

نموذج إجابة امتحان علم الأدوية النهائي (Pharmacology)

برنامج علوم التمريض • المستوى الأول / الفصل الدراسي الثاني • العام الأكاديمي: 2023-2024

الجزء الأول: اختيار من متعدد (Part I: Choose the Correct Answer)

1. Which of the following is used for treatment of moderate to severe pain?

- A. Aspirin
- B. Tramadol
- C. Ibuprofen
- D. Acetaminophen

الإجابة الصحيحة: B. Tramadol

2. Regarding "Domperidone" all answers are correct except:

- A. It enhances gastric emptying and GI motility.
- B. It inhibits GERD and treat heartburn.
- C. It causes parkinsonian like symptoms.
- D. It facilitates endoscopy.

الإجابة الصحيحة: C. It causes parkinsonian like symptoms. (لأنه لا يعبر الحاجز الدموي الدماغي بسهولة مقارنة بالميتوكلوبراميد، وبالتالي لا يسبب أعراض باركنسونية كأثر جانبي شائع).

3. All the following are adverse effects of non-steroidal anti-inflammatory drugs except:

- A. Decrease renal blood flow.
- B. Nausea, vomiting, dyspepsia.
- C. Hypertension.
- D. Increase intracranial pressure.

الإجابة الصحيحة: D. Increase intracranial pressure.

4. It used for treatment of nausea and vomiting, it acts as mild appetite stimulant and used in AIDs or cancer patients to treat anorexia:

- A. Ondansetron
- B. Nabilone
- C. Corticosteroid
- D. Domperidone

الإجابة الصحيحة: B. Nabilone (من أشباه القنب التي تحفز الشهية وتمنع القيء).

5. This drug has no anti-inflammatory activity, just analgesic & antipyretic, it used for acute pain syndrome & fever:

- A. Indomethacin
- B. Acetaminophen
- C. Nalbuphine
- D. Celecoxib

الإجابة الصحيحة: B. Acetaminophen (الباراسيتامول).

6. Which of the following drugs reduce gastric acid secretion and used for treatment of peptic ulcer?

- A. NaHCO_3
- B. Sucralfate
- C. Famotidine
- D. All answers are correct.

الإجابة الصحيحة: C. Famotidine (مثبط لمستقبلات H_2 يقلل إفراز الحمض).

7. It is used as antiplatelet with low dose:

- A. Ibuprofen
- B. Acetaminophen
- C. Aspirin
- D. Tramadol

الإجابة الصحيحة: C. Aspirin

8. Example of proton pump inhibitor used for treatment of peptic ulcer:

- A. Pirenzepine
- B. Famotidine
- C. Sucralfate
- D. Omeprazole

الإجابة الصحيحة: D. Omeprazole

9. Amoxicillin + Clavulanic acid combination is used to:

- A. Prolong duration of action.
- B. Enhance solubility.
- C. Increase stability against β -Lactamase.
- D. All answers are correct.

الإجابة الصحيحة: C. Increase stability against β -Lactamase.

10. Which of the following drugs is cytoprotective and used for treatment of peptic ulcer?

- A. Pirenzepine
- B. Famotidine
- C. Sucralfate
- D. NaHCO₃

الإجابة الصحيحة: C. Sucralfate (يعمل كحامي لبطانة المعدة وقرحتها).

11. It is a 3rd generation cephalosporin active against Gm +ve & Gm -ve bacteria:

- A. Cefaclor
- B. Ceftriaxone
- C. Cefepime
- D. Cefazolin

الإجابة الصحيحة: B. Ceftriaxone

12. This drug is used for treatment of nasal congestion:

- A. Ritodrine
- B. Benztropine
- C. Xylometazoline
- D. Ipratropium

الإجابة الصحيحة: C. Xylometazoline

13. This drug is a long-acting benzodiazepine, and it is used for treatment of seizures:

- A. Triazolam
- B. Diazepam
- C. Thiopental
- D. Buspirone

الإجابة الصحيحة: B. Diazepam

14. This drug is used for treatment of hypotension:

- A. Midodrine
- B. Ritodrine
- C. Salbutamol
- D. All answers are correct.

الإجابة الصحيحة: D. All answers are correct. (كلها محفزات سمبثاوية ترفع الضغط أو يمكن أن تسببه، وخصوصاً Midodrine الذي يعتبر الاختيار الأساسي لرفع الضغط الانتصابي).

