familiarize the student with the basic taxonomy and terminology of computer networks	
8	**Course Outcomes (OC):** **OC 1.** Learners will be able to explain the needs of hardware and software required for a computation task. **OC 2.** Learners will be able to understand the need of primary and secondary storage **OC 3.** Learners will be able to understand the concepts of operating system, networking and internet **OC4.** Learners will be able to understand basic network topologies	
9	**Modules: -** **Module 1:**	
	1.Computer Basics Introduction to Computers: Definition of computer, characteristics of a Computer, History of computers, Generation of Computers. Classification of computers-analog, digital and hybrid. Algorithms, Problem solving using computers **2.Input/output Units:** Input Devices-Keyboard, Mouse, Scanner, OMR, OCR, Barcode reader, Joystick, Tracker ball, Touch screen, MICR, Output devices-monitor-different types, Printers-Impact and Non-Impact printers, plotter **3.Computer Memory:** Computer Memory: Elementary Concepts of Sequential and Random Access, Primary Storage Devices, RAM, ROM, Types of ROM-PROM, EPROM, EEPROM. Secondary Storage Devices- Magnetic Disk,	

	Magnetic Drum, Magnetic Tape, Hard Disk, CDROM, DVD, Pen drive. **4.Computer Languages:** Why programming Language? Assembly Language, Higher Level Programming Languages, Compiling High Level Language Program.	
	Module 2:	
	1. Basics of operating systems: Generations, Types, Structure, Services, System Calls, System Boot, System Programs, Protection and Security Memory management**:** Main Memory, Swapping, Contiguous Memory Allocation, Paging, Structure of Page Table, Segmentation, Virtual Memory, Demand Paging. **2. File system interface:** File Concept, Access Methods, Directory Structure, File System Structure, Allocation Methods, and Free-Space Management. Basic DOS (Disk operating system) commands**:** cd, dir, copy, mkdir, clean etc. Basics of windows operating system, working with utilities of windows operating system like notepad, paint, word pad etc. **3. Computer Network:** Introduction to Data Communication System and Its Components, Networks, types of Connection and Topologies, LAN, MAN, WAN, et al. Network Models- OSI Models, Layers in OSI Models, TCP/IP protocol. **4. Internet and WWW**: Introduction to Internet and its Applications, Connecting to the Internet, Client/Server Technology, Internet as a Client/Server Technology, Email, Video-Conferencing, Internet Service Providers, Domain Name Server, Internet Address, Internet Protocols (IP. TCP, HTTP, FTP, SMTP, POP, Telnet), Introduction to Intranet, Internet vs. Intranet vs. Extranet, Advantages & Disadvantages of Intranet. World Wide Web and Its Evolution, Architecture of Web. Uniform Resource Locator (URL), Browsers: Internet Explorer, Netscape Navigator, Opera, Firefox, Chrome, Mozilla.	
10	**Text Books** 1 Rajaraman. V: Fundamentals of Computers, Prentice Hall India,2004 2 Peter Norton's, *"Introduction to Computers", 7th* Edition, Tata McGraw-Hill, 2010, ISBN: 9780070671201 3. Forouzan, B. A., &Fegan, S. C. New York: "Data communications and networking", McGraw-Hill Higher Education, 2007.	
11	**Reference Books** 1. Computer Basics Absolute Beginner's Guide By Michael Miller and Mike Miller 2. Operating System Concepts, Silberschatz, Ninth Edition, Willey Publication	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:** Class test of 1 of 15 marks Class test of 2 of 15 marks Average of the two: 15 marks Quizzes/ Presentations/ Assignments: 5 marks	**Semester End Examination (30 Marks)– 1 hr duration**

	Total: 20 marks	
14	**Format of Question Paper:** (**Semester End Examination : 30 Marks. Duration:1 hour)** Q1: Attempt any two (out of four) from Module 1 (15 marks) Q2: Attempt any two (out of four) from Module 2 (15 marks)	

Sign of Chairperson
Dr. Mrs. R. Srivaramangai
Ad-hoc BoS (IT)

