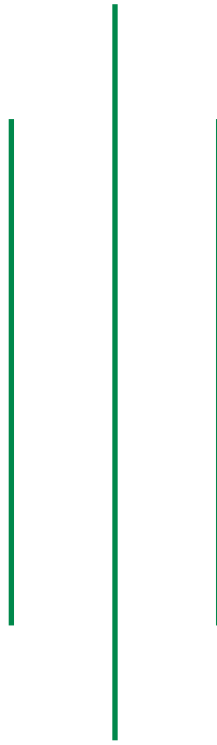


# **Syllabus for Licensing Examination of MPT (Obstetrics and Gynecology) 2022**



**Nepal Health Professional Council**

Bansbari, Kathmandu

## Table of contents

S.N.	Topics	Marks
1	<b>Basic Sciences</b> (Anatomy, Physiology, Biomechanics and Kinesiology)	20%
2	<b>Basic Physiotherapy</b> (Exercise Therapy and Electrotherapy)	25%
3	Research and Methodology, Ethics, Management, Research and Evidence Based Practice (EVP) in Obs/Gyne Disorders	10%
4	<b>Specific Obs /Gyne Disorders Rehabilitation</b>	45%
	Total	100%

## 1) Basic Sciences

### i. **Medical Anatomy** (bones, muscles, joints nerves, lymphatics, surface anatomy)

*Upper limb, lower limb, thorax, head, neck, spine and Male and Female reproductive systems*

### ii. **Medical Physiology following system**

*Muscle, CVS, Respiratory, Nervous, Blood, Skin and Male and Female reproductive systems*

### iii. **Biomechanics and Kinesiology**

- a) Basics principles of mechanics including Centre of gravity, line of gravity, force, newton's law, friction, stability, equilibrium, levers etc
- b) Biomechanics and pathomechanics of spine, upper extremity and lower extremity, thora
- c) Biomechanics of posture and its deviations
- d) Biomechanics of gait and its deviations
- e) Biomechanics of bones, joint, muscles, nerve and tendon etc

## 2) Basic Physiotherapy

### a) **Exercise Therapy** (its application, evidenced based practice and recent advances)

- i) Principle of Exercise Physiology (Aerobic, anaerobic)
- ii) General concept and techniques of therapeutic exercises, range of motion, resistive exercise, stretching, peripheral joint mobilization, aquatic exercise, PNF TECHNIQUE.

### b) **Electro Therapy** (its application, evidenced based practice and recent advances in electrotherapy)

- i) Electrotherapeutic physiological effect in various system
- ii) Electrical stimulation of muscle plasticity and neuro plasticity
- iii) Cryotherapy, moist heat, UVR, IRR
- iv) UST, SWD, MWD, Shock wave, TENS, IFT, Muscle stimulator
- v) EMG, Bio feedback

## 3) **Research and Methodology, Ethics, Management, Reaserch and Evidence Based Practice (EVP) in Obs/Gyne Disorders**

- ◆ Introduction to biostatistics, its application on physiotherapy
- ◆ Research – Definition, concept, purpose, approaches
- ◆ Research Ethics
- ◆ Critical appraisal tools and reporting guidelines - CONSORT, PEDro, PRISMA, STROBE, CARE, TIDieR
- ◆ Writing a Research Proposal: Steps on the research process
- ◆ Hypothesis Testing

- ◆ Probability and Sampling: probability, population and sample, sampling distribution, sampling methods, survey in research, sample size determination and calculation
- ◆ Research Design - Qualitative and Quantitative research designs
- ◆ Epidemiological studies: calculation of incidence and prevalence, odd ratio, relative risk, Iceberg phenomenon
- ◆ Ethical issues in practice of physiotherapy- clinical, research, academics and administration, Ethics and professionalism
- ◆ Development and implementation of policies and procedures Job descriptions, roles and responsibilities
- ◆ Evidence based practice: Introduction, components, steps of evidence-based practice, implication of EBP in physiotherapy clinical practice and research
- ◆ roles and responsibilities in physiotherapy practice

#### 4) Specific Obstetrics and Gynecology Disorders Rehabilitation

- a) **Obs/Gyne (Different exercises regimes, Therapeutic modalities and equipments, Diagnostic tests, Prosthetics and orthotics used for the management of the various clinical condition of evidenced based practice (EVP), Recent advances, clinical decision Making)**

##### **Introduction to Women's Health-**

External genital. Ovaries, fallopian tubes, uterus and vagina. Blood and nerve supply of genital organs.

