Jayoti Vidyapeeth Women's University

Jaipur (Rajasthan)

Faculty of Physiotherapy & Diagnostics

Department of Physiotherapy

"National Education Policy 2020"

CURRICULUM FRAMEWORK FOR

FOUR-YEAR UNDER GRADUATE PROGRAM IN PHYSIOTHERAPY

Program Name: Bachelor of Physiotherapy (BPT)

Duration: 4 * $^{1}/_{2}$ Years

With Effect from

Academic Session 2023-2024

NATIONAL EDUCATIONAL POLICY 2020

The approval of the National Education Policy (NEP) by the Ministry of Human Resource Development, Government of India has been well deliberated the NEP is designed to contemplate the current skill requirements. The Indian education system with its earlier policies on education has greatly led to creation of fragmented system of education. However, bringing the whole system into one large umbrella remains a key issue. The current NEP has attempted to cure the same by getting rid of standalone institutions and institutions of affiliated nature and proposed formation and up gradation of institutions to offer multidisciplinary education. Multidisciplinary education system with inbuilt flexibility for both undergraduate as well as post graduate and research level is a key highlight of the NEP. It focuses on promoting and building vocational skills/skill enhancement courses, right from the school level, which can ease the burden on the employment opportunities and supply of proficient/talented workforce. As the experts rightly put it as the syllabi which academia develops should be student centric rather than teacher centric, which used to be so far. As already the Union Cabinet has approved the NEP 2020, it aims to pave way for transformational reforms in higher education systems in the country. This policy will replace the 34- year-old National Policy on Education (NPE), 1986.

Vision of the National Education Policy 2020

- An education system that contributes to an equitable and vibrant knowledge society, by providing high-quality education to all.
- Develops a deep sense of respect towards the fundamental rights, duties and Constitutional values, bonding with one's country, and a conscious awareness of one's role and responsibilities in a changing world.
- Instills skills, values, and dispositions that support responsible commitment to human rights, sustainable development and living, and global well-being, thereby reflecting a truly global citizen.

This National Education Policy 2020 is the first education policy of the 21st century and aims to address the many growing developmental aspirations of our country. This Policy proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirations & goals of 21st century education, including SDG4, while building upon India's traditions and value systems. NEP aims for India to have an education system by 2040 that is second to none, with equitable access to the highest-quality education for all learners regardless of social or economic background and seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030." The whole of the NEP policy is a medication to cure the shortcomings in the education system for the last 35 to 36 years. The failure or success of the NEP will rely completely on the implementation and its acceptance by the stakeholders. For which we need to join hands in strengthening the system.

EXECUTIVE SUMMARY

Higher Education is a vital contributor for Economic Development of the nation. It plays a major role in improving human well-being and developing Indian Economy, since it serve as a center for developing ideas and innovations. The Sustainable Development Goal 4 (SDGs4) also advocates the quality of education, which seeks to "ensure inclusive and equitable quality education and promotes lifelong learning opportunities for all" by 2030 for Inclusive Economic Development. Jayoti Vidyapeeth Women's University, Jaipur proposed an idea of developing a Curriculum Framework based on New Education Policy guidelines for both Undergraduate and Postgraduate programs across the faculty disciplines. Department of Physiotherapy has adopted the Curriculum Framework for Four-Year under Graduate Program in Physiotherapy, Bachelor of Physiotherapy (B.P.T) given by the NEP Curriculum.

Need for Curriculum Development

As per the National Education Policy initiatives, it is intended to formulate Curriculum to eliminate the disparities among the students studying in different Universities/Institutes. In addition to above the Members of the Committee also identified the need for the Development of Curriculum framework for Commerce Education:

1. **Relevance to Practice:** Physiotherapy techniques and knowledge evolve over time with advances in research and technology. Updating the curriculum ensures that students learn the most current evidence-based practices relevant to their future careers.
2. **Meeting Accreditation Standards:** Accrediting bodies often set standards that programs must meet to ensure quality education. Curriculum development ensures that these standards are not only met but exceeded where possible, enhancing the reputation and recognition of the program.
3. **Preparing Competent Practitioners:** A well-designed curriculum ensures that students receive a comprehensive education that prepares them to meet the demands of clinical practice. This includes not only technical skills but also critical thinking, communication, and professional ethics.
4. **Adapting to Societal Needs:** The healthcare landscape changes with demographic shifts, new health challenges, and evolving patient needs. Curriculum development allows programs to adapt to these changes and produce graduates who can address current and emerging health issues effectively.
5. **Enhancing Student Engagement:** A well-structured curriculum fosters student engagement and motivation by aligning learning objectives with student interests and career aspirations. It can also incorporate innovative teaching methods and technologies to enhance learning experiences.

6. **Promoting Research and Innovation:** Curriculum development can integrate opportunities for students to engage in research, fostering innovation within the field of physiotherapy. This not only benefits students but also contributes to the advancement of knowledge in the profession.
7. **Multidisciplinary Courses:** New Curriculum helps the students to choose the courses of their choice from other streams/across faculty. Therefore, students will be capable of making a positive contribution to Commerce, Trade and Industry in the national and global context by drawing the knowledge from the different disciplines, which is socially desirable.

Outcomes of the Program

In addition to Conventional Time-Tested Lecture Method, the Members of the Curriculum Development suggest the following approaches:

Programme Outcome:

At the end of the Bachelor of Physiotherapy (BPT) Programme, graduates will be able to

PO1 Recognize the role of Physiotherapy in the context of the health needs of the community and National priorities in the health sector.

PO2 Demonstrate professional and ethical behavior appropriate to at least the minimum standard expected for a Physiotherapy Graduate.

PO3 Ability to acquire knowledge on Basic Medical sciences, Human Movement Sciences, Various Medical Conditions and Surgical Treatments to identify Psychological, Social, Economical, Cultural aspects of diseases and its impact on community.

PO4 Ability to perform a safe, systematic and appropriate physiotherapy assessment for various conditions.

PO5 Identify, Define and Deal with problems of professional practice through logical, analytical and critical thinking.

PO6 Ability to analyze and interpret physical assessment and diagnosis and set appropriate short and long term goals.

PO7 Ability to choose, demonstrate intervention safely and document the progression appropriately.

PO8 Communicate effectively across wide range of professional and personal contexts.

PO9 An ability to work independently or collaboratively as a part of rehabilitation team.

PO10 Ability to understand and conduct research activities.

PO11 Engage in activities that contribute to the betterment of society and behave ethically and responsible in social environment.

Guidelines for Continuous Assessment and Semester End Examination

The Members of the BOS Committee deliberated on the framework of Continuous Assessment as well Semester End Examination for the courses. The CA and End Term Examination will carry 30% and 70% weight age each, to enable the course to be evaluated for a total of 100 marks, irrespective of its credits. The evaluation system of the course is comprehensive & continuous during the entire period of the Semester. For a course, the CA and End Term Examination will be on the following parameters:

S.No.	Parameters for the Evaluation	Marks
1.	Continuous Assessment Examinations	30 Marks
2.	Semester End term Examinations	70 Marks
	Total	**100 Marks**

Continuous Assessment: The CA will carry a maximum of 30 % weight age (30 marks) of total marks of a course.

Continuous Assessment has to be conducted in a semester for 30 marks each and the same is to be scaled down to 30 marks. Standard format is given below.

Template for Continuous Assessment Examinations

Continuous Assessment Examinations

Bachelor of Physiotherapy (B.P.T)

Course Code: Name of the Course:

Duration: 1 Hour 30min. Total Marks: 30

SECTION-A

I. Answer the following multiple choice questions. (1 x 10= 10)

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

SECTION- B

II. Answer any two of the following questions. Questions are asked on Understanding and Applying. **(2 x 5= 10)**

1.

2.

3.

SECTION- C

I. Answer any two of the following questions. Questions are asked on analyzing and evaluating. **(2 x 5 =10)**

1

2.

3.

II. Semester End Examination:

The Semester End Examination for all the courses for which students who get registered during the semester shall be conducted. End Term Examination of the course shall be conducted after fulfilling the minimum attendance requirement as per the University norms. Jayoti Vidyapeeth Women's University BOS Committee for B.P.T has suggested the following Framework for End-Examination.