Sign of the
Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of Offg. Dean,
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. I (2b)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE	
Board of Studies in Information Technology	
UG First Year Programme	
Semester	**I**
Title of Paper	**Credits 2/ 4**
I. **IT_Google Workspace** (Open Elective) [OE]	**2**
From the Academic Year	**2024-2025**

Name of the Course: IT_Google Workspace

Sr.No.	Heading	Particulars
1	**Description the course : Including but Not limited to:**	Google Workspace is a collection of cloud-based productivity tools that are designed to help individuals and organizations to work and collaborate efficiently. This course will provide an introduction to applications such as Gmail, Google Drive, Google meet and Google Calendar Google Docs, Google Sheets, Google Slides, Google Forms, Google Classroom.
2	**Vertical :**	**Open Elective**
3	**Type :**	Practical
4	**Credits :**	2 credits
5	**Hours Allotted :**	60 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives(CO):** CO 1. Understand Google Workspace and its applications. CO 2. Gain proficiency in key features of Google workspace application. CO 3. Acquire proficiency in Google workspace to collaborate, manage tasks and communicate effectively. CO 4. Leverage possibilities of Google workspace tolls to enhance productivity and streamline workflow.	
8	**Course Outcomes (OC):** OC 1. Manage email communications with Gmail. OC 2. Schedule and organize meetings and events using Google Calendar. Arrange and attend video meetings with Google Meet, Communicate with others using Google Chat. OC 3. Save , manage, and share files with Google Drive. OC 4. Generate and collaborate documents, spreadsheets and presentations. OC 5. Design Google Forms and collect data for surveys . Generate reports based on the collected data and integrate it with other Google Workspace applications. OC 6. Use Google Classroom to digitally organize, distribute, and gather assignments, course materials, and feedback. OC 7. Navigate confidently and make use of the numerous functionalities of Google Maps. OC 8. Able to design, develop, and maintain informative and visually appealing websites using Google Sites.	
9	**Modules:-** **Module 1:**	

1. **Google Workspace & Mastering email communication with Gmail**: Overview of Google Workspace, Setting up a Google account and accessing Google Workspace, Set Profile information and Photo, Send and Receive emails, Organize emails using labels, filters, and stars for easy retrieval and management, Utilize Gmail's advanced features like scheduling emails, snoozing emails, and setting reminders.
   a. Create a Gmail account. Write a brief email to your friends inviting them to a meeting to discuss a possible industrial visit. Attach a document file with the many options for places to visit.
2. **Google Calendar , Meet and Chat** : Create a new calendar, Create an event in Google Calendar, Set remainders and alarms , Share a Calendar with Other People ,Integrate with Gmail and other apps. Scheduling and managing Google Meet events, Features in Google Meet like screen sharing, chat, annotations and recording, Creating public and private Google Chat rooms ,Inviting and managing participants in Google Chat rooms, Utilizing Chat room features like sharing files, links, and multimedia, pinning messages, and polls.
   a. Create a new event in Google Calendar for an event happening on a specific date and time. Set a reminder to alert you one day prior to the event. Share your Google Calendar with a specific email address and grant them view-only access.
   b. Set up a meeting with your project partners, choose the suggested security configurations, and send a meeting invite to the participants via email. Begin the meeting by letting everyone into the meeting room. To demonstrate to them the project's progress, share your screen. Use chats to send brief messages and share relevant documents.
3. **Google Drive** :Managing files and folders in Google Drive, Sharing files and folders with collaborators and setting access permissions.
   a. Create a project folder in Google drive. Add a PowerPoint presentation detailing project milestones and a Word document with project guidelines to the folder. Share the folder and allow the project team members to edit it.
4. **Google Docs**: Document creation with Google Docs, Apply Basic Formatting to Text , Inserting Images, Creating tables, Format a document with styles, Using Find and Replace, Using Regular Expressions for Advanced Searching, Sharing and Collaborating on files.
   a. Create a one page document which best describes you. Add the document's heading and page numbers. Make a list of your hobbies using bullet points. Employ formats and typefaces to give the document an elegant look. To highlight your skills, use hyperlinks to other documents in the folder. Include a picture of yourself on the page as well. Add a table with your educational background in it. Write about your positive college experiences by voice typing. After that, translate the document's content into a different language of your choice.
5. **Google Sheets** :Insert, delete and manage sheets , Insert a Function, Format Spreadsheets, Cells, and Ranges, Apply Number Formatting

