Total No. of printed pages = 6

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Roll No. of candidate | | | | | | | | | | |

2021

D.Pharm Part–II (Regular) End-Term Examination

PHARMACOLOGY AND TOXICOLOGY

Full Marks – 80 Time – Three hours

The figures in the margin indicate full marks
for the questions.

1. Answer the following (MCQ) : (20 × 1 = 20)

(i) Which is a folic acid antagonist?

(a) Methotrexate

(b) Cyclosporine

(c) Penicillamine

(d) Chloramphenicol

(ii) Cough is the common side effect with

(a) ACE inhibitors

(b) Alpha receptor blockers

(c) Arteriolar Dilators

(d) Selective beta-blockers

(iii) Which of the following is an antibiotic?

(a) Methotrexate

(b) Penicillin

(c) Dapsone

(d) Cotrimoxazole

[Turn over

(iv) Which of the following demonstrates bacteriocidal effect?

(a) Sulfonamides

(b) Tetracycline

(c) Aminoglycosides

(d) Chloramphenicol

(v) The apparent volume of distribution is related to?

(a) Absorption

(b) Distribution

(c) Metabolism

(d) Excretion

(vi) Following diuretics acts on the Na channel of the collecting duct.

(a) Spironolactone

(b) Furosemide

(c) Amiloride

(d) Thiazides

(vii) Amlodipine acts by?

(a) Blocking Na^+ Channel

(b) Blocking K^+ Channel

(c) Opening K^+ channel

(d) Blocking Ca^{2+} Channel

(viii) Atorvastatin is a

(a) MTP inhibitor

(b) HMG – CoA reductase inhibitors

(c) Lipoprotein lipase activators

(d) Bile acid-binding resins

(ix) A prodrug is

(a) The prototype member of a class of drugs

(b) The oldest member of a class of drugs

(c) An inactive drug that is transformed in the body to an active metabolite

(d) A drug that is stored in body tissues and is then gradually released into the circulation

(x) G-protein coupled receptors span the plasma membrane as a bundle of _____ alpha-helices

(a) One

(b) Three

(c) Seven

(d) Ten

(xi) Bio-transformation

(a) Renders the drug more lipid-soluble

(b) Can be altered by drugs

(c) Is necessary for all drugs for their elimination

(d) Takes place only in the liver

(xii) Blood glucose is decreased by which of these hormones?

(a) Growth hormone

(b) Thyrotropin

(c) Insulin

(d) Glucagon

(xiii) Actions of growth hormone include the following except

(a) Increase protein synthesis

(b) Increased fat utilization

(c) Increase carbohydrate utilization

(d) Glucose tolerance

(xiv) Acetylcholine secreted by preganglionic nerve ending acts on which type receptors?

(a) M_1

(b) M_2

(c) Nm

(d) Nn

(xv) Which of the following is an intravenous anesthetic?

(a) Thiopental

(b) Ethomidate

(c) Propofol

(d) Ketamine

(e) All of the above

(xvi) Which one of the following is not an ester local anesthetic?

(a) Cocaine

(b) Procaine

(c) Lidocaine

(d) Benzocaine

(xvii) The mechanism of stimulant purgative is

(a) Increasing the volume of non-absorbable solid residue

(b) Increasing motility and secretion

(c) Altering the consistency of the feces

(d) Increasing the water content

(xviii) Which of the following antimalarial drug has a gametocidal effect?

(a) Mefloquine

(b) Primaquine

(c) Doxycycline

(d) Sulfonamide

(xix) A receptor that itself has enzymatic property is?

(a) Insulin receptor

(b) Thyroxine receptor

(c) Progesterone receptor

(d) Glucagon receptor

(xx) Which of the following drug is a cycloxygenase-3 inhibitor?

(a) Aceclofenac

(b) Aspirin

(c) Paracetamol

(d) Diclofenac

2. Answer any *six* questions : (6 × 5 = 30)

(a) Classify sulfonamides. Explain the mechanism of action of cotrimoxazole. (2+3)

(b) Classify Local anesthesia. Explain the mechanism of action and side effects of Lignocaine. (1+4)

(c) Classify NSAIDs with the mechanism of action. (3+2)

(d) Classify the receptors of the sympathetic nervous system. Write the pharmacological action of Propanolol. (5)

(e) Explain the mechanism of action of oral contraceptives. (5)

(f) Classify General anaesthesia. Explain the different stages of General anesthesia. (1+4)

(g) Classify antihypertensive agent? Write a note on Angiotensin-converting enzyme (ACE) inhibitors. (1+4 = 5)

(h) What is Arrhythmia? Classify antiarrhythmic drugs. Write a brief note on Calcium channel blockers. (1+1+3 = 5)

(i) Write a note on drug metabolism. (5)

3. Answer any *three* questions : (3 × 10 = 30)

(a) (i) Classify Diuretics. (2)

(ii) Explain the mechanism of action and adverse effects of loop diuretics. (4)

(iii) Write a note on potassium-sparing diuretics. (4)

(b) (i) Define the terms: Pharmacology, Pharmacokinetics, and Pharmacodynamics. (3)

(ii) Write the different routes of drug administration. (2)

(iii) Explain the advantages and disadvantages of the sublingual route of administration. (5)

(c) (i) Classify the receptors and their locations of the parasympathetic nervous system. (2)

(ii) Explain the pharmacology of Acetylcholine. (4)

(iii) Write a note on Anticholinesterase. (4)

(d) (i) What is a peptic ulcer? (2)

(ii) Classify the drugs used in peptic ulcers. (2)

(iii) Explain the role of antihistaminics in peptic ulcers. (3)

(iv) Explain the mechanism of osmotic purgatives. (3)

(e) (i) Classify antidiabetic drugs. (2)

(ii) Explain the mechanism of Sulphonylureas. (4)

(iii) Write a note on various thyroid inhibitors. (4)

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