# KRISHNA VISHWA VIDYAPEETH, (DEEMED TO BE UNIVERSITY), KRISHNA COLLEGE OF PHYSIOTHERAPY

KARAD, MAHARASHTRA.



# MASTER OF PHYSIOTHERAPY (M. P. Th)

# **CBCS PATTERN SYLLABUS**

M.P.Th - (OBSTETRICS AND GYNECOLOGY) PROGRAMME CODE: 3210

#### **RULES FOR EXAMINATION SCHEME LEADING TO**

### POST GRADUATE PHYSIOTHERAPY PROGRAMME IN THE FACULTY OF PHYSIOTHERAPY (Approved by the Board of Management)

#### MASTER OF PHYSIOTHERAPY (M. P. Th.)

#### **PREAMBLE:-**

The Department of Human Resource Development, Government of India, on the recommendation of the University Grants Commission (UGC) has accorded the status of a Deemed University to Krishna Vishwa Vidyapeeth, (Deemed To Be University), Karad for Faculty of Medicine, Dentistry. Physiotherapy Nursing, Allied Sciences and Pharmacy respectively.

The Degrees, Diploma and the Fellowship programmes of Krishna Vishwa Vidyapeeth, (Deemed To Be University), Karad shall have the same status as of those given by any Statutory University duly recognized by the University Grants Commission. (UGC).

The Master of Physiotherapy Programme is directed towards rendering training in Specialty discipline so as to enhance professional competence in order to fulfill requirement for Physiotherapy Education and Practice.

1. This shall apply to all the examinations leading to Post Graduate Physiotherapy namely Programmes offered: - Total Programmes offered: 10 Programmes.

Sr No	Programme Code	Programme Name
1.	3201	M.P.Th in Musculoskeletal Sciences
2.	3202	M.P.Th in Neuro Sciences
3.	3203	M.P.Th in Cardio Pulmonary Sciences
4.	3204	M.P.Th in Pediatric Neurology
5.	3205	M.P.Th in Community Health Sciences
6.	3206	M.P.Th in Oncology Physiotherapy
7.	3207	M.P.Th in Sports Physiotherapy
8.	3208	M.P.Th in Orthopedic Manual Therapy
9.	3209	M.P.Th in Obstetrics and Gynecology
10.	3210	M.P.Th in Geriatric Physiotherapy

#### **SEMESTER WISE SUBJECTS:**

Sr No	Course Code	Year	Semester	SUBJECT
1	3210-11	M.P.Th - I Year	Ι	1. Basic Sciences
2	3210-12			2. Basic Therapeutics
3	3210-21	M.P.Th - I Year	Ш	1. Advanced therapeutics in
5	5210 21	WI.I . III - I I Cal	11	Specialty Subject
4	3210-22			2. Biostatistics and Research
				Methodology
5	3210-31	M.P.Th - II	III	1. General Physiotherapy in
		Year		Specialty Subject – Paper 1
6	3210-32			2. Advances in Specialty
				Subject – Paper 1
7	3210-41	M.P.Th - II	IV	1. General Physiotherapy in
		Year		Specialty Subject- Paper 2
8	3210-42			2. Advances in Specialty
				Subject – Paper 2

**Duration**: Master of Physiotherapy shall be a full time programme with duration of TWO academic years divided into FOUR semesters.

### 2. Eligibility for admission:

Applicant for admission to the programme, Master of Physiotherapy should have the Bachelor degree from I.A.P recognized institution or from the recognized university. Selection of candidate is strictly through Krishna PGAIET, which is conducted by Krishna Vishwa Vidyapeeth, (Deemed To Be University), Karad.

### 3. ELIGIBILITY FOR APPEARING FOR THE EXAM:

- The examination for the degree, Master of Physiotherapy shall be conducted twice in a academic year (i.e. Semester Pattern).
- Every student should present his / her dissertation at least three months prior to the fourth semester university examination. The acceptance of the dissertation by the examiners is important for the student's admission for the Written & Clinical (Practical) examination.
- Dissertation should be based on the Specialty Subject. A student who has submitted his / her dissertation once will not be required to submit a fresh dissertation if he / she re- appears for the examination in the same branch on a subsequent occasion, provided that the dissertation has been accepted by the examiners.

- The Degree of Master of Physiotherapy shall not be conferred upon a student unless he / she have passed in the Written, Practical and the Dissertation prescribed for the examination in accordance with the provision.
- The dissertation has been evaluated and approved AND
- Has passed both the headings i.e.

(With minimum of 50%) in Theory and Practical including Internal Assessment for both.

#### 4. GOALS OF THE M.P.TH PROGRAMME:

- The goal of training post- graduate candidate in the respective specialty is to enable him / her to function as a consultant in the respective Physiotherapy specialty. This requires a thorough knowledge of the fundamental and recent advances.
- He/she should be able to make logical decisions regarding patient management & adapt interventions independently.
- During this period he/she will be expected to acquire skills in teaching technology & gain experience in research methodology.
- He/she should practice Physiotherapy in respective specialty and maintain the highest regards for ethical aspect.
- The programme shall focus on clinical reasoning, problem solving and measurement of treatment outcome, emphasizing on the recent diagnostic & therapeutic trends and skill specific Physiotherapy.

#### 5. OBJECTIVES OF THE PROGRAMME: -

At the end of the programme the candidate shall be able to:

- Acquire the in-depth knowledge of structure and function of human body related to the respective branch of specialty.
- Acquire the in-depth knowledge of movement dysfunction of human body & principles underlying the use of physiotherapeutic interventions for restoring movement dysfunction towards normalcy.
- Ability to demonstrate critically appraises recent physiotherapeutic and related medical literature from journals & adapts diagnostic & therapeutic procedures based on it.
- Ability to perform skill in Physical & functional diagnosis pertaining to patient under care.
- Ability to make clinical decision & select appropriate outcome measures based on the comprehensive knowledge of theoretical aspects of specialty.
- Expertise in evidence-based skill in the management of movement dysfunction.
- Expertise in health promotion & quality restoration of functional movement pertaining to specialty.
- Planning and implementation of treatment programme adequately and appropriately for all clinical

conditions related to respective specialty in acute and chronic stage, in intensive care, indoor and outdoor institutional care, independent practice, on fields of sports and community and during disaster or natural calamities.

- Proficiency in planning and executing Physiotherapy services and teaching technology skills.
- Develop managerial and administrative skills.
- Develop the knowledge of legislation applicable to compensation for functional disability & appropriate certification

### POSTGRADUATE PROGRAMME OUTCOMES

#### M.P.TH (Master of Physiotherapy)

The course is of two years duration (Divided into 4 Semesters) advanced learning programme in Physiotherapy with CBCS Pattern.