	and Conditional Formatting, Insert and View Notes, Choose Spreadsheet Settings, Merge Cells, Wrap and Rotate Cell Contents, Inserting Objects in Google Sheets, Sort and Filter Data, Apply Data Validation to Your Sheets, Protect Ranges in a Sheet, Protect a Sheet, Create and Manage Macros. a. Create a Personal budget sheet, list all your expenses and incomes of the month in the sheet. Use sum function to total the income and expenses. Use IF function to find if the budget is in deficit or not.
	Module 2:
	1. **Google Slides**: Add a Slide to a Presentation, Import Slides from an Existing Presentation, Understanding and Using Views, Work with Text Boxes, Add Audio and Video to a Slide, Insert Shapes and Word Art, Add a Transition and Animations, Edit a Slide Master, Organize the Slides in a Presentation a. Open a new Google Slides presentation titled “Project Presentation”. Add slides to provide a summary of your project. Use themes and transitions to make the slide experience better. 2. **Google Forms**: Create a Form, Choose Settings for a Form, Add Questions to a Form, Add Images to a Question, Add a Video to a Question, Import Questions from an Existing Form, Create a Form with Multiple Sections, Control Progression Based on Answers, Add Collaborators to a Form, Preview and Test a Form, Send a Form to Its Respondents, View the Responses to a Form, Analyse form responses and generate reports. a. Create a Google Form to accept participation entries for the various events your department is organizing on the annual day. Mention the details of event in the form description. Include a dropdown menu to select the events they wish to participate in. Insert relevant multimedia to make the Google Form attractive. b. Create an online evaluation quiz using Google Form. Include a variety of question formats, such as ones with pictures, videos, etc. Assign points to the questions. Share the link with your friends and check out the the summary of the responses. 3. **Google Classroom**: Create and set up a Google Classroom, Add Students and Co-Teachers, Using Google Classroom to share resources, Create assignment, Set due dates and points, Use rubrics for grading, Integrate quizzes created using Google Form with Google Classroom. a. Create a Google Classroom for a certain subject that includes a range of topics, resources, and activities. Include resources for each topic, such as Word docs, PowerPoints, and YouTube links. Include elements that encourage participation and interaction, such as assignments and discussions. 4. **Google Maps:** Search on Maps, Different Map Views (Satellite, Terrain, Street View), Customizing Maps, Get to your destination, Sharing Maps with Others. a. Use google maps to explore local landmarks in your area. Find directions from your current location to a nearby restaurant. Use Maps to check the places you have visited on a particular day.

	5. **Google Sites**: Creating and building simple websites using Google Sites, Adding content, images, and widgets to websites. a. Assume you runs a small business. Create a visually appealing website which includes the following pages: Home page , About the business, Products page, Announcement of discounts.	
10	**Text Books and Online Resources** 1. **Hart-Davis, G. (2021). Teach Yourself Visually Google Workspace. Visual.** 2. **https://support.google.com/a/users#topic=9247638** 3. **https://support.google.com/edu/classroom#topic=10298088** 4. **https://support.google.com/maps/?hl=en#topic=9729258**	
11	**Reference Books** **1. Team, Z. (2017). The Ultimate Guide to G-Suite. Lean Pub G-Suite.** **2. Iyer, b. (2022). Google workspace user guide: a practical guide to using google apps efficiently while integrating them with your data.**	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.(at least 3)	
14	**Format of Question Paper: Duration 2 hours. Certified copy of Journal is compulsory to appear for the practical examination** Practical Slip: Q1. From Module 1 13 marks Q2. From Module 2 12marks Q3. Journal and Viva 05 marks	

Sign of Chairperson
Dr. Mrs. R. Srivaramangai
Ad-hoc BoS (IT)

Sign of the
Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of Offg. Dean,
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. I (7a)

As Per NEP 2020

University of Mumbai



Syllabus for Basket of OE	
Board of Studies in Statistics	
UG First Year Programme	
Semester - I	
Title of Paper	**Credits 2**
I) Introduction to Basic Statistics-I	**2 credit**
II)	
III)	
From the Academic Year	**2024-25**