Proposed Model Question Paper for Semester End Examination

Semester B.P.T Examination, Month/Year (New Syllabus 2023-24)

PHYSIOTHERAPY

Paper:_____

Time: 3 Hours Max. Marks: 70

SECTION-A

1. Answer of the following multiple choice questions. **(2 x 10= 20)**

a.

b.

c.

d.

e.

f.

g.

h.

i.

j.

SECTION- B

Answer any five of the following questions. Each question carries 5 marks (4 x5= 20)

1.

2.

3.

4.

5.

6.

SECTION- C

Answer any three of the following questions. Each question carries 10 marks (3x10=30)

1.

2

3.

4.

Learning Outcome Based Curriculum Framework

Programme Specific Outcome:

PSO 1 Demonstrate sufficient understanding of knowledge in Physiotherapy.

PSO 2 Able to integrate theoretical knowledge with clinical assessment.

PSO 3 Develop the ability to collect history, perform relevant clinical assessment and frame appropriate electrotherapeutic and exercise therapy management for the patients.

PSO 4 Demonstrate clinical decision making ability and provide appropriate patient care.

PSO 5 Develop effective communication with patients, family, colleagues and students.

PSO 6 Promote health education and improved quality of life through the practice of the profession.

PSO 7 To carry out research and publications towards upliftment of the field of Physiotherapy.

PSO 8 Actively engage in lifelong learning activities.

PSO 9 Work effectively in various inter professional collaborative settings like hospitals, Rehabilitation Centers, Special Schools, Educational Institutions, Health and Fitness Centers, Geriatric Centers, Ergonomic Consultant in Corporate Sectors, Private Consultation, Home Care Services, Industrial Sectors, Sports Management, Fitness Consultant.

i. Generic Skills

The graduate will

PEO1 Graduates are prepared to be employed in industry, academia and research laboratories and by providing expected domain knowledge.

PEO2 Graduates are provided with practical training, hands-on and project experience to meet the industrial needs.

PEO3 Graduates are motivated in career and entrepreneurial skill development to become global leaders.

PEO4 Graduates are trained to demonstrate creativity, develop innovative ideas and to work in teams to accomplish a common goal.

PEO5 Graduates are addressed with social issues and guided to operate problems with solutions.

i. Graduate Attributes

Bachelor of Physiotherapy graduates will have the following attributes and skills:

(A) Academically excellent

(1) Analysis and evaluation of evidence in the physiotherapy disciplines in support of an argument, proposition or solution to problems in organizations and in society.

(2) Strategic and critical thinking in relation to health and fitnes- related issues.

(B) Research Skills

(3) The retrieval of information from variety of health and ailment/medical sources.

(4) Knowledgeable across disciplines with a kaleidoscopic view.

(5) Synthesis of knowledge across disciplines.

(6) Problem solving through the application of appropriate and relevant theories principles and data.

(7) Skilled in the use of computer systems and software used in medical through practical assignments, exercises and demonstrations.

C) Attuned to cultural diversity

(8) Aware of Cultural difference and able to account for these in developing solutions to health and fitness-related problems.

D) Active global citizens

(9) Effective communicators on matters related to health and fitness.

(10) Participants in discussion and debate on national and international issues related to the disciplines of the faculty.

E) Leaders in communities

(11) Effective decision makes in health and fitness through meaningful and impactful community engagement practices.

(12) Ethical and collegial in professional practice.

PROGRAM STRUCTURE

Teaching & Evaluation for B.P.T (Bachelor of Physiotherapy) with Physiotherapy as Core subject

I SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	I		English Communication	Minor	2+0+0	70	30	100	02
2	06	I		General Biochemistry	Minor	3+0+0	70	30	100	03
3	06	I		Basics of Psychology	Minor	3+0+0	70	30	100	03
4	06	I		Human Anatomy-I	Major	4+0+0	70	30	100	04
5	06	I		Human Anatomy-I (LAB)	Major	0+0+2	70	30	100	02
6	06	I		Human Physiology-I	Major	4+0+0	70	30	100	04
7	06	I		Human Physiology(LAB)	Major	0+0+2	70	30	100	02
8	06	I		Fundamentals of Yoga-I	Minor	3+0+0	70	30	100	03
9	06	I		Fundamentals of Yoga-I (LAB)	Minor	0+0+2	70	30	100	02
10	06	I		Basic Nursing, Emergency & CPR	Minor	0+0+2	70	30	100	02
11	06	I		Women's rights and Law (UMC)	Multidisciplinary	1+0+0	50	50	100	01
12	06	I		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
13	06	I		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
14	06	I		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
15	06	I		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
16	06	I		Portfolio development (government/ corporate/ entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						20+0+8	750	350	1100	28

II SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	II		Sociology	Minor	2+0+0	70	30	100	02
2	06	II		Exercise Therapy-I	Major	3+0+0	70	30	100	03
3	06	II		Exercise Therapy-I (LAB)	Major	0+0+2	70	30	100	02
4	06	II		Biophysics	Minor	3+0+0	70	30	100	03
5	06	II		Human Anatomy-I	Major	4+0+0	70	30	100	04
6	06	II		Human Anatomy-I (LAB)	Major	0+0+2	70	30	100	02
7	06	II		Human Physiology-I	Major	4+0+0	70	30	100	04

8	06	II		Human Physiology-I(LAB)	Major	0+0+2	70	30	100	02
9	06	II		Fundamentals of Yoga-I	Minor	3+0+0	70	30	100	03
10	06	II		Fundamentals of Yoga-I (LAB)	Major	0+0+2	70	30	100	02
11	06	II		Gow Gyan Science (UMC)	Multidisciplinary	1+0+0	70	30	100	01
12	06	II		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
13	06	II		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
14	06	II		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
15	06	II		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
16	06	II		Portfolio development (government/ corporate/ entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						20+0+8	700	300	1000	28

III SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	III		General Medicine & Surgery	Minor	3+0+0	70	30	100	03
2	06	III		Pharmacology	Minor	3+0+0	70	30	100	03
3	06	III		Electrotherapy - I	Major	3+0+0	70	30	100	03
4	06	III		Electrotherapy – I(LAB)	Major	0+0+2	70	30	100	02
5	06	III		Pathology & Microbiology	Minor	3+0+0	70	30	100	03
6	06	III		ENT, Ophthalmology & Dermatology	Minor	2+0+0	70	30	100	02
7	06	III		Exercise therapy – II	Major	3+0+0	70	30	100	03
8	06	III		Exercise therapy – II(LAB)	Major	0+0+2	70	30	100	02
9	06	III		Radio-diagnosis	Minor	2+0+0	70	30	100	02
10	06	III		Self Defence (UMC)	Multidisciplinary	1+0+0	50	50	100	01
11	06	III		Fundamental of Computer (UCC)	Multidisciplinary	1+0+0	50	50	100	01
12	06	III		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
13	06	III		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
14	06	III		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
15	06	III		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
16	06	III		Portfolio development (government/ corporate entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						20+0+8	700	300	1000	28

IV SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	IV		Orthopedics	Major	3+0+0	70	30	100	03
2	06	IV		Pediatrics	Major	2+0+0	70	30	100	02
3	06	IV		Electrotherapy - II	Major	3+0+0	70	30	100	03
4				Electrotherapy – II (lab)	Major	0+0+2	70	30	100	03
5	06	IV		Biomechanics & Kinesiology-I	Major	3+0+0	70	30	100	03
6	06	IV		Research Methodology- I	Minor	3+0+0	70	30	100	03
7	06	IV		Sports Nutrition	Minor	2+0+0	70	30	100	02
8	06	IV		Militiary Science (UMC)	Multidisciplinary	1+0+0	50	50	100	01
9	06	IV		Environmental Science & Disaster Management (UCC)	Multidisciplinary	1+0+0	50	50	100	01
10	06	IV		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
11	06	IV		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
12	06	IV		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
13	06	IV		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
14	06	IV		Portfolio development (government/ corporate/entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						18+0+2	590	310	900	21

V SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	V		Neurology & Neurosurgery	Major	3+0+0	70	30	100	03
2	06	V		Cardio-diseases & Thoracic Surgery	Major	3+0+0	70	30	100	03
3	06	V		Manual Therapy	Major	3+0+0	70	30	100	03
4	06	V		Manual Therapy(Lab)	Major	0+0+2	70	30	100	02
5	06	V		Health, Fitness & Exercise Prescription	Minor	2+0+0	70	30	100	02
6	06	V		Biomechanics & Kinesiology -II	Major	3+0+0	70	30	100	03
7	06	V		Research Methodology- II	Minor	3+0+0	70	30	100	03
8	06	V		Electoral literacy (UCC)	Multidisciplinary	1+0+0	50	50	100	01
9	06	V		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
10	06	V		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
11	06	V		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade

12	06	V		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
13	06	V		Portfolio development (Government/ corporate/entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						18+0+2	540	260	700	20

VI SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	VI		Gynecology & Obstructics	Major	3+0+0	70	30	100	03
2	06	VI		Bio-Engineering	Major	2+0+0	70	30	100	02
3	06	VI		Psychiatry	Minor	2+0+0	70	30	100	02
4	06	VI		Ethics & Law (Medical/PT)	Minor	2+0+0	70	30	100	02
5	06	VI		Organization & Administration	Minor	2+0+0	70	30	100	02
6	06	VI		Human Ergonomics	Minor	2+0+0	70	30	100	02
7	06	VI		Therapeutic Massage	Major	3+0+0	70	30	100	03
8	06	VI		Therapeutic Massage (LAB)	Major	0+0+2	70	30	100	02
9	06	VI		Cyber Security (UMC)	Multidisciplinary	1+0+0	50	50	100	01
10	06	VI		Help Aid (UMC)	Multidisciplinary	1+0+0	50	50	100	01
11	06	VI		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
12	06	VI		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
13	06	VI		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
14	06	VI		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
15	06	VI		Portfolio development (government/ corporate/entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						18+0+2	660	370	1000	20

VII SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	VII		Ortho Physiotherapy - I	Major	3+0+0	70	30	100	03
2	06	VII		Neuro Physiotherapy - I	Major	3+0+0	70	30	100	03
3	06	VII		Chest Physiotherapy - I	Major	3+0+0	70	30	100	03
4	06	VII		Sports Physiotherapy - I	Major	3+0+0	70	30	100	03
5	06	VII		General & Community Physiotherapy - I	Major	3+0+0	70	30	100	03

6	06	VII		Allied Therapy	Major	2+0+0	70	30	100	02
7	06	VII		Allied Therapy (LAB)	Major	0+0+2	70	30	100	02
8	06	VII		Research Project - I	Major	0+0+6	100	-	100	06
9	06	VII		Gender Sensatization(UMC)	Multidisciplinary	1+0+0	50	50	100	01
10	06	VII		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
11	06	VII		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
12	06	VII		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
13	06	VII		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
14	06	VII		Portfolio development (government/ corporate/entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						18+0+8	640	260	900	26

VIII SEMESTER

S.No.	NHEQF Level	Year	Course Code	Title of the Course	Category of Courses	Teaching Hours per Week (L + T + P)	End Term	CA	Total Marks	Credits
1	06	VIII		Ortho Physiotherapy - II	Major	3+0+0	70	30	100	03
2	06	VIII		Neuro Physiotherapy - II	Major	3+0+0	70	30	100	03
3	06	VIII		Chest Physiotherapy - II	Major	3+0+0	70	30	100	03
4	06	VIII		Sports Physiotherapy - II	Major	3+0+0	70	30	100	03
5	06	VIII		General & Community Physiotherapy - II	Major	3+0+0	70	30	100	03
6	06	VIII		Fundamentals of Therapeutic & Kinesio Taping	Major	2+0+0	70	30	100	02
7	06	VIII		Fundamentals of Therapeutic & Kinesio Taping (lab)	Major	0+0+2	70	30	100	02
8	06	VIII		Research Project - II	Major	0+0+6	100	-	100	06
9	06	VIII		Research & Development (UCC)	Multidisciplinary	1+0+0	50	50	100	01
10	06	VIII		Human Value & Professional Ethics	Multidisciplinary		Grade	Grade	Grade	Grade
11	06	VIII		Yoga & Meditation (UMC)	Multidisciplinary		Grade	Grade	Grade	Grade
12	06	VIII		Extra – Curicular -Activity	ECA		Grade	Grade	Grade	Grade
13	06	VIII		CDA- Health Sector	CDA		Grade	Grade	Grade	Grade
14	06	VIII		Portfolio development (government/ corporate/entrepreneurship)	UCC		Grade	Grade	Grade	Grade
Sub Total (A)						18+0+8	640	260	900	26

Notes:

- One Hour of Lecture is equal to 1 Credit.
- One Hour of Tutorial is equal to 1 Credit (Except Languages).
- Two Hours of Practical is equal to 1 Credit

Acronyms Expanded

- VAC : Value Added Course
- UMC : University Mission Course
- CC : Core Course
- SEC-SB/VB : Skill Enhancement Course-Skill Based/Value Based
- OEC : Open Elective Course
- DSE : Discipline Specific Elective
- L+T+P : Lecture+Tutorial+Practical(s)

Note: Practical Classes may be conducted in the Business Lab or in Computer Lab or in Class room depending on the requirement. 2 Hours of Practical Class is equal to 1 Hour of Teaching, however, whenever it is conducted for the entire class (i.e., more than 50 students) 2 Hours of Practical Class is equal to 2 Hours of Teaching.

Detailed Syllabus - 1st Semester

Credits= 08	**English Communication**	**2+0+0** **Total Lectures: 40**
Objective:	Student will be given knowledge of functional grammar in order to develop effective reading and writing skills.	
Unit 1	**Sentence Structure:** Elements of a sentence (Subject, verb, object, complement and adjunct) **Articles:** Definite and Indefinite & omission of articles	8
Unit 2	**Transformation of Sentence Structure:** Active and Passive Voice (statement, negative, interrogative and imperative), Direct and indirect narration (statement, negative, interrogative and imperative)	8
Unit 3	**Correct Usage of Language:** Tenses (Present, Past and Future), Phrasal verbs, Modals (can, could, will, would, shall, should, may, might, must, ought to, need) **Common Errors in Effective Communication:** How to avoid common sentence – structural errors, vocabulary and pronunciation	8
Unit 4	**Writing Skills:** Theme (Paragraph) writing, Letter (formal letters) and application writing, report writing, résumé writing	8
Unit 5	**Reading Comprehension:** Efficient reading and note taking	8
Course Outcome: The student will:		
1	Learn the essentials of English Grammar.	
2	Apply the rules of grammar to use flawless English in speech and writing.	
3	Analyze, identify and rectify the common errors in speech and writing.	
4	Student can read with ease and fluently, enrich vocabulary and enjoy reading and writing.	
5	Evaluate a piece of writing keeping in mind all the rules of grammar studied.	
6	Read and comprehend English	
Text Books:		
1	Wren & Martin: English Grammar & Composition, S.Chand & Co, Delhi (Latest edition)	
2	Hornby A.S.: A Guide to patterns and usage, Oxford University Press, Delhi, 1954.	
Reference Books:		
1	Murphy and Reynold: Essentials of English grammar, Cambridge University Press, 4th printing 2007.	
2	Leech Geoffery: English Grammar for today, Longman, Delhi, 1973.	
3	Quirk & Greenbaum: University English Grammar, Longman Publications, 1973.	
4	Sharma, R.C. & Krishna Mohan: Business Correspondence & Report writing; Tata McGraw Hill, New Delhi (Latest edition).	

