

## **SYLLABUS MOLECULAR MEDICINE**

### **Paper I- General paper on Research methodology**

(35% as Multiple Choice Questions and 15% as Short Answer Questions)

1. Logic and Reasoning
2. Basic Math and Biostatistics
3. Experimental research methods in life sciences
4. Medical ethics governing human material utilization for research

### **Paper II- Introductory life sciences; Molecular medicine unit specific topics**

Introductory biochemistry, cell biology and molecular biology

(35% as Multiple Choice Questions and 15% as Short Answer Questions)

**Cell Biology:** Basic cell biology including Protein sorting into major organelles, Protein secretion, Vesicular transport, Signaling pathways, Cell cycle.

**Molecular Oncology:** Tumor biology including, Hallmarks of cancer, carcinogenesis, oncogenes and tumor suppressor genes, tumor progression.