Semister-I
Open Electives-I
Name of the course: Introduction to Basic Statistics-I

Sr. No.	Heading	Particulars
1	**Description the course :** **Including but Not limited to :**	Introduction: Introduction to Basic statistics-I course is focuses on basic statistics such as collection of data and how to measure variables on different scale. Student will equip with to identify the scale of measurement and analyze elementary statistical analysis through graphical presentation. Also student will learn to identify nature of the data through statistical methods. This course mainly emphasizes the method of collecting data, summarizing and presenting data, and drawing inferences from the data. This course will be useful for science, humanity and commerce faculty. This course will be offered other than science faculty students which will be very useful to gain knowledge about basic statistics in their field. This course will be applicable to various field to analyze their basic data structure. This course is focuses practical as well as theoretical aspects of basic statistics along with subjects from psychology, Economics, sociology, commerce, Computers , Mathematics , IT etc. There is growing demand for highly skilled statisticians in the 21st century in many fields including government, banking sector, health sciences, veterinary sciences, agricultural sciences, business, and social sciences etc
2	**Vertical :**	Open Elective
3	**Type :**	Theory
4	**Credit**:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)

5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: Students will be able to, 1. Understand the meaning of Statistics and scope of Statistics. 2. Understand techniques of data collection and its presentation. 3. Compute various measures of central tendencies to know the entire data by a centralized single value. 4. Understand spread and variation of data using various techniques of measure of dispersion. 5. Understand the behavior of data using skewness and kurtosis and study the nature of probability curve.	
8	**Course Outcomes**: **: on successful completion of the course Students Should be able to,** 1. Calculate arithmetic mean and its applicability 2. Differentiate between qualitative and quantitative data through scale of measurement. 3. Construct graphs and diagrams from data and interpret the result. 4. Compute Skewness and Kurtosis of the data to describe nature of data distribution.	

9	**Modules**:-	**Lectures**
	Module 1: Classification, Tabulation and Presentation of data.	
	• Definition and scope of Statistics • Types of data: Qualitative and Quantitative data, Geographical data, Time series data and Crosssection data • Measurement of scales: Nominal, Ordinal, Interval and Ratio. • Primary data and Secondary data • Classification and Tabulation (One way and Two way). • Frequency distributions: Uni-variate and Bi-variate • Diagrammatic representation of data	15

Simple bar diagram, Multiple bar diagram, Subdivided bar diagram and Pie-chart • Graphical representation of data Histogram, Frequency Polygon, Frequency Curve, Cumulative frequency curve (Less than and more than type).	
Module 2: Measures of central tendency and Measures of Dispersion	**15**
Measures of central tendancy • Concept and Requirements of good measures of central tendency. • Arithmetic mean (Simple, weighted mean, combined mean)for grouped and un-grouped data, Merits, demerits and its applicability • Positional averages: Median, Mode, and Quartiles (for grouped and un-grouped data) Merits, demerits and its applicability • Graphical representation of mode, median and Quartiles. • Empirical relation between mean, median and mode (Only statement) **Measures of Dispersion** • Concept and requirements of good measures of dispersion. • Absolute and Relative measures of dispersion: Range, Quartile Deviation , Mean absolute deviation, Variance • and Standard deviation (for grouped and un-grouped data) Merits, demerits and its applicability • Raw moments and central moments , relation between them upto order four (only statement). • Measures of Skewness and Kurtosis: Karl Pearson's measure of Skewness , • Measures of skewness and kurtosis based on moments.(Only • formulae) and their interpretation	

Reference Books

- David S. : Elementary Probability, Cambridge University Press.
- Hoel P.G. : Introduction to Mathematical Statistics, Asia Publishing House.
- Hogg R.V. and Tannis E.P. : Probability and Statistical Inference.McMillan Publishing Co. Inc.
- Pitan Jim : Probability, Narosa Publishing House.
- Goon A.M., Gupta M.K., Dasgupta B. : Fundamentals of Statistics, Volume II :The World Press Private Limited, Calcutta.
- Mukhopadhyay P. An Introduction to the Theory of Probability, World Scientific Publishing Company, 2011.
- Grewal P. S, Methods of Statistical Analysis, Sterling Publishers, 1990
- S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical Statistics, Sultan Chand and Sons

Format of Question Paper:

Internal Continuous Assessment: (20 marks)

Assignment/viva Quizzes, Class Tests, presentation, project, assignment etc	**Class Test**	**Total**
05	15	20

Semester End Examination: (30 marks)

Semester End Examination will be of 30 marks of 01 hour duration covering entire syllabus of the semester. All questions are Compulsory.

