

Exam Date & Time: 05-Mar-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Pharmacology II [PHA-BP503T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

- 1) Which among the following causes hyperpolarization of excitable cardiac cells? (1)
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|-----------------|--------------|------------|------------------|
| 1) Disopyramide | 2) Mexiletin | 3) Sotalol | 4) Acetylcholine |
|-----------------|--------------|------------|------------------|
- 2) Among the following drugs that dilate blood vessels, choose the one that is predominantly venodilator? (1)
- | | | | |
|-------------------------|---------------|--------------|-----------------|
| 1) Isosorbide dinitrate | 2) Nifedipine | 3) Verapamil | 4) Dipyridamole |
|-------------------------|---------------|--------------|-----------------|
- 3) Which among the following hyperlipidaemic drugs act via a GPCR? (1)
- | | | | |
|--------------|----------------|-----------------|-------------------|
| 1) Ezetimibe | 2) Fenofibrate | 3) Atorvastatin | 4) Nicotinic acid |
|--------------|----------------|-----------------|-------------------|
- 4) Which among the following carries iron in the blood stream? (1)
- | | | | |
|----------------|----------------|---------------------------------|-------------|
| 1) Ferroportin | 2) Transferrin | 3) Divalent metal transporter-1 | 4) Ferritin |
|----------------|----------------|---------------------------------|-------------|
- 5) Which among the following cannot be used as a styptic? (1)
- | | | | |
|-----------|------------|-------------|--------------|
| 1) Fibrin | 2) Gelatin | 3) Thrombin | 4) Lepirudin |
|-----------|------------|-------------|--------------|
- 6) All the following drugs prevent bleeding, except (1)
- | | | | |
|-------------------------------|--------------|---------------------|--------------|
| 1) Epsilon amino-caproic acid | 2) Aprotinin | 3) Tranexaemic acid | 4) Urokinase |
|-------------------------------|--------------|---------------------|--------------|
- 7) Which of the following antiplatelet drugs act by blocking a purinergic receptor? (1)
- | | | | |
|----------------|-----------------|--------------|-----------------|
| 1) Ticlopidine | 2) Dipyridamole | 3) Abciximab | 4) Eptifibatide |
|----------------|-----------------|--------------|-----------------|
- 8) Which among the following is a second-generation anti-histaminic drug? (1)
- | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
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|--|--|--|--|--|--|--|--|--|--|

1) |Rupatidine| 2) |Cyclizine| 3) |Cinnarizine| 4) |Hydroxyzine|

9) When 5-hydroxytryptamine is metabolised, the following compound is produced -

1) |Tyrptophan| 2) |Indole acetic acid| 3) |Imidazole acetic acid| 4) |Vanillyl mandelic acid| (1)

10) Choose the drug with poor anti-inflammatory action.

1) |Indomethacin| 2) |Acetaminophen| 3) |Naproxen| 4) |Diclofenac| (1)

11) All the following drugs can modulate RAAS, except-

1) |Clonidine| 2) |Captopril| 3) |Nicardipine| 4) |Saralasin| (1)

12) Which of the following highly potent drug decreases A-V conduction in the heart?

1) |a) Digoxin| 2) |b) Adrenaline| 3) |c) Amiodarone| 4) |d) Chlorthalidone| (1)

13) Which of the hormone acts on renal collecting ducts?

1) |Vasopressin| 2) |Oxytocin| 3) |Renin| 4) |Angiotensin| (1)

14) Which hormone is released in higher concentration during breastfeeding and inhibits ovulation and prevent pregnancy for several months after postpartum?

1) |Prolactin| 2) |Estrogen| 3) |Progesterone| 4) |Oxytocin| (1)

15) What is the mechanism of action of propylthiouracil?

1) |Inhibition of thyroid hormone synthesis| 2) |Inhibition of iodide trapping by thyroid glands| 3) |Inhibition of release of thyroxin hormone from thyroid glands| 4) |Destruction of thyroid tissue and can be used in thyroid cancers| (1)

16) Which hormone is responsible for the fusion of epiphyses in both boys and girls?

1) |Estradiol| 2) |Progesterone| 3) |Cortisone| 4) |Cortisol| (1)

17) "Dope Test" is carried-out in athletes during the athletic competitions for one of the following drugs. Identify

1) |Methandienone| 2) |Medroxyprogesterone| 3) |Ethinyl estradiol| 4) |Dopamine| (1)

18) What is the target of oxytocin on the uterus? (1)

1)	Specific G-protein coupled oxytocin receptors signalling	2)	Nuclear Oxytocin receptors with zinc-finger	3)	Non-specific actions on the uterus to induce contraction	4)	Transmembrane kinase receptor signalling
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19) Among the following drugs, bioassay of which of the following drugs show "All or None" response? (1)

1)	ACTH	2)	Digoxin	3)	Heparin	4)	Adrenaline
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20) Which organisation does the biostandardisation for biologicals? (1)

1)	WHO	2)	UNESCO	3)	USFDA	4)	CDCSCO
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II Long Answers

Answer all the questions.

- 1) Describe the mechanism of action and pharmacological actions of insulin. Briefly discuss the different insulin preparations and the adverse reactions of insulin. (10)
- 2) Define and classify androgens with examples. Describe the actions of androgens and anabolic steroids, listing therapeutic applications. (10)

III Short Answers

Answer all the questions.

- 1) Depict how the actions of a) propafenone and b) bretylium could be useful in the management of arrhythmia. (5)
- 2) Write the differences in the anti-coagulant mechanisms of warfarin and heparin. (5)
- 3) Giving examples, list the uses of serotonergic drugs. (5)
- 4) Explain how leflunomide and sulfasalazine are useful as anti-rheumatoid drugs. (5)
- 5) With examples of drugs, discuss the rationale of blocking the renin-angiotensin aldosterone system in hypertension. (5)
- 6) Discuss the mechanism of action of furosemide and chlorthalidone? Explain their pharmacological uses. (5)

7) Discuss the therapeutic actions and adverse drugs reactions of corticosteroids

(5)

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