Credits= 12	**General Biochemistry**	**3+0+0 Total Lectures: 60**
Objective:	To get acquainted for application of chemistry in biological sciences.	
Unit 1	**Introduction to Biochemistry:** Amino acids & Proteins: Structure & Function. Structure and properties of Amino acids, Types of proteins and their classification, Forces stabilizing protein structure and shape. Different Level of structural organization of proteins, Protein Purification. Denaturation and renaturation of proteins. Fibrous and globular proteins. Carbohydrates: Structure, Function and properties of Monosaccharides, Disaccharides and Polysaccharides. Homo & Hetero Polysaccharides, Mucopolysaccharides, Bacterial cell wall polysaccharides, Glycoprotein's and their biological functions.	12
Unit 2	**Lipids and Nucleic acids:** Structure and functions –Classification, nomenclature and properties of fatty acids, essential fatty acids. Phospholipids, sphingolipids, glycolipids, cerebrosides, gangliosides, Prostaglandins, Cholesterol. Nucleic acids: Structure and functions: Physical & chemical properties of Nucleic acids, Nucleosides & Nucleotides, purines & pyrimidines,. Biologically important nucleotides, Double helical model of DNA structure and forces responsible for A, B & Z – DNA, denaturation and renaturation of DNA.	12
Unit 3	**Enzymes:** Nomenclature and classification of Enzymes, Holoenzyme, apoenzyme, Cofactors, coenzyme, prosthetic groups, metalloenzymes, monomeric & oligomeric enzymes, activation energy and transition state, enzyme activity, specific activity, common features of active sites.	12
Unit 4	**Enzyme specificity:** Types & theories, Biocatalysts from extreme thermophilic and hyperthermophilic archaea and bacteria. Role of: NAD+, NADP+, FMN/FAD, coenzymes A, Thiamine pyrophosphate, Pyridoxal phosphate,lipoic-acid, Biotin vitamin B12, Tetrahydrofolate and metallic ions.	12
Unit 5	**Carbohydrates Metabolism:** Reactions, energetics and regulation. Glycolysis: Fate of pyruvate under aerobic and anaerobic conditions. Pentose phosphate pathway and its significance, Gluconeogenesis, Glycogenolysis and glycogen synthesis. TCA cycle, Electron Transport Chain, Oxidative phosphorylation. ß-oxidation of fatty acids.	12
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the various aspects of Biochemistry.	
3	Understanding the concepts of Biochemistry.	
Text Books:		
1	Bhardwaj Uma (2014). Biochemistry for Life Sciences. Dorling Kindersley (India) Pvt. Ltd, Pearson IN.	
2	Jain J L, Jain Supriya and Jain N (2005) Fundamentals of Biochemistry. S Chand and Compant Ltd. New Delhi	
Reference Books:		
1	Nelson, D.L., Cox, M.M. 2004 Lehninger Principles of Biochemistry, 4 Freeman and Company, New York, USA. edition, W.H.	

Credits= 12	**Basics of Psychology**	**3+0+0 Total Lectures: 60**
Objective:	The objective of the course is to create awareness among the student about the basics of Psychology.	
Unit 1	**Introduction to Psychology-** Definition, Aspects of Psychology :Natural Science and Social Science, Evolution of Psychology, Branches of Psychology.	12
Unit 2	**Learning and Intelligence-** Definition, Theories- Classical Conditioning, Operant Conditioning, Observational Learning , Nature and Theories of Intelligence: One Factor Theory, Two Factor Theory, Theory of Primary Mental Abilities, Hierarchical Model Theory, Structure of Intellect Model, Theory of Multiple Intelligence, PASS Theory.	12
Unit 3	**Motivation and Emotion** - Motives: Biogenic and Sociogenic, Maslow's Hierarchy of Need Emotions- Definition, nature of emotions, key emotions, Theories of emotions- James Lange ,Cannon Bard and Schachter Singer , Managing Negative Emotions and Enhancing Positive Emotions.	12
Unit 4	**Personality-** Nature and theories: Type approaches, Trait Approaches, Psychodynamic Approach, Neo- Freudians, Nature vs. Nurture Debate on Personality.	12
Unit 5	**Stress**- Nature, Symptoms, Sources , Methods to manage Stress.	12
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the various aspects of Psychology	
3	Understanding the concepts basics to Psychology	
Text Books:		
1	Morgan, C. T. 2017, King, R. A., Weisz, J. R., & Schopler, J. *Introduction to Psychology*. 7th Edition, Tata McGraw-Hill, New Delhi.	
2	Baron, 2016, R. A. *Psychology: The Essential Science*. 5th Edition, Allyn &Bacon, New York.	
Reference Books:		
1	Zimbardo, P. G., & Weber, A. L.2017, *Psychology, 7th Edition,* Harper Collins College Publisher, New York.	

Credits= 20	Human Anatomy-I	4+0+2 Total Lectures: 80
Objective:	The objective of the course is to create awareness among the student about the Human Anatomy.	
Unit 1	**General Anatomy:** Histology - cell, tissues of the body, epithelium, connective tissue, cartilage, bone, blood, lymph, muscles & nerve. Embryology- ovum, spermatozoa, fertilisation & formation of the firm layers & their directions. Development of the skin, fascia, blood vessels, lymphatics, bones, axial & appendicular skeleton & muscles, Neural tube, brain vessels & spinal cord, brain (brain stem) structures.	16
Unit 2	**Organ Anatomy:** Cardiovascular system-Heart, arteries, veins, collateral circulation, nervous control of circulation (details). Respiratory system -lungs, pleura, broncho-pulmonary segments (details). Digestive system (brief outline). Urinary system (brief outline). Male reproductive system (brief outline). Female reproductive system (details). Endocrine system (brief outline). Lymphatic system (brief outline). Radiological anatomy of thorax.	16
Unit 3	**Neuro Anatomy:** Organization of C.N.S - spinal nerves & autonomic nervous system mainly pertaining to cardiovascular, respiratory & urogenital systems. Cranial nerves. Peripheral nervous system-peripheral nerve, neuromuscular junction, sensory end organ.	16
Unit 4	**CNS Anatomy:** C.N.S- spinal cord segments & areas, brain stem, cerebellum, Inferior colliculi, Superior colliculi, diencephalon, the thalamus, the hypothalamus, the corpus stratum, the cerebral hemisphere, the lateral ventricles, the rhiencephelon, the blood supply of brain, the meninges, the visual radiation, internal capsule, thalami cortical radiation, the auditory radiation, basal gangalia, pons, medulla, the pyramidal system, extra pyramidal system, anatomic integration, intra cortical integration.	16
Unit 5	**Skin Anatomy:** Skin & appendages of skin (brief outline).	16
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of Human Anatomy.	
3	Understanding the Human body in detail.	
Text Books:		
1	Chaurasia, B.D.,(2017), Human Anatomy. Volume 1, 2 ,3 & 4th, 7th Edition,CBS Publishers & Distributers Pvt.Ltd.	
2	Singh Inderbir, (2004), Atlas of Human Anatomy, 1st Edition, Jaypee brothers Medical publishers.	
Reference Books:		
1	Singh inderbir, (2009), Textbook of Human osteology, 3rd Edition, Jaypee Bothers medical publishers.	
2	Drake.L. Richard, (2014), Gray's Anatomy,3rd Edition, Elsevier Health Sciences.	

Credits= 16	Fundamentals of Yoga-I	3+0+2 Total Lectures: 60
Objective:	The objective of the course is to create awareness among the student about the Yogic sciences.	
Unit 1	**General Introduction of Yoga:** Brief about origin of Yoga, psychological aspects and Mythological concepts, History and development of Yoga: prior to the vedic period, Medieval period, modern era.	12
Unit 2	**Definition** of Yoga, aims and objectives of yoga, misconceptions of yoga, brief about stream of yoga, principles of yoga, meaning and Importance of yoga, Elements of Yoga.	12
Unit 3	**Introduction** to Asanas, Pranayama, Meditation and Yogic Kriyas and detail studies of each.	12
Unit 4	**Yoga for concentration and related asanas** (Sukhasana, Tadasana, Padmasana, Shashankasana), Relaxation techniques for improving concentration- Yognindra.	12
Unit 5	**Procedure, benefits, contraindications for asanas** in the following diseases: Obesity, Diabetes, Asthma, Hypertension, Back pain, Heart problems, constipation, Arthritis, Fever, Hernia etc.	12
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the concepts of Yoga	
3	Understanding the practical aspects of Yogic sciences.	
Text Books:		
1	Singh SP and Yogi Mukesh, (2010), Foundation of Yoga, Standard Publication, New Delhi.	
2	Lal Basant kumar, (2013), Contemporary Indian Philosophy, Motilal Banarsidas Publishers pvt.ltd. Delhi.	
Reference Books:		
1	Sharma VK, (2018), Health and Physical Education, New Saraswati House (India) Pvt.Ltd.	
2	Agarwal MM, (2010), Six systems of Indian Philosophy, Chow khambha vidya Bhawan, Varanasi.	

