JSS COLLEGE OF ARTS, COMMERCE AND SCIENCE

(An Autonomous College of University of Mysore)

PG DEPARTMENT OF STUDIES AND RESEARCH IN BIO-TECHNOLOGY Value Added Course Credit hours-30

Year 2018-19

Pathophysiology of Common Diseases

Course Outcomes: Total hours: 30

- 1. Demonstrate a basic understanding of the concepts and elements of disease.
- 2. Demonstrate an understanding of the mechanisms of diseases, the diagnosis of diseases, and the treatment of diseases.
- 3. Understand the pharmacological treatment of diseases or conditions.

Unit1.

Basic Principles of Cell Injury and Adaptation: Causes of Cellular injury, pathogenesis, morphology of cell injury. Intercellular alterations in lipids, proteins and carbohydrates, Cellular adaptation, atrophy, hypertrophy.

Unit 2.

Basic Mechanisms involved in the process of inflammation and repair: Alterations in vascular permeability and blood flow, migration of WBCS, acute and chronic inflammation, mediators of inflammation, brief outline of the process of repair.

Unit 3. 10 hrs

Pathophysiology of Common Diseases: Rheumatoid arthritis, gout, epilepsy, psychosis, depression, mania, hypertension, angina, congestive heart failure, atherosclerosis, myocardial infarction, diabetes, peptic ulcer, asthma, ulcerative colitis, hepatic disorders, acute and chronic renal failure, tuberculosis, urinary tract infections, sexually transmitted diseases, anemias and common types of neoplasms. Wherever applicable the molecular basis should be discussed.

References:

1. <u>Applied pathophysiology: a conceptual approach</u>: Nath, Judi Lindsley, author.

2. Pathobiology of human disases- A dynamic encyclopedia of diseasemechanisms- Linda M. McManus.