Theory Question Paper Pattern:

Q 1	Attempt any one question out of two questions (Module I and II)	Max. marks: 10
Q 2	Attempt any two questions out of three questions (Module I)	Max. marks: 10
Q 3	Attempt any two questions out of three questions (Module II)	Max. marks: 10

Sign of the BOS Chairman
Dr. Santosh Gite
Board of Studies in Statistics

Sign of the Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of the Offg. Dean
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. I (8a)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of OE	
Board of Studies in Biotechnology	
UG First Year Programme	
Semester – I	
Title of Paper	**Credits 2/ 4**
I) OE: Nutrition, Life style diseases and their management	**2**
II)	**2**
From the Academic Year (2023-24 Progressively)	

Name of the Course: Nutrition, Life style diseases and their management

Sr. No.	Heading	Particulars
1	**Description the course :** **Including but Not limited to :**	This syllabus offers a comprehensive understanding of nutrition's role in preventing and managing lifestyle diseases, with a focus on theoretical foundations and practical applications. Students delve into the relevance and usefulness of nutrition knowledge, preparing them to address contemporary health challenges effectively.
2	**Vertical :**	Open Elective
3	**Type :**	Theory
4	**Credit**:	2 credits
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted**:	50 Marks
7	**Course Objectives**: **CO1:** To understand the principles of nutrition and their role in human health. **CO2 :** To learn about various nutrients,their sources, functions and requirements **CO3:** To understand Diet planning **CO4:** To understand the relationship between nutrition and various health conditions **CO5**: . To create awareness about arising from day to day activities which could be prevented/ managed by controlling life style.	
8	**Course Outcomes**: Learner will be able to **OC1**: Demonstrate knowledge of principles of nutrition science **OC2:** Develop dietary plans to meet nutritional needs of individual across the life span and in various health conditions. **OC3:** Understand the role of nutrition in the prevention and management of chronic diseases **OC4:** Understand concept of life style disorders and their impact on individual health and well being **OC5:** Learn strategies for prevention, early detection and management of lifestyle disorders through lifestyle modifications, including diet, exercise.	

9	**Modules**:- **Module 1: Nutrition and Dietetics**
	1. Food, Nutrition and Nutrients: Food groups based on functions and chemical nature. Nutritional disorders due to deficiency and excess **(3 lectures)** **2. Energy Value of Foods:** Methods of measurement of energy, value of nutrients, BMR (basal metabolic rate) - measurement and factors affecting BMR **(2 lectures)** **3. Adequate Diet:** food guide pyramid, balanced diet **(1 lecture)** **4. Cereals and Millets:** composition, nutritive value and nutrient losses during processing. **(2 lectures)** **5. Pulses, Legumes, Nuts and Oilseeds:** composition, nutritive value and nutrient losses during processing. Importance of germination and malting, anti-nutritional factors. Rancidity of oils and preservation. **(3 lectures)** **6. Vegetables and fruits:** Vegetables-composition and nutritive value, changes during cooking, storage. Fruits - composition, nutritive value, storage and ripening, enzymatic browning and its prevention. **(2 lectures)** **7. Animal Foods:** Composition, nutritive value of Milk, Eggs, Poultry, Meat and Fish **(2 lectures)**
	Module 2: Life style Diseases and their management
	1. Concept of lifestyle diseases- Importance of lifestyle factors in preventing disease development: diet, exercise, smoking, alcohol etc. **(2 lectures)** **2. Diabetes-** Type 1 and type 2, Characteristics, causes, diagnosis, prevention and management **(2 lectures)** **3. Cancer-**Characteristics, causes, diagnosis, prevention, management, basis of treatment modalities **(2 lectures)** **4. Arteriosclerosis and cardiovascular diseases-** Myocardial infarction, congestive heart failure, ischemic diseases - causes, diagnosis and management, hypertension **(3 lectures)** **5. Obesity-** causes, prevention and management.**(2 lecture)** **6. Respiratory diseases, Cirrhosis and stroke (2 lectures)** **7. Importance of diet and physical exercise in health**. **(2 lectures)**
10	**Text Books:** **1. Fundamentals of Food and Nutrition, 4th Edition, Mudambi R. and Rajgopal M.V. 2001, New Age International Ltd. Publication** **2. Principles of Nutrition and Dietetics, 2nd Edition, Swaminathan M.** **3. Food Science, 5th Edition, 2011, Srilakshmi B. New Age International Publishers, New Delhi**