Total Specialties offered: 10 Specialties

- 1. M.P.Th In Musculoskeletal Sciences
- 2. M.P.Th In Neuro Sciences
- 3. M.P.Th In Cardio Pulmonary Sciences
- 4. M.P.Th In Pediatric Neurology
- 5. M.P.Th In Community Health Sciences
- 6. M.P.Th In Oncology Physiotherapy
- 7. M.P.Th In Sports Physiotherapy
- 8. M.P.Th In Orthopedic Manual Therapy
- 9. M.P.Th In Obstetrics And Gynecology
- 10. M.P.Th In Geriatric Physiotherapy

# M.P.Th - I<sup>ST</sup> YEAR INCLUDES TWO SEMESTERS NAMELY,

- I Semester: It is common for all the specialties which include the two subjects Basic Sciences & Basic Therapeutics.
- **II Semester:** Biostatistics and Research Methodology is a common subject for all specialties & Advanced Therapeutics in Specialty Subject is the second one.

### M.P.Th - II<sup>ND</sup> YEAR INCLUDES TWO SEMESTERS NAMELY,

- **III Semester:** It includes two subjects which are specialty specific namely, General Physiotherapy in Specialty Subject Part I & Advances in Specialty Subject Part I
- **IV Semester:** It includes two subjects which are specialty specific namely, General Physiotherapy in Specialty Subject- Part II & Advances in Specialty Subject Part II
- **\*Dissertation:** An individual research project preferentially interventional study is mandatory to be completed before appearing for the IV Semester examination.

### M.P.Th (FIRST YEAR): I - SEMESTER

### 1. BASIC SCIENCES (3210-11 )

### **COURSE OBJECTIVES**:

- The student should be able to know the background of Physiotherapy profession, basic ethics and its principles.
- To understand and apply the principles of exercise physiology and nutrition
- To master various assessment tools, test.
- To obtain knowledge of Orthotics & Prosthetics.

### **COURSE OUTCOMES:**

At the end of the course the student should be able to apply the basic principles and ethics of Physiotherapy profession, Biomechanics, Patho-mechanics and in depth Kinesiology of human body, all the assessments and clinical tests, diagnosis of various conditions, in depth knowledge of the Orthotics and Bio-engineering.

### 2. BASIC THERAPEUTICS ( 3210-12)

#### **COURSE OBJECTIVES**:

The student should be able to obtain detail knowledge with evidence base of all the Electrotherapeutic modalities, Electro-Diagnostic tests with its application for diagnosis and treatment of Physiotherapy conditions

### **COURSE OUTCOMES**:

At the end of the course the student should have in depth knowledge of the Basic Electrotherapeutics, Physical And Functional Diagnosis, EMG / NCV and Radiological investigations.

### M.P.Th (FIRST YEAR): II - SEMESTER

### 1. ADVANCED THERAPEUTICS SPECIALITY SPECIFIC (3210-21)

#### **COURSE OBJECTIVES:**

- To interpret various therapeutics used in the treatment of speciality specific conditions.
- To evaluate and generate a diagnosis and differential diagnosis of all related conditions related to speciality and its complications.
- Demonstrate condition specific various skills in the treatment.

#### **COURSE OUTCOMES:**

At end of the session the student will be able to learn the conditions pertaining to the speciality, the diagnostic test for the same. The students shall learn to make a correct diagnosis and also a differential diagnosis and learn the advanced techniques to treat the same.

### 2. BIOSTATISTICS AND RESEARCH METHODOLOGY ( 3210-22 )

### **COURSE OBJECTIVES:**

- To understand the statistical measures used for analysis and interpretation of research data.
- Enhanced training to apply the information on research design and their implementation
- To identify, read, critique research articles and understand and apply the principles of research to perform a guided research.

### **COURSE OUTCOMES:**

- At the end of the course the student should have a sound knowledge regarding the basic concept of research, research designs, types of data, sampling methods, interpretation of result and various statistical tests.
- The student will able to identify appropriate statistical technique reference, use of various software packages for analysis and data management. Interpretation of the results and its application in Physiotherapy.
- The student will be able to learn fundamental of reading and understanding research methods, design and statistics.
- Special emphasis is given to Biostatistics and Research methodology and for completing a scientific research project in the second year as per their elective subject.

### M.P.Th (SECOND YEAR): III - SEMESTER

### 1. GENERAL PHYSIOTHERAPY IN SPECIALTY SUBJECT – PAPER 1 ( 3210-31 )

### **COURSE OBJECTIVES:**

- Evoke and interpret clinical signs and symptoms of speciality specific disorders & interpret various diagnostic tests, clinical and special investigations used in the diagnosis of the conditions.
- Management of patient, consultation, identifying the problem, derive a provisional diagnosis with differential diagnosis and to chalk out a treatment plan.
- Maintain a precise patient documentation.
- Discuss and develop a specific exercise prescriptions plan with their clinical use, and the sequence of treatment.

### **COURSE OUTCOMES**:

- Be able to apply the knowledge for planning and evaluation of teaching methods in Physiotherapy.
- Be able to apply the knowledge on clinical education to spread awareness and guidance to common people about health and disease.
- Understand the pathophysiology of common conditions, their management and its effects on body systems.
- Assess patients' physical function, considering disease and treatment-related impairments.
- Design and implement evidence-based Physiotherapy interventions as per the health issues.

### 2. ADVANCES IN SPECIALTY SUBJECT – PAPER 1 ( 3210-32 )

#### **COURSE OBJECTIVES:**

- Understand the application of the information regarding recent advances in Physiotherapy for patient care.
- Application and proper implementation of specific evidences available for assessment and management appropriate to the health conditions.

#### **COURSE OUTCOMES**:

- The students learn and excel in various aspects of Physiotherapy as per their speciality in theoretical and practical knowledge with a solid platform and tend to train them to be the best in the field.
- To analyse and undertake data for research purpose and its documentation for long life learning in Physiotherapy.
- To develop educational experience for proficiency in profession and promote Preventive and Rehabilitative aspect on the society.

#### M.P.Th (SECOND YEAR): IV - SEMESTER

#### 1. GENERAL PHYSIOTHERAPY IN SPECIALTY SUBJECT- PAPER 2 (3210-41 )

#### **COURSE OBJECTIVES:**

To equip Physiotherapy students with the knowledge and skills necessary to provide problem specific effective rehabilitation and supportive care for patients.

#### **COURSE OUTCOMES**:

- Recognize and manage potential complications specific to the condition.
- Demonstrate knowledge of protocol specific principles and their application in Physiotherapy practice.
- Communicate effectively with patients, their families, and the multidisciplinary team.
- Critically evaluate current research in the area of rehabilitation to inform clinical decision-making.

### 2. ADVANCES IN SPECIALTY SUBJECT – PAPER 2 (3210-42 )

#### **COURSE OBJECTIVES:**

To provide students with an in-depth understanding of recent developments and emerging trends in the specialty subject, focusing on innovative diagnostic techniques, treatment modalities, and research breakthroughs.

