

Question Paper

Exam Date & Time: 15-May-2024 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Pharmacology III (Theory) [PHA-BP602T -S1]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

- 1) Which medication is a prostaglandin analog that helps protect the gastric mucosa and is sometimes used to prevent peptic ulcers caused by nonsteroidal anti-inflammatory drugs (NSAIDs)? (1)

[Omeprazole](#)
[Misoprostol](#)
[Famotidine](#)
[Metoclopramide](#)

- 2) The drugs employed for anti-H. Pylori therapy includes all the following EXCEPT (1)

[Ciprofloxacin](#)
[Clarithromycin](#)
[Tinidazole](#)
[Amoxicillin](#)

- 3) Which of the following is a fourth-generation cephalosporin? (1)

[Ceftriaxone](#)
[Cefaclor](#)
[Cefepime](#)
[Cefuroxime](#)

- 4) Which of the following is NOT a derivative of 4-fluoroquinolones? (1)

[Ciprofloxacin](#)
[Levofloxacin](#)
[Moxifloxacin](#)
[Azithromycin](#)

- 5) What is the recommended treatment for type 2 lepra reaction? (1)

[Oral corticosteroids](#)
[Antibiotics](#)
[Antifungal medications](#)
[Topical creams](#)

- 6) What is the mechanism of action of methotrexate, a commonly used antimetabolite in cancer treatment? (1)

[Inhibition of DNA synthesis](#)
[Inhibition of RNA polymerase](#)
[Inhibition of dihydrofolate reductase](#)

Inhibition of microtubule formation

7) Leucovorin (folinic acid) is commonly used as a rescue agent in chemotherapy to reduce the toxic effects of which drug? (1)

Doxorubicin

Cyclophosphamide

Methotrexate

Paclitaxel

8) Tacrolimus, an immunosuppressant drug, exerts its pharmacological effects by binding to which intracellular protein, inhibiting the activation of T-cells? (1)

Calcineurin

mTOR (mammalian target of rapamycin)

NF- κ B (nuclear factor kappa-light-chain-enhancer of activated B cells)

Janus kinase (JAK)

9) Specific drug for filariasis (1)

Diethylcarbamazine (DEC)

Metronidazole

Praziquantel

Pyrental pamoate

10) Which of the following antimicrobial agent causes the leakage of cell membrane (1)

Gentamycin

Amphotericin

Idoxuridine

Ethambutol

11) Ame's test is for testing substances for (1)

Mutagenicity

Allergy

Immunogenicity

Pyrogenicity

12) Which of the following is an antiprotozoal drug? (1)

Chloroquine

Amantadine

Griseofulvin

Pyrantel pamoate

13) How can codeine be helpful in the treatment of cough? (1)

Mucolytic

Mucokinetic

Antitussive

Expectorant

14) Which of the following drugs is mucolytic agent? (1)

Guaiphenesin

Codeine

Noscapine

Bromhexine

- 15) Which of the following LABA (long acting β_2 agonists) used in COPD? (1)
- [Terbutaline](#)
[Indacaterol](#)
[Acidinium](#)
[Salbutamol](#)
- 16) Which of the following nasal decongestants acts through α -agonistic action? (1)
- [Xylometazoline](#)
[Almitrine](#)
[Chlophedianol](#)
[Chlorpheniramine](#)
- 17) Which of the following antimicrobial agent derived from bacteria? (1)
- [Colistin](#)
[Streptomycin](#)
[Penicillin](#)
[Griseofulvin](#)
- 18) Which of the following can be used to kill malarial HYPNOZOITES in liver? (1)
- [Primaquine](#)
[Artesunate](#)
[Artemether](#)
[Chloroquine](#)
- 19) Which of the following drug is used as TISSUE Amoebicide, and it can also be used in GIARDIASIS? (1)
- [Diloxanide](#)
[Tinidazole](#)
[Quiniodochlor](#)
[Paromomycin](#)
- 20) Drug of choice for acute amoebic dysentery (1)
- [Metronidazole](#)
[Diethylcarbamazine \(DEC\)](#)
[Albendazole](#)
[Pyrental pamoate](#)

II Long Answers

Answer all the questions.

- 1) Classify and describe the mechanism of action of any two classes of anticancer drugs. Write a note on the toxic effects of alkylating agents. (10)
- 2) Pictorially represent the replication cycle RNA virus and locate the anti-viral drugs intervening the process. Discuss the advantages of HAART therapy with any two examples of combination regimen (6+4) (10)

III Short Answers

Answer all the questions.

- 1) Discuss the mechanism of action of proton pump inhibitors. Why are they given half an hour before breakfast? (5)
- 2) Classify anti-TB drugs and explain the mechanism of action of INH, List their toxic effects. (5)

- 3) Describe the mechanisms of action of sirolimus and tacrolimus as immunosuppressants. (5)
- 4) Explain the general principles in the management of poisoning. (5)
- 5) Discuss the general mechanism of resistance in antimicrobial therapy (5)
- 6) With an example, classify any five class of anti-asthmatic drugs based on their mechanism of action. (5)
- 7) Discuss the mechanism of action of metronidazole and its therapeutic uses. (5)

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