11	**Reference Books:** **1. Textbook of Lifestyle Medicine- Labros Sidossis and Stefanos Kales, Wiley 2020, ISBN # 978.1.119.70442.3** **2. Food Facts and Principles, Shakuntala Manay N., 2005,New Age International Publishers, New Delhi** **3. Food Science, Norman Potter N. 2007, CBS Publishers and Distributors, New Delhi**

12	**Internal Continuous Assessment: 40%**	**External, Semester End Examination : 60% Individual Passing in Internal and External Examination**
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc. (at least 3)	
14	**Format of Question Paper:** Semester End Examination theory - 50 Marks	

Sign of the BOS Chairman
Dr. Varsha Kelkar-Mane
Ad-hoc BoS (Biotechnology)

Sign of the Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of the Offg. Dean
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. II (1b)

As Per NEP 2020

University of Mumbai



Syllabus for Basket of OE (Scheme I)	
Board of Studies in Mathematics	
UG First Year Programme	
Semester	**II**
Title of Paper	**Credits**
1. Logic and Data Interpretation – II	**2**
2.	**2**
3.	**2**
From the Academic Year	**2024-25**

Name of the Course: Logic and Data Interpretation – II (OE – II)

Sr. No.	Heading	Particulars
1	**Description the course:** **Including but Not limited to:**	This course deals with the Logical Thinking and Data Interpretation, that forms an essential component of Most of the Competitive and Entrance Examinations, such as Banking, Management Entrance, UPSC/MPSC, SET/NET, GMAT/GRE to quote a few. The nature of the problems and the difficulty level of the questions is quite high and a person appearing for such exams is expected to have a thorough understanding of the concepts, to have ability to think logically, and to be able to interpret the data, presented in different manner.
2	**Vertical :**	Open Elective
3	**Type :**	Theory
4	**Credits :**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted :**	30 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives (CO):** This course revises the basic mathematical concepts learned during school career. However, the problems asked in this course would be mostly advanced and indirect, and would demand broader and critical thinking. The course aims to enhance the reasoning power and logical thinking of the learners and nurture their intellect so as to make them competent across all competitive exams. CO1. To reinforce the basic math concepts and ideas within the learners CO2. To improve the cognitive power of the learners and make them think over and apply concepts/formulae to solve math problems of indirect nature, thereby developing their problem-solving capacity. CO3. To develop rational thinking of the learners CO4. To make learners competent across all competitive and entrance examinations	
8	**Course Outcomes (OC):** After completion of the course, the learners will be able to OC1: think logically about the problems related to clocks OC2: understand the nature of the calendars, find out the day related to any date in past/future OC3: develop logical thinking and realize the hidden pattern amongst the sequence of figures/diagrams	