#### **COURSE OUTCOMES:**

- Analyze cutting-edge research and its potential clinical applications.
- Evaluate novel diagnostic technologies and their impact on early detection and personalized treatment.
- Critically assess emerging advanced and targeted therapies.
- Explain advancements in Prevention strategies and Risk assessment.
- Interpret complex clinical trial data and their implications for patient care.
- Describe innovations and apply knowledge of recent advances to case studies and clinical scenarios.

#### **END OF PROGRAMME:**

After completion of PG (M.P.Th) Programme, with the above mentioned Programme features the Post-Graduates will be equipped with advanced knowledge in respective specialty related to Technical, Problem Solving and Scientific skills to practice with Evidence Based Physiotherapy Practice through firm decision making process in assessment and treatment, establish advance research hypotheses and undertake research works effectively within the healthcare sectors and community safely and efficiently inculcating effective communication skills.

Semester	Subject	Theory	Theory	Practical	Practical	Total
			Credit		Credit	Credit
			point		point	point
		I - MI	PTh			
I - Semester	Basic Sciences	100	7	100	7	14
	Basic	100	7	100	7	14
	Therapeutics					
II - Semester	Advanced	100	7	150	5	12
	Therapeutics					
	in Speciality					
	Biostat &	100	7			7
	Research					
		II - M	PTh			
III -	General PT in	200	13	225	8	21
Semester	Speciality					
	Paper - 1					
	Advances in	200	13	250	8	21
	Speciality					
	Paper - 1					
IV -	General PT in	200	13	225	8	21
Semester	Speciality					

### **TOTAL HOURS: MPTh**

Paper - 2					
Advances in Speciality <b>Paper - 2</b>	200	13	250	8	21
	1200	80	1300	51	131
	Total Hrs: 2500 Total Credit point: 13			: 131	

### **EXAMINATION SCHEME:**

	Т	Theory	Practical	IA	
				Theory	Practical
Sem. I	Basic Sciences	<b>Basic Therapeutics</b>	-	50 marks x	-
	(100 Marks)	(100 Marks)		2 Subjects	
Sem. II	Advanced	Biostatistics &	Advanced	50 marks x	50 Marks
	Therapeutics	Research	Therapeutics	2 Subjects	
	in Speciality	Methodology	in Speciality		
	(100 Marks)	(100 Marks)	(250 Marks)		
Sem.	General	Advances in	-	50 marks x	
III	Physiotherapy in	Speciality		2 Subjects	
	Speciality	Paper – 1			
	Paper – 1	(100 Marks)			
	(100 Marks)				
Sem.	General	Advances in	Specialty Practical	50 marks x	50 Marks
IV	Physiotherapy in	Speciality	(300 Marks)	2 Subjects	
	Speciality	Paper – 2			
	Paper – 2	(100 Marks)			
	(100 Marks)				
		Total: 18	50 marks		

### **EXAMINATION PATTERN:**

### **THEORY: (ALL SEMESTERS)**

	Total: 100 marks
Q2. 2 LAQ (All compulsory)	$2 \ge 25 = 50$ marks
Q1. 10 BAQ (All compulsory)	10 x 5 =50 marks

### \*\*\* INTERNAL ASSESSMENT: Out of 50 MARKS for each Subject

#### PRACTICAL: (II & IV SEMESTER)

#### SEMESTER II PATTERN

- 1. Long Case (Specialty)
- 2. Short Case 1. (Assessment)
- 3. Short Case 2. (Management)
- 4. Spots

#### SEMESTER IV PATTERN

- 1. Long Case (Specialty)
- 2. Short Case (Assessment)
- 3. Short Case (Management)
- 4. Dissertation Presentation
- 5. Microteaching

- 100 marks 50 marks 50 marks 50 marks **Total: 250 marks + IA: 50 marks** = **300 Marks**
- 100 marks 50 marks 50 marks 50 marks 50 marks **Total: 300 marks + IA: 50 marks = 350 Marks**

#### MPTh - I: SEMESTER: I

### COURSE: MPTH IN OBSTETRICS AND GYNECOLOGY

### **SUBJECT: BASIC SCIENCES**

Subject	Theory	Credit	Practical	Credit	<b>Total Credits</b>
Basic Sciences	100	7	100	7	14

Sr. No	Content		Teaching Hours (200 Hrs.)		DK	NK
		Didactic (100 Hrs.)	Practical (100 Hrs.)			
1.	PRINCIPLES AND ETHICS:	5 hrs	-			
	a. Theoretical background of Physiotherapy profession.			MK		
	b.Professional sources in the community.					
	c.Principles and practice of physiotherapy in India.					
	d. Ethical background of physiotherapy.					
	e. Ethics of IAP & WCPT. Professional ethics.					
	f. Modified Referral ethics in the practice of Physiotherapy					
	g. Governing body of Physiotherapy Profession state & central level.					
2.	EXERCISE PHYSIOLOGY AND NUTRITION: a. Nutrition and physical performance.	15 hrs	15 hrs	МК		
	b. Energy transfer.					
	c. Systemic adaptation during exercise.					
	<ul><li>d. Physical performance.</li><li>e. Factors affecting physical</li></ul>					

	performance.					
	f. Fatigue and lactate.					
	g. Training.					
	h. Fitness and testing.					
	i. Obesity.					
	j. Diabetes.					
	k. Applied exercise physiology.					
3.	PATHOMECHANICS AND CLINICAL KINESIOLOGY:	10 hrs	5 hrs	MK		
	Review of mechanical principles and					
	applied biomechanics of human body.					
4.	Review of various types of exercises, principles and its applications for joint mobility, muscle re-education,	15 Hrs	5 Hrs	МК		
	Strengthening and endurance training.					
5.	Posture, analysis of normal and abnormal posture, posture training.	5 hrs	10 hrs		DK	
6.	Gait, analysis of normal and abnormal gait, gait training.	5 hrs	15 hrs			NK
7.	ADL, assessment and training of ADL.	5 hrs	10 hrs		DK	
8.	<ul> <li>Clinical assessment, clinical tests and diagnosis of:</li> <li>Musculoskeletal conditions</li> <li>Manual Therapy clinical reasoning</li> <li>Sports conditions</li> <li>Neurological conditions</li> <li>Cardio-pulmonary conditions</li> <li>Obstetrics and Gynecology conditions</li> <li>Pediatric conditions</li> <li>Geriatric conditions</li> <li>Oncology conditions</li> <li>Community Health conditions</li> </ul>	10 hrs	15 hrs	МК		
0	-	5 h	10 h	MV		
9.	Measuring tools in therapeutics: Goniometry, accelerometer, pressure transducers, force plates,	5 hrs	10 hrs	МК		

	spondylometer, Body composition, anthropometric measurements, etc.				
10.	ORTHOTICS, PROSTHETICS & BIOENGINEERING:	25 hrs	15 hrs	MK	
	a. Orthosis of spine.				
	b. Orthosis of upper limb.				
	c. Orthosis of lower limb.				
	d. AK and BK Prosthesis.				
	e. Prosthetic fitting and training.				
	f. Biomechanical principles governing them.				

