

2021

PHARMACOLOGY

Paper — II

Full Marks : 100

Time : 3 hours

Answer all questions

The figures in the right-hand margin indicate marks

Use separate answer sheet for Section-A and Section-B

SECTION — A

1. A 50-years-old male patient, a known case of hypertension for the past two years came to the out-patient department for a routine follow up. He was on hydrochlorothiazide 25 mg for the past two years. On examination his blood pressure was 150/86 mm of Hg. There were no other unusual findings. On investigations, his

(2)

FBS was 167 mg/dl and two-hour post prandial blood glucose was 200 mg/dl. 5 + 2 + 3

(a) Which antihypertensive drug(s) should be preferred in this patient? Justify with reasons. Explain the mechanism of action and adverse effects expected with these drugs.

(b) Can hydrochlorothiazide be continued in this patient? Explain.

(c) A few years later, if the patient's blood pressure is poorly controlled, which anti-hypertensive combination should be preferred? Justify.

2. Classify antithyroid drugs. Discuss mechanism of action and adverse action of thyroid synthesis inhibitors. 5 + 5

3. Explain the rationale for the following : 4 × 5

(a) Folinic acid rescue after a chemotherapeutic infusion for acute lymphoblastic leukemia.

(3)

(b) MESNA is administered with ifosfamide.

(c) Levofloxacin as respiratory fluoroquinolones.

(d) Combination of Amphotericin B and Fluconazole in systemic fungal infection.

(e) Compare and contrast between Oxytocin and Carboprost in obstetrics practice.

4. Answer the following questions : 1 × 5

(a) Write the drug treatment of Acute amoebic dysentery.

(b) Write the drug treatment of post exposure prophylaxis for HIV infection.

(c) Write the drug treatment of Scabies.

(d) Indications and contraindications of Radio-active iodine.

(e) Indications of fibrinolytic agents.

5. MCQs :

1 × 5

(a) Peripheral neuritis is caused by use of following drug :

- (i) Isoniazid
- (ii) Pyrazinamide
- (iii) Rifampicin
- (iv) Pyridoxin

(b) Super infection is resulted due to use of

- (i) Tetracyclines
- (ii) Amoxicillin
- (iii) Cefadroxyl
- (iv) Azithromycin

(c) Which of the following drug used topically in glaucoma

- (i) Timolol
- (ii) Phenacetin
- (iii) Tropicamide
- (iv) Acetazolamide

(d) Which of the following drug causes hyperglycaemia

- (i) Thiazides
- (ii) Amiloride
- (iii) Spiranolactone
- (iv) Triamterine

(e) Drug of choice of anaphylactic shock is

- (i) Adrenaline
- (ii) Dopamine
- (iii) Nor adrenaline
- (iv) Vasopressin

SECTION – B

6. A 26-years-old man living in Bhubaneswar presented with high grade fever 105°F with chills and rigors. Patient is delirious and passed 200 ml of urine in past 24 hours. Blood smear examination showed presence of intra-erythrocytic Plasmodium Falciparum. 5 + 3 + 2

- (a) What treatment regimen should be followed for this patient according to the National Programme.
- (b) Discuss the advantages of this treatment.
- (c) List two adverse effects of this therapy.
7. A 35 years lady comes to you fever and burning sensation of micturation. Urine microscopy reveals 6-8 pus cells/HPF. She diagnosed to be Urinary tract infection. $4 + 3 + 3$
- (a) What is the drug and non-drug treatment of this case ?
- (b) How will you monitor the therapy ?
8. Answer the following questions : 4×5
- (a) Write the therapeutic basis of frusemide in acute pulmonary oedema.
- (b) Write the adverse effect profile of combined oral contraceptive pills.

- (c) Write the Therapeutic uses of vitamin E.
- (d) Use of isopropyl alcohol as disinfectant.
- (e) Name the Antifungals used for Mucormycosis.
9. Fill in the blanks : 1×5
- (a) Vitamin B12 Deficiency is common with which anti diabetic drug _____.
- (b) Ulipristal acetate is _____.
- (c) Drug of choice of exercise induce angina _____.
- (d) Drug of choice of scrub typhus is _____.
- (e) Parathormone derivative used for treatment of osteoporosis is _____.
10. MCQs : 1×5
- (a) Which of the following Anti biotic Produce Thrombocytopenia

- (i) Cefixime
 - (ii) Amikacin
 - (iii) Azithromycin
 - (iv) Linezolid
- (b) Which of the following drug may produce Haemolysis
- (i) Primaquine
 - (ii) Chloroquine
 - (iii) G6PD Enzyme
 - (iv) Artesunate
- (c) Which of the following is not an adverse reaction with Erythropoitin
- (i) Hypertension
 - (ii) Hypotension
 - (iii) Thromboembolic events
 - (iv) Seizure
- (d) Which of the following is anti-pseudomonal -antibiotic ?
- (i) Ciprofloxacin

- (ii) Vancomycin
 - (iii) Cefaclor
 - (iv) Chloramphenicol
- (e) Most mitogenic anti-cancer drug is
- (i) Cis-platin
 - (ii) Cyclophosphamide
 - (iii) Methotrexate
 - (iv) Bleomycin
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