Sl.No:M21210 Course Code: BP501T

# VINAYAKA MISSION'S RESEARCH FOUNDATION (Deemed to be University), SALEM

## B.PHARM. DEGREE EXAMINATION – October 2021 Fifth Semester

#### MEDICINAL CHEMISTRY – II

Time: Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions:

 $(2 \times 10 = 20)$ 

- 1. a) Classify diuretics with examples.
  - b) Discuss the mechanism of action and SAR of thiazides.
- 2. a) What are corticosteroids?
  - b) Write in detail the SAR of glucocorticoids.
- 3. a) Classify antiarrhythmic drugs with examples.
  - b) Write the SAR of 1,4 dihydropyridines.

### II. Write short answers on any **SEVEN** questions:

 $(7 \times 5 = 35)$ 

- 4. Classify anti- histaminic drugs with examples. Outline the synthesis of Diphenhydramine.
- 5. Classify antineoplastic agents with examples.
- 6. Illustrate the mechanism of action of organic nitrates. Outline the synthesis of isosorbide dinitrate.
- 7. Classify antihyperlipidemic drugs with examples. Summarize the mechanism of action of statins.
- 8. Write the structure and uses of the following
  - a) Procainamide b) Clofibrate c) Menadione d) Methimazole
  - e) Clopidogrel.
- 9. Write the steps involved in the formation of  $T_3 \ \& \ T_4$ .
- 10. Illustrate the structure, chemistry and uses of Diethyl stilbestrol.
- 11. Classify oral hypoglycemic drugs with examples. Draw the structure of Metformin.
- 12. Discuss the SAR of anilides.

#### III. Write short notes on:

 $(10 \times 2 = 20)$ 

- 13. Outline the synthesis of promethazine.
- 14. Draw the structure and uses of cyclophosphamide.
- 15. What is a loop diuretic? Give examples.
- 16. Write the synthesis of Nitroglycerin. What is it used for?
- 17. Draw the structure and use of lidocaine.
- 18. Give examples for bile acid sequesterants.
- 19. Draw the structure and use of Testosterone.
- 20. What are oral contraceptive drugs? Give any two examples.
- 21. Enumerate the synthesis of procaine.
- 22. Name any four sulphonyl ureas. What are they used for?

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