#### **BASIC SCIENCES - RECOMMENDED BOOKS:**

- Ross and Wilson Anatomy and Physiology in Health and Fitness Kathleen. J, Churchill Livingstone.
- 2. Samson Wright's Applied Physiology Neil and Joel, Oxford press.
- 3. Principles of Anatomy Harper Collins College Publications
- 4. Anatomy and Physiology for Physiotherapists Mottram, Moffat, Blackwell Scientific
- 5. Atlas of Anatomy Tank Patrick, Lippincot Williams
- 6. Surface and Radiological Anatomy Halim A, CBS

#### **REFERENCE BOOKS:**

- 1. Clinical Kinesiology for the Physical therapist Assistants Lippert L, Jaypee.
- 2. Brunnstrom's Clinical Kinesiology Letimkuni W, Jaypee.
- 3. Clinical Kinesiology Laura Weiss, Jaypee.
- 4. Joint Structure & Function Levangie P, Norkin C, Jaypee.
- 5. Basic Biomechanics of the musculoskeletal system Nordin M, Lippincot Williams.
- 6. Biomechanical Basis of Movement Hamill J & Krutzen K M, Lippincot Williams.
- 7. Measurements of Joint Motion Norkin C, F. A. Davis.
- 8. Principles of Mechanics & Biomechanics Bell, Frank, Stanley Thornes Pvt. Ltd.
- 9. Basic Biomechanics Hall, Susan J, McGraw hill.
- 10. Kinesiology Oatis, Carol A, Lippincot Williams.
- 11. Applied Kinesiology Robert Frost, North Atlantic Books.
- 12. Biomechanics of Spine White and Punjabi, Lippincot Williams

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### MPTh - I: SEMESTER: I

# **COURSE: MPTH IN OBSTETRICS AND GYNECOLOGY**

### **SUBJECT: BASIC THERAPEUTICS**

Subject	Theory	Credit	Practical	Credit	<b>Total Credits</b>
Basic Therapeutics	100	7	100	7	14

Sr. No	Content		hing Hours 200 Hrs.)	MK	DK	NK
		Didactic (100Hrs)	Practical (100Hrs)	1		
1.	Basic Electrotherapeutics:	25 hrs	25 hrs	MK		
	Review the principles and applications of the					
	following electrotherapy modalities and justify					
	the effects and uses of it with evidence					
	1. Short wave diathermy.					
	2. Microwave diathermy.					
	3. Ultrasonic therapy.					
	4. Ultraviolet radiation.			Τ	Τ	Τ
	5. Infrared radiation.					
	6. Iontophoresis.					
	7. Electric stimulation.					
	8. D i - Dynamic currents.			† <u> </u>		
	9. Interferential therapy.			†		
	10. Cryotherapy.					
	11. TENS.					
	12. LASER Therapy.					
	13. Paraffin wax bath.					
	14. Hydrotherapy.			+		
	15. Hydro collator packs.			1		1
	16. Contrast bath.			1		1
	17. Traction.			1		1
	18. Mechanical external	1		1	1	1
l	Compression therapy.					
l	19. Fluidotherapy.			+		+
l	20. Phonophorosis.			+		1
	21. Shock Wave Therapy			+		1
3.	Pain and pain modulation.	5 hrs	5 hrs	+	DK	1
4.	Conventional electro diagnosis.	5 hrs	5 hrs	MK		+
l	1) FG Test.			+		+
l	2) SD Curve.					+
		<u> </u>				

5.	Electrocardiogram.	10 hrs	10 hrs		DK	
6.	Echocardiography.	10 hrs	10 hrs			NK
7.	Physical & functional diagnosis.	25 hrs	25 hrs	MK		
	1. Clinical examination in general and					
	detection of movement dysfunction.					
	2. Principles of pathological					
	investigations and imaging techniques					
	related to neuromuscular, skeletal and					
	cardiopulmonary disorders with					
	interpretation					
	3. Development screening development					
	diagnosis, neurodevelopment					
	assessment and motor learning- voluntary control assessment					
	4. Physical fitness assessment:					
	<ul> <li>Cardiac efficiency tests and</li> </ul>					
	spirometry					
	• Fitness test for sport					
	5. Electro diagnostics-EMG/NCV					
	A. Electromyography (EMG)					
	Electro-diagnosis, clinical and					
	kinesiological electromyography and					
	evoked potential studies.					
	1. Instrumentation.					
	2. Types of electrodes.					
	3. Cathode ray oscilloscope digital					
	processing.					
	4. Electrical safety.					
	5. Artifacts.					
	6. Normal and abnormal motor action potential.					
	7. EMG Examination.					
	a. Muscle at rest.					
	b. Insertional activity.					
	c. Minimum effort.					
	d. Maximum effort.					
	8. Motor unit's potential in disease.					
	• Motor neuron disease.					
	• Hereditary motor neuron disease.					
	Poliomyelitis.					
	• Muscular dystrophy.					
	• Inflammatory myopathies.					
	Congenital myopathies					
	• Myotonia.					
	Metabolic myopathies.					

	9) Quantitative methods in EMG.				
	<b>B.</b> Nerve conduction studies (NCV):				
	I. Motor and sensory conduction.				
	II. Physiology of nerve conduction.				
	III. General factors affecting nerve conduction.				
	IV. Nerve stimulation.				
	V. H wave.				
	VI. F wave.				
	VII. Entrapment syndromes.				
	a) Carpel tunnel syndrome.				
	b) EMG studies in Myasthenia gravis.				
	c) EMG studies in Decremental				
	studies Lambert myasthenia				
	syndrome.				
	d) Electro diagnosis in				
	Radiculopathy.				
	e) Peripheral neuropathies.				
	- Nerve conduction changes in				
	peripheral neuropathy.				
	- EMG changes in peripheral neuropathy.	201	201		
8	Radiological investigation.	20 hrs	20 hrs	MK	
	1) $X - ray.$				
	2) CT / MRI Scan.				
	3) Blood investigation (routine)				

#### **BASIC THERAPEUTICS - RECOMMENDED BOOKS:**

- Exercise Physiology, energy, nutrition and human performance McArdle, Katch &Katch, Lippincot Williams.
- 2. Illustrated principles of exercise physiology Axen. K, Kathleen. V, Prentice Hall.
- 3. Essentials of Exercise Physiology Shaver Larry. G, Surjeet Publications.
- 4. Physiology of Sports and Exercise Majumdar. P, New Central Book.
- 5. Exercise and the Heart Froliecher, Victor. F, Elsevier.
- 6. Textbook of Work Physiology Astrand and Rodahl, McGraw Hill.
- 7. Kinanthropometry and Exercise Physiology Laboratory manual tests, procedures anddata-Erston, Reilly, F & FN Spon.

