**Sri Manakula Vinayagar Medical College & Hospital**

**Department of Biochemistry**

**MD Biochemistry**

**PG – Schedule (May to December 2022)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl. No.** | **Month** | **Seminar Discussion** | **Theory Discussion** | **Practical Discussion** |
| **1.** | May – IV week | Regulation of gene expression | - | Estimation of glucose |
| **2.** | June – I week | **Term Exam** | Enzymology | **Term Exam** |
| **3.** | June – II week | Thesis work | Chemistry of carbohydrate | Estimation of creatinine |
| **4.** | June – III week | Thesis work | Chemistry of protein | Estimation of Total protein |
| **5.** | June – IV week | Thesis work | Chemistry of lipids | Estimation of Albumin |
| **6.** | July – I week | Thesis work | Chemistry of haemoglobin | Estimation of Cholesterol |
| **7.** | July – II week | Thesis work | Chemistry of nucleotide | Estimation of Triglycerides |
| **8.** | July – III week | Thesis work | Oxidative phosphorylation | Estimation of AST & ALT |
| **9.** | July – IV week | Thesis work | Vitamins | Electrophoresis |
| **10.** | August – I week | Radioisotopes | Biostatistics | Chromatography |
| **11.** | August – II week | Glycoproteins | Surface tension & Osmosis | Colorimetry & Spectrophotography |
| **12.** | August – III week | Immunoassay | Donnan membrane equilibrium | Nephelometry |
| **13.** | August – IV week | Structure function relationship of Hb | Fluorimetry | Potentiometer |
| **14.** | September – I week | Cell cycle | Cell sorting | Centrifugation |
| **15.** | September – II week | DNA sequencing | MHC | PCR |
| **16.** | September – III week | Molecular basis of Ab diversity | Cancer Biochemistry | Blotting techniques |
| **17.** | September – IV week | Hypersensitivity reactions | Proteomics | DNA sequencing |
| **18.** | October - I week | Cytochrome p450 | Inborn errors of carbohydrate metabolism | rDNA technology |
| **19.** | October - II week | Fast-fed cycle | Human nutrition | Applications of bioinformatics |
| **20.** | October - III week | Inborn errors of lipid metabolism | Xenobiotics | LIS |
| **21.** | October - IV week | Hyperbilirubinemia | Mineral metabolism | Bioinformatics |
| **22.** | November - I week | Atherosclerosis | Acid Base Balance | Diabetes Mellitus |
| **23.** | November - II week | CSF analysis | Thyroid function test | Adrenal cortical hormones |
| **24.** | November - III week | Apoptosis | Peritoneal fluid analysis | Method validation |
| **25.** | November - IV week | Obesity | Biochemistry of AIDS | Total Quality Management |
| **26.** | December – I week | Nanotechnology | Dialysis | POCT |
| **27.** | December – II week | Autoimmunity | Mechanism of hormone action | Diabetes Mellitus |
| **28.** | December – III week | Complement system | Latest markers of CKD & AKI | Setting a clinical Biochemistry Lab |
| **29.** | December – IV week | Porphyria | Tumour markers | Urine preservatives |

 **Professor & Head**

**Department of Biochemistry**