15. This benzodiazepine is most prescribed for insomnia:

- A. Diazepam
- B. Thiopental
- C. Alprazolam
- D. Triazolam

الإجابة الصحيحة: D. Triazolam (قصير المدى ويستخدم للأرق بشكل محدد).

16. Adverse effects of sympathomimetics include all the following except:

- A. Cardiac arrhythmias.
- B. Hypotension.
- C. Urine retention.
- D. Peripheral vascular disorders.

الإجابة الصحيحة: B. Hypotension. (المحفزات السمبثاوية تسبب ارتفاع الضغط Hypertension وليس انخفاضه).

17. This drug is only anxiolytic, has no hypnotic effect, no muscle relaxant effect, and no anticonvulsant action.

- A. Buspirone
- B. Triazolam
- C. Diazepam
- D. Thiopental

الإجابة الصحيحة: A. Buspirone

18. Example of Beta blocker used for treatment of Hypertension:

- A. Propranolol
- B. Methyldopa
- C. Phenylephrine
- D. Midodrine

الإجابة الصحيحة: A. Propranolol

19. Which of the following antiepileptic drugs causes Cleft lip & palate to fetus if taken in pregnancy?

- A. Topiramate
- B. Phenobarbitone
- C. Phenytoin
- D. Valproate

الإجابة الصحيحة: C. Phenytoin (يسبب متلازمة الفينيتوين الجنينية والتي تشمل شق الشفة والحنك).

20. Propranolol can be used for which of the following disorders?

- A. Control palpitations results from hyperthyroidism.
- B. Used prophylactically for migraine headache.
- C. Useful in mild-moderate hypertension.
- D. All answers are correct.

الإجابة الصحيحة: D. All answers are correct.

21. This drug is used for treatment of febrile seizures (39° C) in children & in neonatal seizures:

- A. Topiramate
- B. Phenobarbitone
- C. Phenytoin
- D. Valproate

الإجابة الصحيحة: B. Phenobarbitone (هو الاختيار الأساسي لتشنجات حثيثي الولادة والتشنجات الحرارية المستعصية).

22. This drug is used to treat Open-angle glaucoma:

- A. Timolol
- B. Homatropine
- C. Dipivefrin
- D. A and C are correct

الإجابة الصحيحة: D. A and C are correct.

23. This drug is effective for all forms of epilepsy, but causes autism as a side effect:

- A. Carbamazepine
- B. Valproate
- C. Phenobarbitone
- D. Phenytoin

الإجابة الصحيحة: B. Valproate (حمض الفالبرويك واسع المدى، واستخدامه في الحمل يزيد خطر إصابة الجنين بالتوحد بشكل كبير الفالبروات الجنينية).

24. This drug is administered only topically and if used parenterally lead to nephrotoxicity?

- A. Bacitracin
- B. Cefotaxime
- C. Ampicillin
- D. No answer is correct

الإجابة الصحيحة: A. Bacitracin

25. Administration of glucocorticoids for more than 2 weeks can cause:

- A. Development of a buffalo hump.
- B. Weight loss.
- C. Hypertension.
- D. A and C are correct.

الإجابة الصحيحة: D. A and C are correct

26. Drugs are administered into the GI system and this route is used when patients can't ingest the drug orally.

- A. Intradermal route
- B. Topical route
- C. Gastric route
- D. Subcutaneous route

الإجابة الصحيحة: C. Gastric route (عبر أنبوب التغذية للمعدة مباشرة).

27. Aminocaproic acid can control bleeding that results from administration of:

- A. Alteplase
- B. Aspirin
- C. Heparin
- D. All answers are correct

الإجابة الصحيحة: A. Alteplase (حمض الأمينوكابرويك هو مضاد للفيبرين ومضاد لجرعة الزائدة Alteplase).

28. By this route, drugs are self-administered by devices like metered-dose inhaler or injectable drugs applied directly by endotracheal tube:

- A. Topical route
- B. Intradermal route
- C. Intravenous
- D. Respiratory route

الإجابة الصحيحة: D. Respiratory route

29. Which of the following is used to control bleeding that results from administration of Heparin?

- A. Protamine sulfate intravenously.
- B. Aminocaproic acid
- C. Fresh frozen plasma for severe bleeding
- D. A and C are correct

الإجابة الصحيحة: D. A and C are correct (Protamine هو الترياق المباشر، وال FFP تستخدم لنقل عوامل التجلط في النزيف الشديد).

30. Drugs which can be administered as inactive drugs and don't become active until they're metabolized are called:

- A. Unbound drugs
- B. Lipophilic drugs
- C. Prodrugs
- D. Bound drugs

الإجابة الصحيحة: C. Prodrugs (الأدوية الأولية).