#### **REFERENCE BOOKS:**

- 1. Communication Skills in Clinical Practice Sethuraman K. R.
- 2. Handbook of Educational Technology Elington Henry, Kogan Page.
- Physical Therapy Administration & Management Hickok, Robert J, Williams & Wilkins.
- 4. Clinical Decision making in Rehabilitation Basmajian, John V, Churchill Livingstone.
- 5. Handbook of Clinical Teaching Watts Nancy, Churchill Livingstone.
- 6. Physical Therapy Ethics by Gabard and Martin (Sep 2, 2010)
- 7. Management in Physical Therapy Practices by Catherine G. Page (Sep 23, 2009)
- 8. Physical Rehabilitation: Evidence-Based Examination, Evaluation, and Intervention byMichelle H. Cameron and Linda Monroe (Apr 5, 2007)
- Physical Therapy Management by Ronald W. Scott and Christopher L Petrosino (Sep 1,2007)

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### <u>MPTh – I: SEMESTER: II</u>

# COURSE: MPTH IN OBSTETRICS AND GYNECOLOGY SUBJECT: BIOSTATISTICS AND RESEARCH METHODOLOGY

Sr No.		Contents	TEACHIN GHOURS Theory (100 Hrs)	Must Know	Desirable to Know	Nice to Know
1	Resea	rch methodology:				
	I.	How to read critique research.	60 hrs	MK		
	II.	Introduction to research: frame work: levels of measurement: variables				
	III.	Basic research concepts: validity and reliability.				
	IV.	Design, instrumentation and analysis for qualitative research.				
	V.	Design, instrumentation and analysis for quantitative research				
	VI.	Design, instrumentation and analysis for quasi-experimental research				
	VII.	How to write research proposal				
	VIII.	Ethics in research				
	IX.	Importance of software in research				
	X.	Importance of SPSS, PowerPoint, etc in research.				

2	Biosta	tistics:			
		Descriptive and inferential statistics	40 hrs	MK	
	١١.	Types of data qualitative and quantitative			
	III.	Frequency distributions			
	IV.	Describing data with graphs			
	V.	Describing data with averages modemedian mean			
	VI.	Describing variability variancestandard deviation etc			
	VII.	Normal distributions			
	VIII.	Interpretations of result			
	IX.	Hypothesis testing			
	Х.	T tests			
	XI.	ANOVA			
	XII.	Probability			
	XIII.	Type I and type II errors			
	XIV.	Parametric and non-parametric tests			
	XV.	Simple statistical analysis using available software.			

#### TEXT BOOKS FOR RESEARCH METHODOLOGY AND BIOSTATISTICS:

- 1. Research Methodology .Methods and Techniques C.R. Kothari New Age International Publishers.2nd edition 2008
- 2. Rehabilitation Research: Principles And Applications By Elizabeth Domholdt(Elsevier Science Health Science Div, 2004)
- 3. Research Methods for clinical therapists by Hicks Carolyne, Churchill
- 4. Foundations of clinical Research by Portney & Watkins, Davis
- 5. Research methodology by Kothari New Age international
- 6. Research Methodology for health professionals by Goyal, Jaypee
- 7. Methods in Biostatistics By Mahajan, B.K Jaypee
- 8. Principles & practice of Biostatistics By Dixit ,J.V Bhanot

### **TEACHING TECHNOLOGY:**

- 1. Public Power And Administration Wilenski, Hale And Iremonger, 1986
- 2. Physical Therapy Administration And Management Hickik Robert J

- 3. A Practical Guide for Medical Teachers : John A Dent& Ronald M Harden: Elsevier Health Sciences: 2009
- 4. International Handbook of Medical Education : Abdul W Sajid, Christie H McGuire et al: Greenwood Press 1994
- 5. Principles Of Medical Education by. Tejinder Singh, Piyush Gupta, DaljitSingh.year: 2009. Edition: 3<sup>rd</sup> edition Publisher: Jaypee brothers.

# SPECIALTY: PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY SUBJECT: ADVANCED THERAPEUTICS IN OBSTETRICS AND GYNECOLOGY

Subject	Theory	Credit	Practical	Credit	Total Credit
ADVANCED THERAPEUTICS IN OBSTETRICS AND GYNECOLOGY	100	7	150	5	12

#### **COURSE OBJECTIVES:**

- 1. In this subject, the student will learn in detail about advanced therapeutics and its application besides exercise therapy and electrotherapy procedures used in Obstetrics and Gynecology Physiotherapy.
- 2. Update the knowledge of advance and implement in clinical practice in Obstetrics and Gynecology Physiotherapy.
- 3. To learn the applied aspect of Obstetrics and Gynecology disorders for physiotherapy practice.

Sr no.	Торіс		ng hours ) Hrs)	Must know	Desire to	Nice To
		Didactic (100Hrs )	Practical's (150Hrs)		know	know
1.	Detailed Assessment Principles and concepts of assessment and management Procedures Related to the Antenatal Obstetric	12 Hours	15 Hours	MK		
	<ol> <li>Conditions:         <ol> <li>Routine antenatal &amp; Pre-conceptual care</li> <li>Evaluation of maternal musculoskeletal disorders</li> <li>Gestational diabetes mellitus and high risk pregnancy</li> <li>Antenatal Exercises &amp; Back care</li> <li>Nutrition &amp; Weight gain in pregnancy</li> <li>Pregnancy discomforts.</li> </ol> </li> </ol>					

2. <b>Principles and concepts of assessment during</b>	12 Hours	15 Hours	MK	
labor in:				
1. Labor				
2. Preparation-Coping skills: Relaxation,				
Breathing, Positions in labor, Massage in				
labor, Pain relief in labor-TENS, Third				
stage of labor.				
3. Principles, concepts of assessment and	15 Hours	18 Hours	MK	
Physiotherapy management during Post-nata		10 110015	IVIIX	
period:				
Routine Assessment.				
• Evaluation of postnatal problems.				
1. Breast engorgement, Sore and cracked				
nipples Obstetric anal sphincter injury-				
anal sphincter exercises, pelvic floor				
muscle exercises.				
2. Postpartum physical/mental condition				
<ol> <li>Postnatal care,</li> <li>Perineal pain -Therapeutic agents</li> </ol>				
5. Immediate and long-term postnatal				
problems, Postnatal spinal pain				
6. Early postnatal class, relaxation				
7. Educational principles for individual				
learning of exercises, ergonomics				
8. Postnatal home exercise, exercise classes				
in the community				
9. Kegels exercise				
10. Functional exercises, therapeutic				
modalities				
11. Post-operative pain management				
4. Pelvic floor assessment:	8 Hours	10 Hours	MK	
Measurement of pelvic floor muscle				
function and strength and pelvic organ Prolapse				
5. Physiotherapy Skills used in Obstetrics and	10 Hrs	20 Hrs	MK	
gynecological Management:				
Introduction, History, Background, Concepts				