##### ◆ **Antenatal**

Routine antenatal & Pre-conceptual care • Gestational diabetes mellitus and high risk pregnancy, Antenatal Exercises & Back care, Nutrition & Weight gain in pregnancy, & Gestational Varicosity

##### ◆ **Post-natal**

Obstetric anal sphincter injury-anal sphincter exercises, pelvic floor muscle exercises. • Postpartum physical/mental condition • Postnatal care, Baby massage • Perineal pain -Therapeutic agents • Immediate and long-term postnatal problems, Postnatal spinal pain, Early postnatal class, relaxation

Educational principles for individual learning of exercises, ergonomics • Postnatal home exercise, exercise classes in the community •Kegels exercise • Functional exercises, therapeutic modalities • Post operative pain management

##### ◆ **Physiotherapy during pregnancy in**

Neurological conditions: Nerve compression syndrome • Cardiovascular conditions: Varicose veins • Musculoskeletal conditions:- Muscle cramps, pelvic girdle pain, low back pain,CTS, knee patella dysfunction, SI joint pain, coccyx pain piriformis syndrome

##### ◆ **Labour**

Preparation-Coping skills: Relaxation, Breathing, Positions in labour, Massage in labour, Pain relief in labour-TENS, Third stage of labour

- ◆ **Psychological and emotional changes**  
Fatigue, Abortion, Postnatal depression, Anxiety, Maternity or third day blues, Puerperal psychosis, Sexual problems
- ◆ **Physiotherapy in Gynecology disorders**  
Pelvic inflammatory disease, Endometriosis, Prolapse, Menstrual & Premenstrual disorders, Infertility, Polycystic ovarian syndrome, Vaginismus, Dyspareunia, Vulvodynia, Pre-operative, Post-operative, & Discharge advice
- ◆ **Physiotherapy for women with special needs**  
Women with physical disabilities, and female sexual dysfunction. • Disease processes with gender differences and increased prevalence in women-chronic fatigue syndrome; urinary tract infection, immune system disorders, • Post-menopausal problems-osteoporosis • Oncologic issues with women's health and lymphedema, Injuries to the pelvic region following accidents
- ◆ **Advanced approaches in obstetrics and gynecology Physiotherapy practice**  
Electrotherapeutic modalities, Aqua therapy, Exercise protocols, Surface electromyography, Dilators, Visceral mobilization, Trigger point release, Myofascial release, Positional release, Muscle energy techniques
- ◆ **Urinary incontinence**  
Skills to acquire pertaining to prescription of Kegel exercises, wall exercises and Pelvic floor muscle rehabilitation: Sensory awareness, Visualization, Palpation, Auditory input, Muscle awareness, Verbal feedback, Self-examination, Functional retraining
- ◆ **Bowel and anorectal dysfunction**
- ◆ Defecation retraining, Positioning training, Stretches, Posture, Breathing patterns  
• Perianal and perineal pain syndromes
- ◆ Management of common problem in Antenatal period: Diastasis recti & PT management of diastasis recti, other hernia like femoral hernia.
- ◆ Breast milk, its advantages, Breast feeding positions, Common problem in Breast feeding, Breast engorgement and its PT management, Types of nipples and its problems.
- ◆ Swiss ball in Pregnancy, Episiotomy and its PT management
- ◆ Adolescent and the musculoskeleton system. Diet and exercise for adolescent, active pelvic floor exercises.
- ◆ Water birth,
- ◆ Recent advances in outcome measures used in OBG physical therapy
- ◆ Recent advances in evaluation and treatment Of maternal MSK Disorder in Obstetrics and Gynecology