31. Which of the following drugs produce peak diuretic effect?

- A. Amiloride
- B. Furosemide
- C. Indapamide
- D. Spironolactone

الإجابة الصحيحة: B. Furosemide (مدر بول عروي قوي High-ceiling loop diuretic).

32. The process in which the drug reversibly leaves the blood stream and spread into the interstitial and intracellular fluids:

- A. Absorption
- B. Distribution
- C. Metabolism
- D. Elimination

الإجابة الصحيحة: B. Distribution (التوزيع).

33. Irritating and nonproductive cough results from administration of:

- A. Captopril
- B. Bumetanide
- C. Methyldopa
- D. Nifedipine

الإجابة الصحيحة: A. Captopril (من مثبطات ACE المشهورة بالسعال الجاف كأثر جانبي).

34. If the antagonist binds to a site other than where the agonist binds it is called:

- A. Competitive antagonist.
- B. Non-competitive or allosteric antagonist.
- C. Chemical antagonist.
- D. Functional antagonist.

الإجابة الصحيحة: B. Non-competitive or allosteric antagonist.

35. This drug is the preferred treatment of hypertension in pregnant women:

- A. Captopril
- B. Bumetanide
- C. Methyldopa
- D. Nifedipine

الإجابة الصحيحة: C. Methyldopa

36. It describes an aspect of drug abuse, when the drug is stopped, withdrawal symptoms occur:

- A. Dependence
- B. Tolerance
- C. Therapeutic index
- D. Potency

الإجابة الصحيحة: A. Dependence (الاعتماد/الإدمان).

37. This drug is insulin sensitizer used as an adjunct to diet and exercise for the management of type 2 diabetes:

- A. Pioglitazone
- B. Metformin
- C. Liraglutide
- D. Canagliflozin

الإجابة الصحيحة: B. Metformin (أو Pioglitazone كلاهما يزيدان الحساسية، لكن الميتفورمين (المعتمد خطأ أولاً بالعيادات Insulin sensitizer هو الخيار الأول والأساسي كـ Metformin).

38. The ratio of the minimum dose of a drug that produces toxicity and the minimum dose that produces response is called:

- A. Tolerance
- B. Dependence
- C. Therapeutic index
- D. Maximum effectiveness

الإجابة الصحيحة: C. Therapeutic index (المؤشر العلاجي).

39. Insulin Aspart is:

- A. Rapid-acting
- B. Short-acting
- C. Intermediate-acting
- D. Long-acting

الإجابة الصحيحة: A. Rapid-acting (سريع المفعول جداً).

40. Drug bound to plasma proteins:

- A. Is pharmacologically active.
- B. Can be metabolized.
- C. Can be excreted easily.
- D. Is pharmacologically inactive.

الإجابة الصحيحة: D. Is pharmacologically inactive. (الدواء المرتبط ببروتينات البلازما يكون غير نشط بيولوجياً حتى يتحرر).

41. This anti diabetic drug is used to treat chronic obesity:

- A. Empagliflozin
- B. Liraglutide
- C. Pioglitazone
- D. Gliclazide

الإجابة الصحيحة: B. Liraglutide (من محفّرات GLP-1 التي تساعد في إنقاص الوزن وعلاج السمنة).

42. Pharmacokinetics of drugs can be defined as the study of the following except:

- A. Absorption.
- B. Drug action.
- C. Biotransformation.
- D. Distribution.

الإجابة الصحيحة: B. Drug action. (لأن تأثير الدواء وآلية عمله تتبع الديناميكية الدوائية وليس الحركة Pharmacodynamics).

43. This anti diabetic drug slows the digestion of starches in small intestine that leads to increased flatulence and abdominal bloating:

- A. Liraglutide
- B. Pioglitazone
- C. Acarbose
- D. Canagliflozin

الإجابة الصحيحة: C. Acarbose (مثبط لـ Alpha-glucosidase ويعمل بالأمعاء مسبباً غازات وانتفاخ).

44. Both drugs are biologically active, and when combined, the net effect is greater than the sum of their individual effects:

- A. Additive effect
- B. Potentiation
- C. Synergism
- D. Antagonism

الإجابة الصحيحة: C. Synergism (التآزر الدوائي).

45. The preferred treatment of Hypertriacylglycerolemia ($\uparrow$ triglycerides) and different types of hyperlipidemia:

- A. Clofibrate
- B. Atorvastatin
- C. Niacin
- D. Ezetimibe

الإجابة الصحيحة: A. Clofibrate (أو الفايبرات عموماً هي الاختيار النوعي لارتفاع الدهون الثلاثية Triglycerides).