	of therapy and Principles:					
	<ol> <li>Skills to acquire pertaining to prescription of Kegel exercises, wall</li> </ol>					
	exercises, etc. 2. Pelvic floor muscle rehabilitation:					
	<ul> <li>Sensory awareness, Visualization,</li> <li>Palpation, Auditory input, Muscle</li> <li>awareness, Verbal feedback, Self-</li> <li>examination, Functional retraining,</li> <li>Biofeedback,</li> <li>Bladder retraining, Voiding training.</li> <li>4. Continence promoting advice.</li> </ul>					
	<ol> <li>Defecation retraining, Positioning training, Stretches, Posture, Breathing patterns</li> </ol>					
	6. Anal sphincter exercise					
	7. Rectal sensitivity training, plugs, cone.					
	8. Lymphedema management					
	9. Aquatic therapy services in women's					
	Health					
	10. Pilates Training.					
6.	Principles, concepts of assessment and	8 Hour	14 Hours		DK	
	Physiotherapy management during					
	Postmenopausal period and Aging women.					
	<b>Relaxation training for Psychological and</b> <b>emotional changes like</b> Fatigue, Abortion, Postnatal depression, Anxiety, Maternity or third day blues, Puerperal psychosis, Sexual problems	5 Hour	8 Hours			NK
8.	Physiotherapeutic Skills used while treating	10 Hours	18 Hours	MK		
	Common Gynecological Conditions:					
	1. Infective conditions					
	2. Cysts and new growths					
	3. Displacements and genital prolapse					
	4. Disorders associated with menstruation					

	5. Back ache and abdominal pain					
	6. Polycystic ovarian syndrome					
	7. Infertility					
	8. Premature ovarian failure/Premature					
	menopause					
	9. Psychosexual problems					
	10. Vulvodynia					
	<ul> <li>B. Pelvic inflammatory disease, Endometriosis, Prolapse, Menstrual &amp; Premenstrual disorders, Infertility, Polycystic ovarian syndrome, Vaginismus, Dyspareunia, Vulvodynia.</li> <li>C. Physiotherapy in Gynecological surgery</li> <li>D. Pre-operative, Post-operative &amp; Discharge advice.</li> </ul>					
9.	Prosthetics & Orthotics in women's health	5 Hour	8 Hours		DK	
10.	Exercise testing & prescription for women's	5 Hours	10 Hours	MK		
	health under different age groups					
11.	Electrical Modalities used in OBG:	5 hrs	10 hrs	МК		
	TENS, IFT, Ultra Sound, Electrical Stimulation, Biofeedback, SWD, etc.,					
12.	Advanced approaches in obstetrics and	5Hrs	10 Hrs	MK		
	gynecology Physiotherapy practice:					
	1. Electrotherapeutic modalities,					
	2. Aqua therapy,					
	3. Exercise protocols,					
	4. Surface electromyography,					
	5. Dilators,					
	6. Visceral mobilization,					
	7. Trigger point release, Myofascial release,					
	Positional release, Muscle energy					
	techniques.					

## SUGGESTED REFERENCES:

- 1. Gray, Henry. 1918. Anatomy of the Human Body, 20th ed.
- 2. C.Guyton, John E. Hall, Textbook of medical physiology, W.B.Saunder

company- Harcourt Brace Jovanovich, Inc.

3. D.K.James et al. High Risk Pregnancy-management options, Saunders-An imprint of Elsevier.

4. MargaretPolden, Jill Mantle, Physiotherapy in obstetric and gynecology, Butterworth-Heinemann, Linacre house, Jordan Hill, Oxford, 1990.

5. Ann Thomson, Tidy's physiotherapy, Varghese publishing House, Bombay.6. Ruth Sapsford, Joanne Bullock-Saxton, Sue Markwell. Women's Health: A Textbook for Physiotherapists, 1997.

 Scientific basis of human movement –Gowitzke, Williams and Wilkins, Baltimore, 1988, III edition.

 8. Clinical biomechanics of spine – White A, and Panjabi- J, B. Lippincot, Philadelphia 1978.

9. Physiotherapy in Obstetrics and Gynaecology- 2nd edition- Jill Mantle,

Jeanette Haslam, Sue Bartom. Forwarded by Professor Linda Cardow

 Physiotherapy in Obstetrics & Gynaecology – Polden& Mantle, Jaypee Brothers, New Delhi, 1994.

11. D.CDatta - Textbook of Gynaecology. 1st edition

12. Women's Health- A textbook for Physiothgerapists. R.Sapsford J. Bullock.

Saxton. S, Markwell.- (W.B. Saunders)66

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#### SPECIALITY: PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY

### SUBJECT: GENERAL PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY PAPER I

Subject	Theory	Credit	Practical	Credit	Total Credit
GENERAL PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOG PAPER 1		13	225	8	21

#### **COURSE OBJECTIVES:**

The aims for the second year elective subject in General Physiotherapy learner in Obstetrics And Gynecology is to understand, apply, and teach/educate (students / patients / caregivers) kinetics and Kinematics of women's population in various rehabilitation aspects, monitor outcomes appropriately, and recommend appropriate treatment for them.

Sr.no	Content	Teaching hours. 425 Hrs		Must know	Desirable to	Nice To
		Didactic (200Hrs)	Practical (225Hrs)		know	know
1.	Overview of Female Anatomy:	75 Hrs	75 Hrs	MK		
	1. Historical insights female nomenclature					
	<ul> <li>2. General female anatomy</li> <li>The female breast</li> <li>The female abdomen</li> <li>The female pelvis</li> <li>The bony pelvis</li> <li>Biomechanics of the female pelvis</li> <li>The reproductive tract</li> <li>The abdominal muscles</li> </ul>					

