

**Examination: Master in Pharmacy First Year Second Semester EXAM 2024**

Subject: ADVANCED PHARMACOLOGY-II

Ref. No.: Ex/MPL201T/2024

Time: 03 hrs Full Marks: 75

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**GROUP A (25 marks)**

- Q1)** Discuss the merits and demerits of Stem Cell Therapy in Cardiac Infraction and Diabetes Mellitus. (10)
- Q2)** With the help of a diagram write down the working principle of Flow cytometry and FACS. (10)
- Q3)** Write about the method and purpose for Pulse Chase Assay. (05)

**GROUP B (25 marks)**

- Q4)** Write down the biosynthesis of thyroid hormones. How thyroid hormone secretion is regulated? Shortly discuss about hypothyroidism. (15)
- Q5)** Write notes on (*any two*) (10)
- a) Insulin preparation.
  - b) Integrated hormonal regulation of female reproductive system.
  - c) Estrogen.
  - d) Micro and macro vascular complications of diabetes mellitus.

**GROUP C (25 marks)**

- Q6)** Briefly discuss about the following: (*Attempt any 5*) (5x5=25)
- a) Development of resistance to Beta Lactam antibiotics.
  - b) Clinical significance of 5<sup>th</sup> Generation Cephalosporins.
  - c) Mode of action and use of Levofloxacin
  - d) Management of Atypical Bacterial Pneumonia.
  - e) Synergistic activity of Co-trimoxazole
  - f) Mode of action and use of Avibactam.
  - g) Clinical use of Meropenem