	OC4: understand the representation of data in various forms OC5: understand the idea behind displaying data in a web-like diagram and comparing between two sets of data OC6: develop logical thinking to extract information from various graphs, charts, and tables representing data.
9	**Modules:-** **Module 1: Logic and Data Interpretation** 1. Clocks • The proportion of the speeds of different hands of a clock • The angles between the several positions of the hands • Coincidental and collinear but oppositely directed hour-hand and minute hand 2. Calendars • Review of the standard Gregorian calendar, with emphasis on Leap Year (1900 wasn't a leap year but 2000 was!) • Number of weeks in a year • Forward movement of the days with respect to dates (E.g. 1 Jan 2023 was Sunday, but 1 Jan 2024 is Monday) 3. Figures and Images • Sequence of diagrams, identifying the various patterns by which the figures/diagrams undergo changes and then predicting the next (or in between) figure/diagram. • Understanding images of various shapes/figures in mirror and water. Finding out the actual shape from its images in water/mirror. [The problems to be asked should be of varied levels of difficulty. A few ones based on directly applying a given formula may be asked at the beginning; however, the latter ones should demand critical analysis of the given information and a thoughtful selection of the method/formula to solve the same.]
	Module 2: Data Interpretation 1. Types of data: Qualitative and Quantitative 2. Tabulation: Reading and understanding data presented in a tabular form. 3. Interpreting data represented by Bar Graph, Pie Chart, Line graph, Scatter Diagram, Histogram etc. 4. Caselet Data Interpretation – Questions/Problems based on a long paragraph of information. 5. Web-based data interpretation – Display of data in a web-like diagram, Two sets of data and their comparison, Analysing the data 6. Missing Data Interpretation - Filling the missing values in the table from the additional information given or by applying logical thinking.
10	**Text Books** 1. Data Interpretation for CAT, Nishit k Sinha 2. Data Interpretation & Analysis, Aashish Arora

<table>
<tr><td></td><td colspan="2">3. Logical and Analytical Reasoning: Useful for All Competitive Exams, A. K. Gupta</td></tr>
<tr><td>11</td><td colspan="2">Reference Books

1. Arithmetic : Subjective And Objective For Competitive Examinations, R. S. Agarwal
2. A Complete Book on Data Interpretation & Analysis and A Complete Book for Seating Arrangement and Puzzles, Adda247 Publications
3. Reasoning for Competitive Examinations, Nishit K Sinha</td></tr>
<tr><td></td><td colspan="2"><u>Scheme of the Examination</u></td></tr>
<tr><td></td><td colspan="2">The performance of the learners shall be evaluated into two parts.
• Internal Continuous Assessment of 20 marks for each paper.
• Semester End Examination of 30 marks for each paper.
• Separate head of passing is required for internal and semester end examination.</td></tr>
<tr><td>12</td><td>Internal Continuous Assessment: 40%</td><td>Semester End Examination: 60%</td></tr>
<tr><td>13</td><td>Continuous Evaluation through:
Quizzes, Class Tests, presentations, projects, role play, creative writing, assignments etc.
(at least 3)
<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Marks</th></tr>
<tr><td>1</td><td>A class test of 10 marks is to be conducted during each semester in an Offline mode.</td><td>10</td></tr>
<tr><td>2</td><td>Project on any one topic related to the syllabus or a quiz (offline/online) on one of the modules.</td><td>05</td></tr>
<tr><td>3</td><td>Seminar/ group presentation on any one topic related to the syllabus.</td><td>05</td></tr>
</table>
Paper pattern of the Test (Offline Mode with One hour duration):
Q1: Definitions/Fill in the blanks/ True or False with</td><td></td></tr>
</table>

	Justification. (04 Marks: 4 x 1). Q2: Attempt any 2 from 3 descriptive questions. (06 marks: 2 × 3)	

14 **Format of Question Paper:**

The semester-end examination will be of 30 marks of one hour duration covering the entiresyllabus of the semester.

Note: Attempt any TWO questions out of THREE.			
Q.No.1	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks
Q.No.2	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks
Q.No.3	Module 1 and 2	Attempt any **THREE** out of **FOUR**. (Each question of 5 marks) (a) Question based on OC1/OC2 (b) Question based on OC3 (c) Question based on OC4 (d) Question based on OC5/OC6	15 Marks

Sign of the BOS Chairman
Dr. Bhausaheb S Desale
The Chairman, Board of Studies in Mathematics

Sign of the Offg. Associate Dean
Dr. Madhav R. Rajwade
Faculty of Science & Technology

Sign of the Offg. Dean
Prof. Shivram S. Garje
Faculty of Science & Technology

AC – 20/04/2024
Item No. – 6.6 Sem. II (9c)