	3. Obstetric Concerns				
	• Pelvic axes, position, obstetric diameters and shape				
	_				
	Abnormal bony pelvis     Machanical Immach of the e				
	Mechanical Impact of the e fetus on an atomic relations				
	• Influence of fetal weight on				
	blood supply				
	• Influence of fetal weight and				
	postural changes				
	Hormonal impact of				
	pregnancy on anatomic				
	relations				
	4. Gynecologic concerns				
	• Contents of the pelvic cavity				
	• The urinary tract				
	• The anorectic region				
	Neuro-anatomy and				
	neurophysiology of pelvic				
	floor				
	• Muscles of the pelvis and				
	pelvic floor/ diaphragm				
	• The perineum/external				
	genitalia				
2.	The Adolescence Female	50 Hrs	75 Hrs	MK	
	1. Puberty and menarche.				
	2. Eating disorders				
	3. Urinary dysfunction in				
	adolescence.				
	4. Diet for adolescence.				
	5. Adolescence and				
	musculoskeletal system				
	6. Exercise for adolescence.				
3.	Physiology of Pregnancy	75 Hrs	75 Hrs	MK	
3.		75 Hrs	75 Hrs	МК	
3.	1. The endocrine physiology	75 Hrs	75 Hrs	МК	
3.		75 Hrs	75 Hrs	МК	
3.	1. The endocrine physiology related to reproductive medicine	75 Hrs	75 Hrs	МК	
3.	<ol> <li>The endocrine physiology related to reproductive medicine</li> <li>Physiology of ovulation and</li> </ol>	75 Hrs	75 Hrs	МК	
3.	1. The endocrine physiology related to reproductive medicine	75 Hrs	75 Hrs	МК	
3.	<ol> <li>The endocrine physiology related to reproductive medicine</li> <li>Physiology of ovulation and menstruation</li> </ol>	75 Hrs	75 Hrs	МК	
3.	<ol> <li>The endocrine physiology related to reproductive medicine</li> <li>Physiology of ovulation and menstruation</li> <li>Pregnancy and fetal</li> </ol>	75 Hrs	75 Hrs	МК	
3.	<ol> <li>The endocrine physiology related to reproductive medicine</li> <li>Physiology of ovulation and menstruation</li> </ol>	75 Hrs	75 Hrs	МК	

	changes during pregnancy:		
•	Endocrine system		
•	Reproductive system		
•	Cardiovascular system		
•	Respiratory system		
•	Breasts		
•	Skin		
•	Gastrointestinal system		
•	Nervous system		
•	Urinary system		
•	Musculoskeletal system		

#### **RECOMMENDED BOOKS**

1. Gray, Henry. 1918. Anatomy of the Human Body, 20th ed.

2. C.Guyton, John E. Hall, Textbook of medical physiology, W.B.Saunder

company- Harcourt Brace Jovanovich, Inc.

3. D.K.James et al. High Risk Pregnancy-management options, Saunders-An imprint of Elsevier.

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Butterworth-Heinemann, Linacre house, Jordan Hill, Oxford, 1990.

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Baltimore, 1988, III edition.

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 Brothers, New Delhi, 1994.

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### SPECIALITY: PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY

#### **SUBJECT: ADVANCES IN OBSTETRICS AND GYNECOLOGY PHYSIOTHERAPY PAPER 1**

Subject	Theory	Credit	Practical	Credit	Total Credit
ADVANCES IN OBSTETRICS AND GYNECOLOGY PHYSIOTHERAPY PAPER 1	200	13	250	8	21

#### **COURSE OBJECTIVES:**

The aims for the second year elective subject in Advances in Obstetrics And Gynecology Physiotherapy learner is to understand, apply, and teach / educate (students / patients / caregivers) on women's health principles or concepts core to their specialty.

Sr no	Contents	Teachin 450 Hrs	-	Must Know	Desirable to	Nice To
		Didactic (200hrs)	Practical (250hrs)		know	know
	High risk Complications with Indications	25 Hrs	25 Hrs	MK		
	and Contra-Indications to Physiotherapy:					
	1. Antenatal / Labor / Postnatal / Post-					
	menopausal women					
	2. High risk pregnancy and					
	management.					
	Bladder dysfunction / Urinary	50 Hrs	75 Hrs	MK		
j	incontinence - Assessment &					
	Management:					
	1. Normal urinary tract function					
	2. Lower urinary tract dysfunction					
	3. Incontinence of urine – common					
	types					
	4. Voiding difficulties					

	5. Principles of urodynamic,				
	radiological and				
	electromyographical investigations				
	6. Pregnancy, childbirth and d urinary				
	incontinence				
	Assessment of urinary dysfunction:				
	Assessment of urinary incontinence in				
	neurologically impaired patients.				
	Physiotherapy Management:				
	11. Skills to acquire pertaining to				
	prescription of Kegel exercises, wall				
	exercises, etc.				
	12. Pelvic floor muscle rehabilitation:				
	Sensory awareness, Visualization,				
	Palpation, Auditory input, Muscle				
	awareness, Verbal feedback, Self-				
	examination, Functional retraining,				
	Biofeedback,				
	13. Interferential Therapy, Electrical				
	stimulator, Manometer,				
	Perineometer, Vaginal cones.				
	14. Bladder retraining, Voiding training.				
	15. Continence promoting advice.				
	16. Treatment of incontinence.				
3.	Bowel and Anorectal Function and	50 Hrs	50 Hrs	MK	
5.	Dysfunction:	50 1113	50 1113	WIIX	
	1. Normal bowel function				
	1. Normal bower function				
	2. Bowel and anorectal dysfunction				
	3. Childbirth and anal incontinence				
	Physiotherapy assessment for fecal				
	incontinence and bowel dysfunction				
L					

	Physiotherapy Management:				
	<ol> <li>Defecation retraining, Positioning training, Stretches, Posture, Breathing patterns</li> </ol>				
	<ul> <li>Perianal and perineal pain syndromes: Biofeedback, Massage, Neuromuscular stimulator, Behavior modification</li> </ul>				
	3. Abdominal activity				
	4. Anal sphincter exercise				
	5. Neuromuscular electrical stimulation				
	<ol> <li>Rectal sensitivity training, plugs, cone.</li> </ol>				
4.	Oncologic Issues with Women's Health:	25 Hrs	50 Hrs	MK	
	<ol> <li>Physiotherapy Management of breast cancer sequel</li> <li>Lymphedema management</li> </ol>				
5.	Special Topics within Women's Health	50 Hrs	50 Hrs	MK	
	<ol> <li>The female athlete: The athletic women / women and exercise Pelvic floor physiotherapy for elite athletes</li> <li>Exercise issues and aging</li> <li>Aquatic therapy services in women's Health</li> <li>Physiotherapy management of women with long term physical disabilities</li> </ol>				

### SUGGESTED REFERENCES:

- 1. Gray, Henry. 1918. Anatomy of the Human Body, 20th ed.
- 2. C. Guyton, John E. Hall, Textbook of medical physiology, W.B. Saunder

company- Harcourt Brace Jovanovich, Inc.

