



# BAREILLY INTERNATIONAL UNIVERSITY

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## **Course Work - Ph. D.**

### **Syllabus**

#### **Paper-I (100 Marks)**

#### **Pathology (Code – 91276)**

**Credits : 04**

**Hrs. : 60**

#### **1. General Pathology:**

- Role of pathologist in diagnosis and management of disease
- Common definitions and terms in pathology: Lesion, morphology, pathogenesis, syndrome, etiology, gross examination, microscopic examination
- Cell Injury – causes, mechanism
- Cell death – types, mechanisms, necrosis, apoptosis
- Cell Adaptations – atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia, aplasia
- Inflammation – Acute & Chronic Inflammation -signs, gross and microscopic features
- Neoplasia – definition, types, differences between benign & malignant, nomenclature, spread of tumours, metastasis, carcinogenesis (viral, chemical), laboratory diagnosis, tumour markers

#### **2. Fine Needle Aspiration (FNA):**

- Introduction
- FNAC as a tool in clinical investigation, advantages, limitations, challenges
- Basic techniques – equipment, patient preparation, procedure, processing of sample, fixation, staining
- Image guided Aspiration cytology – technique, sterility, risk/complications, pitfalls

#### **3. Non- Gynecological Cytopathology:**

- Introduction to terminologies
- Concepts and skills used
- Head and Neck-cysts, neoplasms; Salivary gland cytology
- Lymph Node cytology

- Thyroid cytology with Bethesda system of reporting,
- Breast cytopathology-applications, advantages & disadvantages, fibroadenoma, phyllodes tumour, breast carcinoma
- Fluid Cytopathology – inflammatory, benign and malignant
- Soft tissue Lesions

**4. Gynecological Cytopathology:**

- Role of cytology in gynecological specimens(clinical applications)
- PAP test – Bethesda system of reporting, LBC – advantages

**ASSESSMENT IN Ph. D. PATHOLOGY: 50 MCQ questions of total 100 marks**

**Distribution of MCQs :**

<b>Section Distribution</b>	<b>No. of MCQs</b>	<b>Marks</b>
General Pathology	10	20
Fine Needle Aspiration (FNA)	10	20
Non- Gynecological Cytopathology	15	30
Gynecological Cytopathology	15	30
<b>TOTAL</b>	<b>50</b>	<b>100</b>