As Per NEP 2020

University of Mumbai

Syllabus for Basket of Open Elective (OE)	
Board of Studies in Zoology	
UG First Year Programme	
Semester - II	
Title of Paper	**Credits 2/ 4**
I) OE3A: Nutrition, Health and Fitness	**2**
II)	
III)	
From the Academic Year	**2024-25**

OE2: Nutrition, Health and Fitness

9	**Module 1: Nutrition, Health and Fitness-I**	**15hr**
	1.1. Introduction to the basic concept of food, nutrition and nutrients. Classification of Food, Classification of Nutrients	**03hr**
	1.2 Carbohydrates: 1.2.1 Definition, sources, daily requirements, functions. 1.2.2 Effects of too high and too Low carbohydrates on health. 1.2.3 Digestion and absorption of carbohydrate.	**04hr**
	1.3 Lipids: 1.3.1 Definition, Fatty acids: types and sources 1.3.3 Daily requirements, functions.	**03hr**
	1.4 Proteins: 1.4.1 Definition, sources of proteins, daily requirements, functions. 1.4.2 Types of amino acids, functions. 1.4.3 Effect of too high and too low proteins in diet on health.	**05hr**
	Module 2: Nutrition, Health and Fitness-II	**15hr**
	2.1 Dietary Fiber: Classification, sources, composition, properties, and nutritional significance. **2.2 Minerals & Trace Elements:** bio- availability & requirements, sources, deficiency & excess (Calcium, Sodium, Potassium, Phosphorus, Iron, Fluoride, Zinc, Selenium, Iodine, Chromium) **2.3 Vitamins:** Types, requirements, sources, deficiency & excess. **2.4 Water:** Functions, daily requirements, Water balance.	**09hr**
	2.5 Social health problems: Smoking, Alcohol addiction, Drug addiction **2.6 Nutrition for special conditions:** Introduction to Nutrition for physical fitness and sport **2.7** Feeding problems in children.	**06hr**
	Suggested assignment topics: Study of relevant topics such as food rich in various nutrients, Body Mass Index Calculation, Holistic health, Community health and nutrition, Benefits of Yoga, etc.	

10.	**Text Books:** 1. Swaminathan M (2007): Essentials of Food and Nutrition (Vol. I & II), 2nd Ed. Bappco 2. Srilakshmi B (2017): Nutrition Science,6th Multicolour Ed. New Age International (P) Ltd. 3. Nutrient Requirements and Recommended Dietary Allowance for Indians, Indian Council of Medical Research: New Delhi.
11.	**Reference Books:** 1. Mann J and Truswell S (2017): Essentials of Human Nutrition, 5th Ed. Oxford University Press. 2. Robinson CH and Lawler M (1990): Normal and Therapeutic Nutrition. 17th Revised Ed. Macmillan USA. 3. Roday S (2012): Food Science and Nutrition, 2nd Ed. Oxford University Press

12	**Internal Continuous Assessment: 40% (20 marks)**	**External, Semester End Examination : 60% Individual Passing in Internal and External Examination** (30 marks)	
13	**Continuous Evaluation through:** Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.(at least 3)	As per paper pattern 01.00 hour	
14	**Format of Question Paper:** for the final examination		
	Time 1.0 Hr		**Max. Marks 30**
	Q.1. Questions in the form of MCQ and answer in one sentence. (Overall equal weightage for both modules I & II) Q1a. Five questions in the form of MCQ (5 marks) Q1b. Five questions of answer in one line (5 marks)		**10**
	Q.2 Answer any one of the following (based on Module I) a. b.		**06**
	Q.3. Answer any one of the following (based on Module II) a. b.		**06**
	Q4. Write short note any two of the four from module I and II (equal weightage) a. b. c. d.		**08**

Sign of the BOS Coordinator **Dr. Vaishali Somani** **BOS in Zoology**	**Sign of the Offg. Associate Dean** **Dr. Madhav R. Rajwade** **Faculty of Science & Technology**	**Sign of the Offg. Dean** **Prof. Shivram S. Garje** **Faculty of Science & Technology**