Credits= 20	Human Physiology-I	4+0+2 Total Lectures: 80
Objective:	The objective of the course is to create awareness among the student about the Human Physiology.	
Unit 1	**Neuro muscular Physiology:** Nerve & Muscle: Structure & function of muscle and nerve cells, Classification of muscle & nerve fibres, Cell Membranes, Ionic & potential gradients & transport action potential, Propagation of evoked potential, Factors affecting muscle tension, Neuromuscular transmission motor units, Synapse, Reflex physiology, degeneration & regeneration of the nerve fibres, Reaction of degeneration muscle, contraction mechanics, chemistry & biophysics.	12
Unit 2	**CNS (DETAILS):** Physiology of synapse, Physiology of receptors organs for general special sensation, Physiology of touch, pain & temperature sensations, Physiology of reflex action, classifications & properties of reflexes (excluding conditioned reflexes), Sensory & motor tracts of spinal cord & effects of complete & incomplete trans section of spinal cord at various levels, Cerebellum & basal ganglia, Sensory & motor cortex, Physiology of Labyrinthine, Regulation of equilibrium & posture.	12
Unit 3	**Blood:** Composition & functions of blood, Blood groups, Erythropoiesis, Coagulation.	12
Unit 4	**DIGESTIVE SYSTEM:** General Introduction, Organisational plan of digestive system, Composition, function & regulation of salivary, gastric, pancreatic, intestinal & biliary secretion, Movements of GI Tract.	12
Unit 5	**KIDNEY:** General Introduction- Structures and Functions of Kidney.	12
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the concepts of Human Physiology.	
3	Understanding the practical aspects of Human Physiology.	
Text Books:		
1	Chaudhuri,K,Sujit, (2016), Concise Medical Physiology, 7th Edition, NCBA Publishers	
2	Chatterjee CC, (2018), Human Physiology, Vol.1 & 2,12th Edition, CBS publishers & Distributors put.Ltd.	
Reference Books:		
1	Marieb.N.Elaine, (2006), Human Anatomy & Physiology, 6th Edition, Pearson Education, INC	

Credits= 06	Basic Nursing, Emergency & CPR (Laboratory)	0+0+3 Total Lectures: 30
Objective:	The objective of the course is to create awareness among the student about the Basic Nursing, Emergency & CPR.	
Unit 1	**Introductory class:** What is Nursing? Nursing principles, Interpersonal relationship, bandaging, basic turns, bandaging extremities, triangular bandages & their application.	6
Unit 2	**Lifting & transporting patients:** Lifting patients up in the bed, transferring from bed to wheel chair, transferring from bed to stretcher, Surgical dressing, First Aid & CPR.	6
Unit 3	**Nursing position:** Environment safety, bed making, prone, lateral, dorsal, dorsal recumbent, Fowler's positions, comfort measures, aids to rest & sleep, Care of rubber goods-Observation, reporting and recording temperature, respiration and pulse, simple aseptic technique, sterilisation and disinfection.	6
Unit 4	**Components of physiotherapy profession:** History of medical therapeutics, History of Physiotherapy- international, National & local, Professional & governmental licensing accreditation & educational standards.	6
Unit 5	**Role of Physiotherapist in healthcare needs in India:** Needs of physiotherapy versus demand, Physiotherapist as "Educator", Common problems & salvation.	6
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Demonstrate the skills of basic nursing, CPR in Emergency.	
3	Understanding and demonstration of the Emergency procedure.	
Text Books:		
1	D.E.Raj Bhaskara, (2018), Text Book of Nursing Education, 2nd Edition, Emmess Medical Publishers.	
2	BT Basvanthappa, (2009), Nursing Education, 2nd Edition, Jaypee brothers Medical Publishers.	
Reference Books:		
1	Kaur Jaspreet, (2017), Text book of Nursing Education, 1st Edition, Jaypee Brothers Medical Publishers.	

Credits= 20	Human Anatomy-I (Laboratory)	4+0+2 Total Lectures: 20
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical aspects of the Human Body.	
1	Study of Cardiovascular organs.	4
2	Study of Respiratory Organs.	4
3	Study of Various Organs of the body	4
4	Study of Brain	4
5	Study of Medulla and CNS	4
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of human body.	
3	Demonstration of the practical aspects of human body.	

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Credits= 16	Fundamentals of Yoga-I (Laboratory)	3+0+2 Total Lectures: 20
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical aspects of the Human Body.	
1	Learn and demonstrate the yogic asanas.	4
2	Learn and demonstrate the yogic kriyas.	4
3	Learn and demonstrate the yogic asanas.	4
4	Learn and demonstrate the Meditation technique	4
5	Learn and demonstrate the Pranayama.	4
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of yoga.	
3	Demonstration of the practical aspects of yoga on human body.	

Credits= 20	Human Physiology-I (Laboratory)	4+0+2 Total Lectures: 20
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical aspects of the Human Body.	
1	Demonstration of Blood Group, coagulation	4
2	Learn and demonstrate the auscultation movements.	4
3	Learn and demonstrate the various sounds of heart.	4
4	Study the functioning of digestive system	4
5	Study the functioning of Kidney.	4
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of physiology.	
3	Demonstration of the practical aspects of human physiology.	

Women Rights and Law

Credits-2

Objective: The paper aims at creating awareness as to importance and role of women in society through the medium of law. It also focuses on women welfare laws.

1. Introduction of Women Rights And Law: Definition of women, awareness about women rights, appeal for remedies
2. Global Status of Women: Civil and Political Rights ii. Social and Cultural rights, Participation in Panchayat and Municipalities,
3. Rights and awareness of marriage and divorce : Marriage Conditions, Ceremonies, Registration, ,Void & Voidable Marriages, Legitimacy of Children of Void & Voidable Marriages, Punishment of Bigamy
4. Divorce: Divorce Common Grounds for Divorce, No Petition for divorce within 1year of marriage, Divorced Person when may marry again
5. Rights on maintenance: Maintenance: Wife, widowed daughter-in-law, Children, Amount of Maintenance , Interim Maintenance, Maintenance Provisions under Cr.PC,
6. Rights of Adoption: Adoption: Requisites of a valid adoption,Capacity of a male Hindu to take in adoption, Capacity of a female Hindu to take in adoption Persons capable of giving in adoption, Persons who may be adopted, Effects of Adoption,.
7. Rights of private defence: Right of Private defence for body and property
8. Crime against women: Dowry Death, Cruelty by Husband or Relatives of Husband, Sex Selection & Causing Miscarriage, Outraging the modesty of a woman, Offences regarding Prostitution, Rape, Bigamy, Adultery, Domestic Violence,
9. Sexual harassment of women: Sexual harassment in home, society and work place
10. Medical termination Pregnancy act 1971: Liberalizing the provisions relating to abortion
11. The Pre-Conception and Pre-Natal Diagnostic Techniques Act, 1994: Pre-Natal Diagnostics test and oath
12. Surrogacy :Commercial Surrogacy in India & its regulation,
13. Women empowerment: Role of Enforcement Machineries (Reform through judicious interventions)
14. Role for national women commission for women
15. Role of NGO and Reform from within society

Yoga & Meditation

Total Hours: 30 Hrs
Total Credits: 2 Credits
Theory: 0.5 Credit
Practical: 1.5 Credit

S. NO.	SESSIONS	HOURS
1.	Tadasana	**Theory: 10 Min. | Practical: 50 Min**
2.	Trikonasan	**Theory: 10 Min. Practical: 50 min**
3.	Vrikshasan	**Theory: 10Min. Practical: 50min**
4.	Bhujangasan	**Theory: 10Min. Practical: 50min**
5.	Makrasan	**Theory: 10Min. Practical: 50min**
6.	Shashankasan	**Theory: 10Min. Practical: 50min**
7.	Gomukhasan	**Theory: 10Min. Practical: 50min**
8.	Pavanmuiktasan	**Theory: 10Min. Practical: 50min**
9.	Dhanursan	**Theory: 10Min. Practical: 50min**
10.	Utanpadasan	**Theory: 10Min. Practical: 50min**
11.	Shalbhasan	**Theory: 10Min. Practical: 50min**
12.	Surya namaskar-12 steps	**Theory: 10Min. Practical: 50min**
13.	With breathing & hold Surya namaskar-12 step	**Theory: 10Min. Practical: 50min**
14.	Standing hasyea yoga	**Theory: 10Min.**

