

**Course work for first six month duration in Ph. D. Programme - SRPT**

**1. Recent – Advances in Gynecology & Obstetrics.**

**Obstetrics –**

- 1) Update on antenatal care.
- 2) Effect of Vaginal microbiome on pregnancy outcome.
- 3) Management of FGR (Fetal Growth Restriction)
- 4) Screening of preeclampsia.
- 5) Noninvasive prenatal testing.
- 6) Vaccination during pregnancy.

**Gynecology: -**

- 1) Intra ovarian paracrine and autocrine regulators.
- 2) Understanding of markers capable of predicting wellbeing of follicle in the ovary.
- 3) Investigation of Biophysics of sperm-egg cortical granules fusion.
- 4) Understanding of Contraceptive rings.

**Oncology: -**

- 1) Sentinel Lymph Node Biopsy (SLNB) in cervical cancer.
- 2) Immunotherapy, HPV vaccines.
- 3) Breast to mosynthesis – 3D Mammography.
- 4) Knowledge of human epidermal growth factor receptor – 2 (HER<sup>2</sup>)
- 5) TNM Staging System of Breast Cancer. (Tumor Node Metastases – TNM)

**2. Subject – Specific Research Methodology.**

- 1) Use of methodologic standards of confidence intervals, sample size and power calculations.
- 2) Quantitative research, Qualitative Research.
- 3) Triangulation of research findings (Meaning = Qualitative + Quantitative) – using qualitative research to define the meaning of quantitative research.
- 4) Phenomenology, Grounded theory, Action Research.

**3. Subject – Specific Research Issues.**

- 1) Research Areas – Adolescent Gynaecology, Genitourinary infections, Puerperal sepsis, Abortion care, Cervical Cancer.

**4. Research Related Equipment's, Scales**

1. OTAS – Obstetric Triage Acuity Scale.
2. MEOWs chart – Modified Early Obstetric Warning System Chart.
3. BSS – RI – The Birth Satisfaction Scale – Revised Indicator.
4. WALIDD Score in Dysmenorrhea.
5. 5-D Itch Scale in Pruritus.
6. MMAS – Menorrhagia Multi- Attribute Scale.
7. MRS – Menopause Rating Scale.
8. Greene climacteric Scale – menopause.
9. Hysteroscopy.
10. Colposcope.

**5. Broader Area of Research in obstetrics & Gynaecology**

1. Optimal intervals of cervical cytological screening.
2. Psychosocial needs of HIV Positive women and their family system.
3. Behavioral risk factors for transmission or progressions of an STD.
4. Molecular studies to identify high risk and low risk women for breast cancer.
5. Appropriate drug delivery system.
6. Influence of maternal diet, environmental factors and disease status on maturational events of fetus in relation to Garbhini Paricharya.
7. Preconception care and biophysics
8. Ritumaticharya in today's era.
9. Development of specific markers in obstetrics and Gynaecology.
10. Sutika Awastha and lipid Metabolism.