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Normal & Problem Pregnancies - 5th edition- associate editors: Henry

Galon, Laura Guetzl, Mark Landson, Eric.R.M. Jauniau

### JOURNALS:

- 1. Journal of Women's Health Physical Therapy
- 2. Journal of Exercise Science and Physiotherapy
- 3. Physical therapy-APTA
- 4. Journal of Pediatrics, Obstetrics and Gynecology

#### SPECIALITY: PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY

#### SUBJECT: GENERAL PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY PAPER 2

Subject	Theory	Credi	Practical	Credit	Total Credit
ADVANCED PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY PAPER 2	200	13	225	8	21

#### **COURSE OBJECTIVES:**

The aims for the second year elective subject in General Physiotherapy learner in Obstetrics And Gynecology is to understand, apply, and teach/educate (students / patients / caregivers) kinetics and Kinematics of women's population in various rehabilitation aspects, monitor outcomes appropriately, and recommend appropriate treatment for them.

Sr.no	Content		ing hours. 50 Hrs	Must know	Desirable to	Nice To
		Didactic (200Hrs)	Practical (225Hrs)		know	know
	The Physical and Physiological Changes during Labor and Puerperium:	25 Hrs	25 Hrs	МК		
	1. Physical and physiological changes					
	2. Events of normal labor					
	3. Complications of labor					
	4. Post natal physical and mental condition					
	<b>5.</b> Psychological and emotional changes and coping with the demands of newborn					

2.	Climacteric:	25 Hrs	25 Hrs	МК	
	1. Physiological and endocrine changes of the menopause				
	2. Menopausal systemic changes and their management				
	<ul><li>3. Physical, psychological and emotional symptoms</li><li>4. Urinary dysfunction.</li></ul>				
3.	Foundations of Physiotherapy in	25 Hrs	25 Hrs	МК	
5.	Women's Health:	20 1115	20 1115		
	1. Historical perspective of women's health care				
	2. Patient education in women's health				
	3. Psychological issues associated with women's health				
4.	Quality of life and Lifespan Issues in Women's Health:	25 Hrs	30 Hrs	МК	
	1. Musculoskeletal disorders during the middle years and beyond				
	2. Women and heart disease				
	3. Post-menopausal problems and its management				
	4. Osteoporosis: Physiotherapy, prevention and intervention				
5.	Nutrition in women's health	10 Hrs	10 Hrs	МК	
6.	Long term consequences of chronic disorders on Women's specific health issues.	20 hrs	25 hrs	МК	

7.	<ul> <li>Physiotherapy assessment &amp; Management of Miscellaneous conditions <ul> <li>a. Wound healing in diabetes mellitus, leprosy, pressure sores</li> <li>b. Obesity</li> <li>c. Burns</li> <li>d. HIV</li> <li>e. Skin conditions</li> <li>f. Diabetes mellitus</li> <li>g. Malignancy</li> </ul> </li> </ul>	20 hrs	30 hrs	МК		
8.	National & International health programs for women's Physiotherapy interventions.	10hrs	10hrs			NK
9.	<ul> <li>Professional marketing strategies –</li> <li>i. Entrepreneurship</li> <li>ii. Specialty clinics</li> <li>iii. Independent Practice</li> <li>iv. Joining organizations</li> <li>v. Groups</li> <li>vi. NGO</li> <li>vii. Specialty references</li> </ul>	20 hrs	20 hrs		DK	
10.	Management strategies of various women's health disorders	20 hrs	25 hrs	МК		

#### **RECOMMENDED BOOKS**

1. Gray, Henry. 1918. Anatomy of the Human Body, 20th ed.

2. C.Guyton, John E. Hall, Textbook of medical physiology, W.B.Saunder

company- Harcourt Brace Jovanovich, Inc.

3. D.K.James et al. High Risk Pregnancy-management options, Saunders-An

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#### SPECIALITY: PHYSIOTHERAPY IN OBSTETRICS AND GYNECOLOGY

#### SUBJECT: ADVANCES IN OBSTETRICS AND GYNECOLOGY PHYSIOTHERAPY PAPER 2

Subject	Theory	Credit	Practical	Credit	Total Credit
ADVANCES IN OBSTETRICS AND GYNECOLOGY PHYSIOTHERAPY PAPER 2	200	13	250	8	21

#### **COURSE OBJECTIVES:**

The aims for the second year elective subject in Advances in Obstetrics And Gynecology Physiotherapy learner is to understand, apply, and teach / educate (students / patients / caregivers) on women's health principles or concepts core to their specialty.

Sr no	Contents	Teachir 450	ng hours	Must Know	Desirable to	Nice To
		Didactic (200hrs)	Practical (250hrs)		know	know
	<ul> <li>Physiotherapy for women with special needs:</li> <li>1. Women with physical disabilities, and female sexual dysfunction.</li> <li>2. Disease processes with gender differences and chronic fatigue syndrome; urinary tract infection, immune system disorders,</li> <li>3. Post-menopausal problems-osteoporosis</li> </ul>	30 Hrs	30 Hrs		DK	
2.	Injuries to the pelvic region following accidents	20 Hrs	35 Hrs	МК		
3.	Common Pathological Conditions and treatment approaches specific emphasis to	35 Hrs	60 Hrs	МК		

	women's health:					
	1. Arthritis and total joint replacements					
	2. Congestive Heart Failure					
	3. Stroke					
	4. Diabetes					
	5. Cancer					
	6. Multiplicity of disease					
4.	Community based rehabilitation:	25 Hrs	25 Hrs			NK
	Interventions and teaching, learning					
	methods in obstetrics and gynecology					
	physiotherapy practice, Effective					
	communication skills, counseling, health					
	education skills and multidisciplinary					
	teamwork.					
5.	Ethical, legal, professional values:	25 Hrs	30 Hrs		DK	
	1. Ethical, legal, professional and valid					
	consent in obstetrics and gynecology					
	physiotherapy practice					
	2. Clinical practice guidelines for					
	pelvic floor muscle examination					
6.	Evidence Based Practice In Obstetrics	35 Hrs	35 Hrs	MK		
	and Gynecology Physiotherapy:					
	Importance and need of Evidence based					
	practice, Principles of Evidence based					
	practice and Research in the field of					
	physiotherapy, Application of Evidence					
	based practice in professional day to day					
	practice, Sources to search for evidence,					
	Legal issues in practice.					
7.	Clinical Reasoning & Diagnosis:	30 Hrs	35 Hrs	MK		
	Definition of clinical reasoning, Steps in					
	clinical reasoning process, Need for					

(	clinical reasoning in physiotherapy,			
	Special tests & their sensitivity &			
1	reliability, Principles of physiotherapy			
c	diagnosis, Correlating clinical findings			
	with investigations & Differential			
	diagnosis.			

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4. Margaret Polden, Jill Mantle, Physiotherapy in obstetrics and gynecology,

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5. Ann Thomson, Tidy's physiotherapy, Varghese publishing House, Bombay.

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#### JOURNALS:

- 5. Journal of Women's Health Physical Therapy
- 6. Journal of Exercise Science and Physiotherapy
- 7. Physical therapy-APTA
- 8. Journal of Pediatrics, Obstetrics and Gynecology