		Practical: 50min
15.	Sitting hasyea yoga	**Theory: 10Min.** **Practical: 50min**
16.	Pranayam – natural breathing Exercise	**Theory: 10Min.** **Practical: 50min**
17.	Kapalbhati pranayam	**Theory: 10Min.** **Practical: 50min**
18.	Bharmri & bhastrika pranayam	**Theory: 10Min.** **Practical: 50min**
19.	Cooling pranayam	**Theory: 10Min.** **Practical: 50min**
20.	Meditation – IRT (INSTANT RELAXATION TECHNIQUE)	**Theory: 10Min.** **Practical: 50min**
21.	Meditation –QRT (QUICK RELAXATION TECHNIQUE)	**Theory: 10Min.** **Practical: 50min**
22.	Meditation –DRT (DEEP RELAXATION TECHNIQUE)	**Theory: 10Min.** **Practical: 50min**
23.	Meditation –CONCENTRATION ON ONE POINT-I & II	**Theory: 10Min.** **Practical: 50min**
24.	Meditation – CONCENTRATION ON ONE POINT-III & IV	**Theory: 10Min.** **Practical: 50min**
25.	Meditation –OMKARA CHANTING WITH MUSIC	**Theory: 10Min.** **Practical: 50min**
26.	Meditation – OMKARA CHANTING -108 TIME WITH MUSIC	**Theory: 10Min.** **Practical: 50min**
27.	Meditation –CYCLIC Meditation	**Theory: 10Min.** **Practical: 50min**
28.	Meditation –VIPASSANA DHYAN	**Theory: 10Min.** **Practical: 50min**
29.	Meditation – PREKSHYA DHAYAN	**Theory: 10Min.** **Practical: 50min**
30.	Meditation –SOHAM JAP WITH MUSIC	**Theory: 10Min.** **Practical: 50min**

UCC (ENGLISH LANGUAGE)

Total Hours: 30 Hrs

Total Credits: 2 Credits

Theory: 1 Credit

Practical: 1 Credit

SR. NO.	SESSION NO.	SESSIONS	HOURS
1	**SESSION No. 1**	Communication, Greeting and introducing oneself and others.	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
2	**SESSION No. 2**	Parts Of Speech	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
3	**SESSION No. 3**	Modals, Conjunction And Preposition And Prepositional Phrases	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
4	**SESSION No. 4**	Synonyms And Antonyms, Idioms, Other Common Phrases And Confused Words	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
5	**SESSION No. 5**	Listening Skills and watching audio visual clips. Practice in language lab.	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
6	**SESSION No. 6**	Uses of tenses: simple plus progressive, degree of certainty, special uses of the past	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
7	**SESSION No. 7**	Active and passive voice & Direct/indirect speech	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
8	**SESSION No. 8**	Role play	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
9	**SESSION No. 9**	Group discussion	**Theory: 1 Hr** **Practical: 1Hr** **Practice: 1 Hr**
10	**SESSION No. 10**	Phonetic symbols and Speaking exercise	**Theory: 1 Hr.** **Practical: 1Hr** **Practice: 1 Hr**

SYLLABUS OF ENGLISH

(1) Communication,

Meaning, Type, Process and barriers of communication. Greeting and introducing oneself and others.

(2) Parts Of Speech

Noun, pronoun, verb, adjective, adverb, preposition, conjunction, and interjection

(3) Modals, Conjunction And Preposition And Prepositional Phrases

Modals: Modal verbs, modal auxiliary verbs, modal auxiliaries; Conjunction Coordinating Conjunctions, Correlative Conjunctions and Subordinating Conjunctions; Preposition and Prepositional Phrases

(4) Synonyms And Antonyms, Idioms, Other Common Phrases And Confused Words

(5) Listening Skills

Importance to enhance language skills, watching audio visual clips

(6) Tenses

Uses of tenses: simple plus progressive, degree of certainty, special uses of the past

(7) Voice & Narration

Active and passive voice & Direct/indirect speech

(8) Role play

Definition, use role-play, Tips on successful classroom role-play

(9) Group discussion

Types of Group Discussion, Importance, Organization of GD and Group Discussion with a Nominated Leader

(10) Phonetic symbols and Speaking exercise

Sounds: Vowel and Consonant Sounds, Organs of speech, Articulators, Phonetic symbols for English,

SYLLABUS OF MY BEHAVIOUR & ETHICS

(1) Waking Up early morning
(2) Engaged in Yoga & Gym Activities
(3) Good Etiquettes (greet with Namaste or by saying good morning/Afternoon etc. to teachers.
(4) Classroom Punctuality
(5) Make assignment with proper learning material
(6) Perform National Anthem & Vande mataram Tradition
(7) Develop Personality Traits (politeness, Honesty, compassion and so on)
(8) Maintain Peaceful Decorum
(9) Use of University Facilities
(10) Care of University Facilities
(11) Recognize the diversity of the University
(12) No discrimination on the basis of age, ethnic origin, race & nationality and so on
(13) Food & Beverages consumed as per diet
(14) Maintain Cleanliness
(15) Dress decently inside the university
(16) Dress decently outside the university
(17) Maximum Use of library recourses
(18) Proper condition of Library
(19) Act in accordance with all the rules regularize by the University
(20) Show dignity & reputation towards university
(21) Contribution towards Society by donating books
(22) Imparting old clothes to Society
(23) Offer social work towards Society
(24) Show reputation towards university
(25) Beverages consumed as per diet
(26) Mutual aid and harmonious relations are very important values that students should share
(27) Team spirit improves the ability of individuals to work together and boosts morale.
(28) To make sure that every student is aware of what he can and what he cannot do.
(29) Open-mindedness
(30) Well-Developed Self Care Skills
(31) Assertiveness skills
(32) Keeping Safe and Avoiding Risky Behaviors
(33) Student responsibilities towards the University itself
(34) Seeking Assistance When Needed
(35) Money Management

संस्कृत

1. संस्कृत वर्णमाला (स्वरवर्णाः, व्यञ्जनवर्णाः) संयुक्त व्यञ्जनवर्णाः
   सामान्य परिचय : अच् शाकम्, हल्, वस्त्रम्, इत्यादिनां।
2. धातुःरूपम् (पञ्च लकाराः) (गम्, खाद्, रूच्, पठ, कीड्, लिख्, भाष्, वद्)
3. शब्दरूपम् त्रिषु, लिङ्गेषु सम्पूर्ण (अकारन्त पुल्लिङ्ग, इकारान्त, उकारान्त, ऋकारान्त, पुल्लिङग, स्त्रीलिङ्गम्, नपुसंकलिङ्गम्
4. त्व प्रत्ययान्त गत्वा, पठित्वा, लिखित्वा, तोषित्वा
5. क्रिया पद विचार अभ्यासार्थ, परस्मैपदी–आत्मनेपदी (लज्ज्) वारि–जल, गमिष्यति, दास्यति, इत्यादिनां
6. विभक्त्यर्था : सम्पूर्ण
7. शब्दकोष : सम्पूर्ण
8. शुभाषितानि (अनमोल वचन)
9. संस्कृत वाक्यानि (वार्तालापः)
10. सग्रन्थम् उपागम् (अनुवाद)

French Syllabus

A1LEVEL (Beginner)

LEVEL	Learning Goals	Grammar Topics
A1.1 **Textbook: Texto 1** Dossiers0, 1,2.	• Greetings in French • Understand days of the week and months of the year. • Count (numbers) • Spell words • Introduce yourself (give your age, your job ,talk about your family, say where you are from, where you live, say the languages you speak) • Ask questions(1) • Learn basic vocabulary	• Auxiliary verbs(*to be/to have*) • Genders (*masculine/feminine*) • Definite and indefinite articles • Plural form • Possessive adjectives(*my, Your, his/her…*) • Regular verbs at present tense *(-er verbs*)
A1.2 Dossiers3, Dossier4 (leçon 13)	• Understand a menu/Order at a restaurant • Ask questions(2) • Understand and give directions (1) • Speak about the weather • Say the time • Suggest an outing • Buy in shops	• Plural of nouns • "on "pronoun • Negation • Prepositions of location*(in, on,nextto,infront of…*) • Use«Quel»,«Est-ceque» and « Qu'est-ce que » in a question • Demonstrative adjectives (*this, that*)
A1.3 Dossier 4(leçons 14/15), Dossier5 (17/18)	• Do your grocery shopping • Indicate a quantity • Speak about the future(1) • Make a positive/negative comment • Describe someone	• Partitive articles • Answering a negative question • Futur Proche(*future tense*) • Reflexive verbs (*se lever…*) • Imperative Form
A1.4 Dossier5 leçon19, Dossier6	• Speak about the past (1) • Talk about a duration • Talk about your studies • Give an advice, order(1)	• Passé Composé(past tense) • Présent Continu(Present continuous) • Direct pronouns • Time markers

