

- (iii) Why clavulanic acid is combined with amoxicillin?
- (a) To kill bacteria that are not killed by amoxicillin
 - (b) To retard renal excretion of amoxicillin
 - (c) To counteract the adverse effects of amoxicillin
 - (d) To inhibit beta lactamases that destroy amoxicillin
- (iv) Which antibiotic is primarily bacteriostatic but becomes bactericidal at higher concentrations:
- (a) Erythromycin
 - (b) Tetracycline
 - (c) Chloramphenicol
 - (d) Ampicillin
- (v) The following antibiotic accentuates the neuromuscular blockade produced by pancuronium
- (a) Streptomycin
 - (b) Erythromycin
 - (c) Penicillin G
 - (d) Chloramphenicol
- (vi) Which of the following is a steroid 5 α -reductase inhibitor that has been found useful in benign prostatic hypertrophy and male pattern baldness
- (a) Flutamide
 - (b) Finasteride
 - (c) Prazosin
 - (d) Minoxidil

(vii) Glucose entry in which of the following organ/tissue is highly dependent on the presence of insulin?

- (a) Brain (b) Liver
(c) Muscle (d) Kidney tubules

(viii) A short course of potassium iodide was administered before surgery to remove gland. Which of the following statements best explains why this drug was given to the patient?

- (a) To stimulate thyroid hormone synthesis before surgery
(b) To overcome iodine deficiency after surgery
(c) To reduce the size and vascularity of the thyroid gland
(d) To decrease the risk of hypothyroidism after surgery

(ix) The 1st phase of insulin release from pancreatic cells is stimulated by

- (a) Glibenclamide
(b) Metformin
(c) Nateglinide
(d) Both (a) and (c)

(x) Cisapride enhances gastrointestinal motility by

- (a) Activating serotonin 5-HT₄ receptor
(b) Activating muscarinic M₃ receptor
(c) Blocking dopamine D₂ receptor
(d) All of the above

- (xi) The characteristic toxicity of doxorubicin is
- (a) Kidney damage
 - (b) Liver damage
 - (c) Cardiomyopathy
 - (d) Pulmonary fibrosis
- (xii) First line antitubercular drugs include the following except
- (a) Ciprofloxacin
 - (b) Streptomycin
 - (c) Pyrazinamide
 - (d) Ethambutol

Answer any SIX questions : (6 × 15 = 90)

2. (a) What is beta lactam antibiotic? Describe mode of action and adverse affect of penicillin, erythromycin and sulfadoxine. (2 + 6 = 8)
- (b) What is co-trimoxazole? Explain resistance, cross-resistance and superinfection with suitable example. (1 + 6 = 7)
3. (a) Discuss the mechanism of action and adverse affects of isoniazid and rifampicin. Brief about DOTs therapy of tuberculosis. (6 + 3 = 9)
- (b) Explain the mode of action of amphotericin and itraconazole as antifungal agents. (6)

4. (a) Discuss about the therapy of AIDS. How mother to fetus transmission of HIV can be minimized? (6 + 2 = 8)

(b) Describe about insulin receptor and insulin action. Brief different types of insulin preparation available. (5 + 2 = 7)

5. (a) Describe about pharmacotherapy of peptic ulcer and GERD. What is sucralfate? Brief its interaction with antacid. (6 + 1 + 1 = 8)

(b) Explain the mechanism and adverse affect of metoclopramide. Write the mode of action and use of loperamide. Brief about different digestant. (3 + 2 + 2 = 7)

6. (a) Describe the bio-synthetic pathway of thyroid hormone. Explain the mechanism of actions of propylthiouracil and radio iodine. (5 + 4 = 9)

(b) Brief the types and action of oral contraceptive pill. (6)

7. (a) Classify oral hypoglycemic agent. Explain the mechanism of action Glimepiride and vidagliptin. Write the adverse affect of Glimepiride. (2 + 6 + 1 = 9)

(b) Briefly discuss the treatment of organophosphorus and opioids poisoning. (3 + 3 = 6)

8. (a) Describe the pharmacology and therapeutic uses of corticosteroids. Give example of inhaled corticosteroid. (5 + 2 = 7)
- (b) Brief the therapeutic uses of clomiphene citrate, isoxsuprine, nandrolone, and Cholecalciferol. (2 + 2 + 2 + 2 = 8)
9. (a) Discuss the common side effects of antineoplastic drugs. Explain the mode of action of methotrexate and vincristine. Brief hormone therapy for cancer. (2 + 6 + 2 = 10)
- (b) Describe the mechanism of action and adverse effect of chloroquine. (5)
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