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PY 132607

Roll No. of candidate



B. Pharm 6th Semester End-Term Examination

PHARMACOLOGY – II

Full Marks – 100 Pass Marks – 35 Time – Three hours

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

GROUP – A

Answer *all* the questions.

Answer the following questions (Q1 to 12 carries 2 marks each) : $2 \times 12 = 24$

- (i) A 68-year old man is being treated for atrial arrhythmia. He complains about headache, dizziness and tinnitus. Which one of the antiarrhythmic drugs is most likely to cause the problems and why ?
 - Amlodipin.
 - Procainamide.

[Turn over

- (c) Propranolol
- (d) Quinidine
- (ii) This person also showing congestion in heart and body swell up. Doctor in ICU prescribes Digoxin in normal therapeutic dose. But the patient showing toxicity, cardiac arrest due to
- (a) Low plasma level of Digoxin.
- (b) High plasma protein binding fraction of Digoxin.
- (c) Low elimination of Digoxin.
- (d) Displacement of Digoxin from binding site.
2. (i) A patient with angina pectoris prescribe GTN tab sublingually because
- (a) GTN reduce the blood pressure.
- (b) GTN cause reduction in preload, after load and redistribution.
- (c) GTN cause only after load reduction.
- (d) GTN increase urinary volume.

(ii) Doctor change the drug GTN to Dipyridamole but angina aggravated because

- (a) Dipyridamole increase blood supply in angina area.
- (b) Dipyridamole redistributed blood in angina area.
- (c) Dipyridamole dilates more resistance blood vessels in non-ischemic zone.
- (d) Dipyridamole dilated more resistance blood vessels ischemic zone.

3. (i) Auto rhythmic activity mainly due to opening of

- (a) Funny k^+ current in hyperpolarised state.
- (b) Ca^{++} current in hyperpolarised state.
- (c) Na^+ current in hyperpolarised state.
- (d) All of these.

(ii) The principal action common to all class I antiarrhythmic drugs

- (a) Na^+ channel blockade.
- (b) K^+ channel opening.

- (c) Depression of impulse conduction.
 - (d) Prolongation of effective refractory period.
4. (i) ATI receptor blocker preferable because ACEI having ——— side effect.
- (ii) Which of the following drug is ATI receptor blocker ?
- (a) Valsertan
 - (b) Quinidine
 - (c) Propanolol
 - (d) Verapamil
5. (i) Mechanism of action of Tranexamic acid is
- (a) Binding with the lysine binding site of plasminogen and prevent combination with fibrin.
 - (b) Conversion of plasminogen to plasmin.
 - (c) Blocking platelet aggregation.
 - (d) All of these.
- (ii) An example of drug that promote the conversion of plasminogen to plasmin are called ——— agent.

6. (i) Example of drug used as Osmotic diuretic is

- (a) Furosemide
- (b) Hydrochlor Thiazide
- (c) Mannitol
- (d) Acetazolamide

(ii) Osmotic diuretics are used in _____ disease.

7. Vitamin used to reduce cholesterol is _____ and
Vitamin reduce bleeding is _____.

8. In glaucoma PG analogue is used is _____ and
_____ group of diuretics are used in glaucoma.

9. (i) Granisetron is acting on _____ receptors.

(ii) A patient treated with anticancer drug
cisplatin and suffering from severe vomiting.
Drug of choice for him

- (a) Carbamazepine
- (b) Dicyclomine
- (c) Promethazine
- (d) Ondansetron

10. The name of a leukotriene receptor antagonist is _____ and name of a second generation antihistaminic is _____.

11. Bioassay method used to determine the effect of estrogen is _____ and digitalis is _____.

12. Phase III clinical trial is done to determine the _____ and pharmacovigilance is an important part of _____ phase of clinical trial.

13. Match the following : 0.5×6=3

<u>Drug</u>	<u>Mechanism of action</u>
(a) Fluticasone	(i) Antiplatelet drug
(b) Aspirin	(ii) Drug for COPD
(c) Ferrus fumerate	(iii) Heparin antagonist
(d) Protamin sulphate	(iv) 5HT _{1B/1D} blocker
(e) Isosorbide	(v) Hypochromic anemia
(f) Rizatriptan	(vi) Angina pectoris

14. Match the following : 0.5×6=3

<u>Drug</u>	<u>Toxicity</u>
(a) Heparin	(i) Constipation
(b) Inhalation Steroid	(ii) Arrhythmia
(c) Quinidine	(iii) Hypokalaemia
(d) Thiazide Diuretics	(iv) Drowsiness
(e) Chlorpheniramine	(v) Bleeding
(f) Ferrus Gluconate	(vi) Immunesuppression

GROUP – B

Answer any *eight* questions. 5×8= 40

15. Classify antihypertensive drugs on the basis of its mechanism of action and give at least two examples of each class. 5
16. Describe in details about the mechanism of action of Cardiac Glycoside and management of digitalis poisoning. 5
17. Classify H₁ antagonist with examples. Mention their pharmacological applications. 5

18. Describe different types of serotonin receptors, their occurrence, role, important agonist and antagonist. 5
19. Describe the cause, types, symptoms, management and prophylaxis of migraine. 5
20. Write an overview on different phases of clinical trial. 5
21. What are the special features of inhalation steroids used in the treatment of COPD and Asthma? Explain the terms with examples of drugs. 5
22. Write short notes on the following topics :
2.5×2=5
- (a) Expectorants
 - (b) Approaches in the treatment of Asthma.
23. Write down the management of different types of hyperlipidemia with the drugs available. 5
24. Describe in detail about three matching, interpolation and 3 point bioassay with examples. 5

GROUP - C

Answer any *three* questions. $3 \times 10 = 30$

25. Classify antiarrhythmic drugs with their mechanism of action and at least two examples of each class. Explain in details about why nitrates are regarded as novel drug in the management of angina pectoris. $5+5=10$
26. Classify diuretics with examples, on the basis of their site and mechanism of action. Describe in details about the mechanism of action of potassium sparing diuretics. $6+4=10$
27. Describe in details about new drug discovery process and regulatory guidelines associated with this process. 10
28. Write down the mechanism of action, pharmacology, therapeutic uses of following drug with examples of each class : $2.5+2.5+2.5+2.5=10$
- (i) Antiplatelet drug
 - (ii) Fibrinolytic agents
 - (iii) Oral anticoagulant
 - (iv) Vitamin K.