Detailed Syllabus - 2nd Semester

Credits= 08	**Sociology**	**2+0+0 Total Lectures: 40**
Objective:	The objective of the course is to create awareness among the student about the basics of Sociology.	
Unit 1	**Introduction:** Meaning- Definition and scope of sociology. Its relation to Anthropology, Psychology, Social Psychology. Methods of Sociological investigations- Case study, social survey, questionnaire, Interview and opinion poll methods.	8
Unit 2	**Social Factors in Health and disease situations:** Meaning of social factors. Role of social factors in health and illness.	8
Unit 3	**Socialization:** Meaning and nature of socialization. Primary, Secondary and Anticipatory socialization. Agencies of socialization.	8
Unit 4	**Family:** The family, meaning and definitions. Functions of types of family. Changing family patterns. Influence of family on the individuals health, family and nutrition	8
Unit 5	**Social Problems of disabled:** Consequences of the following social problems in relation to sickness and disability, remedies to prevent these problems. Population explosion. Poverty and unemployment. Beggary. Juvenile delinquency. Prostitution. Alcoholism. Problems of women in employment. Geriatric problems. Problems of underprivileged.	8
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Making a sense of the relation of Sociology with health sciences.	
3	Understanding the concepts basics to Sociology	
4	To make out the interdependence between man and society	
Text Books:		
1	Vidyabhushan and Sachdeva: 2005, An Introduction to Sociology, Allahabad, Kitab Mahal.	
2	Rao,C.N.S. : 2005, Sociology, New Delhi,S.Chand.	
Reference Books:		
1	Johnson, H. M.: 1995, Sociology: A Systematic Introduction, New Delhi, Allied Publishers.	
2	MacIver, R. M. and C. H. Page, 1965, Society: An Introductory Analysis, Macmillan.	

Credits= 16	Exercise Therapy-I	3+0+2 Total Lectures: 60
Objective:	The objective of the course is to create awareness among the student about the basics of Exercise Therapy.	
Unit 1	**Introduction:** Introduction to exercise therapy, principles, technique and general areas of its application, Assessment & its importance. Description of fundamental starting position and derived position. Classification of movements – Describe the types, technique of application, indication, contraindications, effects and uses of the following-Active movement, Passive movement, Active assisted movement, Resisted movement, To study the principles, techniques of application indication, Contraindication & precaution.	12
Unit 2	**Mechanics:** Define the following terms and describe the principles involved with suitable examples, Force, Equilibrium, Gravity: Center of gravity, Line of gravity, Body Lever, Pulleys: Fixes, Movable, Springs: Series; Parallel, Tension, Elasticity: Hook's law, Axis and Planes, Definition of speed, Velocity, work, Energy, power, Acceleration, Momentum, Friction and Inertia.	12
Unit 3	**Pelvic Tilt/Manual Muscle Testing/Goniometry:** Describe the following: Normal pelvic tilt; alteration from normal, Anterior tilt (forward), posterior tilt (backward), Lateral tilt, Muscles responsible for alteration and pelvic rotation, Identification of normal pelvic tilt, pelvic rotation and altered tilt and their corrective measures. Principles and application techniques of Manual muscle testing, Goniometry and its types,	12
Unit 4	**Motor Learning:** Introduction to motor learning, Classification of motor skills, Measurement of motor performance. Introduction of motor control, Theories of motor control, Application, Learning Environment, Learning of skill, Instruction & augmented feed back, Practice condition.	12
Unit 5	**Relaxation & Therapeutic Gymnasium:** Describe relaxation, muscle fatigue, muscle spasm and tension (mental & physical), Factors contributing to fatigue & tension, Techniques of relaxation (local and general), Effects, uses & clinical application), Indication and contraindication. Therapeutic Gymnasium, Setup of a gymnasium & its importance,	12

Course Outcome: The student will:	
1	Develop an understanding of the subject.
2	Understanding the basic concepts of Exercise Therapy.
3	Understanding the basic practical aspects of Exercise Therapy to human body.
Text Books:	
1	Gardiner Deena.M, 2007, The Principles of Exercise therapy, 4th Edition, CBS Publishers.
2	Kisner Carulyn, 2007, Therapeutic Exercise: Foundations & Techniques, 5th Edition, F.A. Davis Company.
Reference Books:	
1	Kendall Peterson Florence, 1993, Muscles Testing & Functions, 6th Edition, Williams & Wilkins Publishers.

Credits= 20	Human Anatomy-II	4+0+2 Total Lectures: 80
Objective:	The objective of the course is to create awareness among the student about the Human Anatomy.	
Unit 1	**General Anatomy:** Anatomical positions of the body, axes & planes, common anatomical terminologies (groove, tuberosity, trochanter etc.), Fascia - hard connective tissue, Bones- composition & functions, classifications & types according to morphology & development.	16
Unit 2	**Joints:**definition, classification, structure of fibrous cartilaginous joints, movements of joints, blood supply & nerve supply.	16
Unit 3	**Regional anatomy: Superior extremity-** joints with extra articular structures, Osteology- bones of upper limb & hand. Soft parts- breast, pectoral region & muscles, fascia, ligaments, blood vessels, nerves with lymphatic drainage of the upper limb.	16
Unit 4	**Inferior extremity and Trunk:** Osteology- bones & joints with extra articular structures of lower limb, blood vessels & nerves, lymphatic drainage of leg, arches of the foot, skin of the foot. Trunk- osteology- all the bones of the spine	16
Unit 5	**Bones of the skull & mandible/Thoracic:** muscles of the face, extra ocular muscles, salient points about the eyeball & internal ear.Thoracic cage, respiratory muscles, muscles and mechanics of breathing, Radiological anatomy of musculoskeletal system.	16
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of Human Anatomy.	
3	Understanding the Human body in detail.	
Text Books:		
1	Chaurasia, B.D.,(2017), Human Anatomy. Volume 1, 2 ,3 & 4th, 7th Edition,CBS Publishers & Distributers Pvt.Ltd.	
2	Singh Inderbir, (2004), Atlas of Human Anatomy, 1st Edition, Jaypee brothers Medical publishers.	
Reference Books:		
1	Singh inderbir, (2009), Textbook of Human osteology, 3rd Edition, Jaypee Bothers medical publishers.	
2	Drake.L. Richard, (2014), Gray's Anatomy,3rd Edition, Elsevier Health Sciences.	

Credits= 16	Fundamentals of Yoga-II	3+0+2 Total Lectures: 60
Objective:	The objective of the course is to create awareness among the student about the Yogic sciences.	
Unit 1	**General Introduction:** to Indian Philosophy and its relations with Yoga, Asanas as preventive measures, Definition of Yoga according to Patanjali yoga sutra, Bhagwat Gita and Yoga Vasishtha, Concepts of Yoga according to Upanishads and Puranas.	12
Unit 2	**Meaning and Importance:** of Physical Fitness, Wellness and Lifestyle.Components of Physical Fitness, Health related fitness and wellness.Concepts of positive Lifestyle, MUDRAS : Vipareetkarani Mudra, Kaki Mudra, BANDHAS: Mool, Uddiyana, Jalandhar, Tribandha, Brahmacharya - its meaning , benefits and practice methods.	12
Unit 3	**Breathing Exercises** and its types-Yogic Breathing-Naadi Shodhanand, Sheetali, Sheetakari, Bhramari, Ujjai, Bhastrika, Kapalbhati, SuryaBheda, Bahyavritti, Mantra Japa	12
Unit 4	**Stretching Exercises:** and its benefits.	12
Unit 5	**Concepts and advantages:** of correct Posture, Causes of Bad Posture, Common Postural deformities, corrective measures and their yogic remedies.	12
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the concepts of Yoga	
3	Understanding the practical aspects of Yogic sciences.	
Text Books:		
1	Singh SP and Yogi Mukesh, (2010), Foundation of Yoga, Standard Publication, New Delhi.	
2	Lal Basant kumar, (2013), Contemporary Indian Philosophy, Motilal Banarsidas Publishers pvt.ltd. Delhi.	
Reference Books:		
1	Sharma VK, (2018), Health and Physical Education, New Saraswati House (India) Pvt.Ltd.	
2	Agarwal MM, (2010), Six systems of Indian Philosophy, Chow khambha vidya Bhawan, Varanasi.	

