



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – CHEMISTRY

FIFTH SEMESTER – NOVEMBER 2023

UCH 5602 – MEDICINAL AND PHARMACEUTICAL CHEMISTRY

Date: 16-11-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

SECTION A - K1 (CO1)

Answer ALL the Questions -

(10 x 1 = 10)

1. Choose the correct answer for the following

- a) Which of the following blood group is considered a universal donor?
(i) A (ii) B (iii) AB (iv) O
- b) In which of the following phases of clinical trial of drug, ethical clearance is not required?
(i) Phase I (ii) Phase II (iii) Phase III (iv) Phase IV
- c) Chemically aspirin is _____
(i) Acetyl salicylic acid (ii) Sodium salicylate (iii) Methyl salicylate (iv) Ethyl salicylate
- d) The study of absorption, distribution, metabolism and excretion of drug is known as
(i) Pharmacy (ii) Pharmacokinetics (iii) Pharmacodynamics (iv) Pharmacopoeia
- e) Which of the following solvents is the most suitable one for determining partition coefficients?
(i) Phenol (ii) Butanol (iii) Heptane (iv) Octanol

2. Fill in the blanks

- a) When arteries grow thick and stiff and restrict blood flow to organs and tissues in the body, then the disorder is called _____.
- b) _____ form of the drug has the highest bioavailability.
- c) During angioplasty, doctors often place a _____ inside the artery.
- d) Taxanes are _____ drugs that stop cancer cells from replicating.
- e) _____ character of compounds refers to its fat soluble and non-polar nature

SECTION A - K2 (CO1)

Answer ALL the Questions

(10 x 1 = 10)

3. Match the following

- | | | |
|----------------|---|--------------------|
| a) Morphine | - | Orange |
| b) Crude drugs | - | Penicillin |
| c) Dettol | - | Narcotic analgesic |
| d) Hesperidin | - | Pharmacognosy |
| e) Serendipity | - | Antiseptic |

4. Define the following

- a) Blood clotting
- b) Pharmacophore
- c) Therapeutic index
- d) Drug Latentiation
- e) Lead compound

SECTION B - K3 (CO2)

Answer any TWO of the following

(2 x 10 = 20)

5. (a) What are the characteristics of an ideal disinfectant? (5)
- (b) Discuss briefly the components of blood. (5)

