

GUJARAT TECHNOLOGICAL UNIVERSITY
PHARM.D YEAR-3 EXAMINATION – WINTER - 2024

Subject Code: 838805**Date: 11-12-2024****Subject Name: Medicinal Chemistry****Time: 02 : 30 PM TO 5 : 30 PM****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1 | (a) Discuss life cycle of malarial parasite. Differentiate types of malaria | 06 |
| | (b) Classify anti malarial drugs and write short note on 4-amino quinolines. | 04 |
| | (c) Name the content present in following brands of medicines and give uses of this medicines: Calpol, Disprin, Combiflam, Stopache, Augmentin | 04 |
| Q.2 | (a) Give full form of QSAR, CADD. Write a note on various parameters used in QSAR Studies | 06 |
| | (b) Give full form of DOTS. Enlist first line and second line drugs used for treatment of tuberculosis. | 04 |
| | (c) Which drugs and in what proportion are combined in Cotrimoxazole? Sulphadoxine and pyrimethamine combination is used for what? | 04 |
| Q.3 | (a) Enlist antifungal antibiotics, discuss azoles in details. | 06 |
| | (b) Give specific application of sulphacetamide, silver sulphadiazine, solapsone, sulphasalazine | 04 |
| | (c) Name the infection caused when viral infects: lungs, liver, brain. Name drugs used to treat influenza, AIDS. | 04 |
| Q.4 | (a) Discuss Adrenal gland. Write short note on diseases caused by deficiency in adrenocortical secretion. | 06 |
| | (b) Give specific uses of steroidal hormone. Give structure of Gonane, Andrane, Estrane, Pregnane, Cholane. Name drugs used as hormonal contraceptive | 04 |
| | (c) Enlist thyroid hormones secreted by thyroid gland. Classify disease because of abnormal thyroid hormone secretion. | 04 |
| Q.5 | (a) What are lipids. Enlist major lipid in human being? Draw structure of cholesterol. Give its normal function in body, classify lipo proteins. Classify anti hyper lipedemic drugs | 06 |
| | (b) Discuss structure and stereochemistry of tetracyclines and write a note on fanconi like syndrome | 04 |
| | (c) Write a short note on antibiotics acting on 50s ribosomes | 04 |
| Q. 6 | (a) Discuss anti metabolites used in treatment on cancer | 06 |
| | (b) Discuss action potential in Non automatic myocardial contractile tissue | 04 |
| | (c) Give normal value of blood sugar level and fasting blood sugar level in normal individual. Classify diabetes mellitus, write short note on biguanides. | 04 |
| Q.7 | (a) Define hypertension, enumerate factors responsible for it. Enlist different class of drugs that can be used to treat high blood pressure. Write note on ACE Inhibitors. | 06 |
| | (b) Define diuresis, can diuretic be used in treatment of hypertension, how? Discuss loop diuretics in details | 04 |
| | (c) Write short note on 1. Crystalluria 2. Gray baby syndrome | 04 |