Credits= 20	Human Physiology-II	4+0+2 Total Lectures: 80
Objective:	The objective of the course is to create awareness among the student about the Human Physiology.	
Unit 1	**ENDOCRINE:** Secretion, Regulation, Functions of pituitary, thyroid, adrenal, pancreas, parathyroid, Testis & Ovaries.	16
Unit 2	**RESPIRATORY SYSTEM:** Introduction, general organization. Mechanics of respiration, Pulmonary volumes & capacities, Transport of respiratory gases, Nervous and chemical, control of respiration, Pulmonary function tests.	16
Unit 3	**CARDIOVASCULAR SYSTEM:** Structure and properties of cardiac muscle, Cardiac cycle, Regulation of heart rate, Cardiac output, Blood pressure and its regulation, Regional circulation-coronary, skin, muscle, cerebral circulation, Cardio respiratory and cardiac performance changes during exercise, Normal ECG.	16
Unit 4	**PHYSIOLOGY OF EXERCISE:** Effects of acute and chronic exercise on, O2 transport, Muscle strength/power/endurance, B.M.R/R.Q, Hormonal and metabolic effect, Cardiovascular system, Respiratory system, Body fluids and electrolytes, Effect of gravity/Altitude/Acceleration/Pressure on Physical parameters.	16
Unit 5	**Physiology of age.**	16
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the concepts of Human Physiology.	
3	Understanding the practical aspects of Human Physiology.	
Text Books:		
1	Chaudhuri,K,Sujit, (2016), Concise Medical Physiology, 7th Edition, NCBA Publishers	
2	Chatterjee CC, (2018), Human Physiology, Vol.1 & 2,12th Edition, CBS publishers & Distributors put.Ltd.	
Reference Books:		
1	Marieb.N.Elaine, (2006), Human Anatomy & Physiology, 6th Edition, Pearson Education, INC	
2	Silverthorn Unglaube dee, (2016), Human Physiology, 6th Edition, Pearson Education, INC	

Credits= 12	Biophysics	3+0+0 Total Lectures: 60
Objective:	The objective of the course is to create awareness among the student about the Biophysics.	
Unit 1	**MAIN SUPPLY:** Production of electricity, types, distribution, earthing, types of plugs & switches, fuse. **STATIC ELECTRICITY:** Theories of electricity, production of electric charge, characteristics of charged body, potential & capacity, potential difference. **CURRENT ELECTRICITY:** EMF, resistance, intensity, ohm's law, DC & AC, resistance of series(parallel, devices for regulating intensity, types, construction & working of rheostat,Joule's law.	12
Unit 2	**SHOCK:**Types (Electric shock, Earth shock), definition, severity, causes & effects, precautions. **CONDENSER:** Principles, capacity (measurement & factors determining), types & construction, electric field, charging & discharging of the condenser, duration of discharge, discharge through inductance, capacity reactance. **DC & AC,** semiconductors & its types, diodes & transistors.	12
Unit 3	**APPARATUS FOR MODIFICATION OF CURRENTS:** Interruption of current-R timing circuit, multivibrator circuits (wiring & functioning), current supplied to the patient, impulse type, surging(types & circuits). **MAGNETISM:** Nature & types, molecular theory of magnetism, properties of magnet, magnetic effects of electric currents- electromagnets, milliamp parameter & voltmeter (construction & working), meters for measuring AC.	12
Unit 4	**ELECTROMAGNETIC INDUCTION:** Principles (Faraday's/ Lenz's law), production, direction of induced EMF, strength of induced EMF, types(self & mutual induction), inductive reactance, Eddy currents, dynamo & transformers, choke coil (types & function). **ELECTRICAL SKIN RESISTANCE:** Electrodes used. Electrode gel.	12
Unit 5	**PHYSIOLOGY OF PAIN, ELECTROMAGNETIC SPECTRUM:** Electromagnetic radiation, laws governing EMR, laws of reflection-refraction, absorption, attenuation, cosine law, inverse square law, Grothus law.	12

Course Outcome: The student will:	
1	Develop an understanding of the subject.
2	Understanding the concepts of basic physics.
3	Understanding the biomedical aspects of physics.
Text Books:	
1	Forester Angela,2007, Clayton's electrotherapy, 8th Edition, CBS Publishers.
2	Forester Angela, 1985, Clayton's electrotherapy (physiotherapy essentials), 9th Edition, Bailliere Tindall Publishers.
Reference Books:	
1	Nelson.M. Rogar, 1999, Clinical Electrotherapy, 3rd Edition, Pearson Education Inc.
2	Kahn Joseph, 2000, Principles & practice of Electrotherapy, 4th Edition, Churchill Livingstone Publishers.

Credits= 20	Human Anatomy-II (Laboratory)	4+0+2 Total Lectures: 20
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical aspects of the Human Body.	
1	Study the bones of Upper limbs	5
2	Study the bones of Lower limbs	5
3	Study the bones of Spine	5
4	Study the bones of Skull and mandible.	5
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of human body.	
3	Demonstration of the practical aspects of human body.	

Credits= 16	Fundamentals of Yoga-II (Laboratory)	3+0+2 Total Lectures: 20
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical aspects of the Human Body.	
1	Learn and Demonstrate the Mudras	5
2	Learn and Demonstrate the Stretching Exercises.	5
3	Learn and Demonstrate the Breathing Exercises	5
4	Learn and Demonstrate the Posture correction Asanas.	5
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of yoga.	
3	Demonstration of the practical aspects of yoga on human body.	

Credits= 20	Human Physiology-II (Laboratory)	4+0+2 Total Lectures: 20
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical aspects of the Human Body.	
1	Learn and Demonstrate the Physiological functioning of respiratory system	8
2	Learn and Demonstrate the various physiological tests in exercise.	8
3	Learn and Demonstrate the physiological functioning of cardiovascular system	4
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of physiology.	
3	Demonstration of the practical aspects of human physiology.	

Credits= 16	**Exercise Therapy-I (Laboratory)**	**3+0+2 Total Lectures: 20**
Objective:	The objective of the course is to create awareness and demonstrate among the student about the practical basics of Exercise Therapy.	
1	Learn and Demonstrate the Movements	5
2	Learn and Demonstrate the Stretching Exercises.	5
3	Learn and Demonstrate the Breathing Exercises	5
4	Learn and Demonstrate the Goniometry	5
Course Outcome: The student will:		
1	Develop an understanding of the subject.	
2	Understanding the basic concepts of Exercises.	
3	Demonstration of the practical aspects of Exercise Therapy.	

Course Name :- Gow Gyan Science

1) Fundamentals of Gau with special reference to ancient Indian literature

Unit-I

Introduction to Gau. Verities (Gau vansh) of Cows in India.

Unit-II (Gau in ancient Indian litrature)

Description of Gau in various ancient Indian literatures.

2) Significance of Gau in current scenario

Unit-I

Economical importance

Unit-II

General, medicinal and spiritual importance

3) Anatomy of Gau

Unit-I

General structure and anatomy of Gau

Unit-II

Effect of various factors on the quality of Gau-products.

4) Gau milk and its significance

Unit-I

Physical and chemical properties of milk.

Unit-II

Biological significance of milk. Milk as medicine. Research prospective of milk.

5) Gaumutra and its significance

Unit-I

Physical and chemical characteristics of milk.

Unit-II

Biological significance of Gaumutra. Gaumutra as medicine. Research prospective of cow urine.

6) Cow dung and its significance

Unit-I

Physical and chemical characteristics of cow dung.

Unit-II

Cow dung in medicine. Research prospective of cow dung