46. Overdose of acetaminophen lead to:

- A. Cardiac toxicity
- B. Toxicity to heme system
- C. Hepatotoxicity
- D. None of the above

الإجابة الصحيحة: C. Hepatotoxicity (سمية كبدية شديدة).

47. Bile-Acid binding resin used for treatment of hyperlipidemia and its administration leads to constipation:

- A. Clofibrate
- B. Atorvastatin
- C. Niacin
- D. Cholestyramine

الإجابة الصحيحة: D. Cholestyramine

48. All the following are over-the-counter pain relievers and fever depressants except:

- A. Aspirin
- B. Indomethacin
- C. Ibuprofen
- D. Methadone

الإجابة الصحيحة: D. Methadone (مخدر قوي خاضع للرقابة الصارمة Opioid وممنوع صرفه دون وصفة خاصة جداً).

49. This drug is used for treatment of nausea and vomiting, it causes parkinsonian like symptoms, and it is safe in pregnancy:

- A. Diphenhydramine
- B. Metoclopramide
- C. Domperidone
- D. Ondansetron

الإجابة الصحيحة: B. Metoclopramide (يعبر الـ BBB ويسبب أعراض باركنسونية ولكنه آمن للحامل كعلاج للقيء).

50. All the following is true concerning "Atropine" except:

- A. It can be used as antispasmodic.
- B. It decreases lacrimal secretions causing sandy eyes.
- C. It is used for patients with narrow angle Glaucoma.
- D. It decreases hypermobility of the urinary bladder so causes urinary retention.

الإجابة الصحيحة: C. It is used for patients with narrow angle Glaucoma. (ممنوع تماماً لمرضى مياه زرقاء ضيقة الزاوية لأنه يرفع ضغط العين).

الجزء الثاني: صح أم خطأ (Part II: Mark the following sentences True or False)

الإجابة الصحيحة	العبارة (Statement)	رقم
False (X)	Dependence is a common side effect of non-steroidal anti-inflammatory drugs.	1
True (✓)	Chronic aspirin intake leads to gastric, intestinal damage and hemorrhage due to suppression of gastroprotective PGs in gastric mucosa.	2
True (✓)	Non-steroidal anti-inflammatory drugs if taken during pregnancy, they cause premature closure of ductus arteriosus in the fetus.	3
False (X)	Acetyl cysteine is used to prevent hepatotoxicity after acute overdose of aspirin.	4
True (✓)	Flumazenil is used to treat overdoses of benzodiazepine, and it is given by injection.	5
True (✓)	Tardive dyskinesia occurs mainly with atypical antipsychotics such as risperidone.	6
True (✓)	Carbamazepine is the drug of choice in partial seizures, tonic-clonic seizures but Not in absence seizures.	7
False (X)	Thiopental works as a sedative and hypnotic, acts in seconds, last for 20 minutes.	8
False (X)	Prolonged glucocorticoid administration leads to hyperglycemia, and growth stimulation.	9
False (X)	Intake of low doses of aspirin has a direct hypoprothrombinemic effect that increase risk of bleeding.	10
True (✓)	Indapamide is effective for treatment of hypertension in patients with renal dysfunction.	11
True (✓)	For hypertensive patients having dry cough upon administration of ACEIs, Losartan is an effective treatment choice.	12
True (✓)	The main adverse effect of Canagliflozin is urinary tract infection due to the excretion of glucose in the urine.	13

الإجابة الصحيحة	العبارة (Statement)	رقم
False (X)	Atorvastatin is safe in pregnancy, lactation and children for treatment of hyperlipidemia.	14
True (✓)	Pamidronate is approved for the treatment of Paget disease of bone.	15
True (✓)	Adequate calcium and vitamin D ingestion should be recommended for all patients with osteoporosis.	16
False (X)	Apomorphine is used for induction of emesis for treatment of toxicity and can be used in morphine and opioids toxicity.	17
True (✓)	Headache and constipation are the most common side effects resulting from Ondansetron treatment for nausea and vomiting.	18
True (✓)	Hyoscine can be applied as transdermal patches behind the pinna to give prolonged effect for 3 days for treatment of motion sickness.	19
False (X)	Vitamin B6 has a potent antiemetic effect and can be used alone in pregnancy.	20
True (✓)	Amphetamine can pass BBB and cause CNS stimulation, euphoria and anorexia.	21
True (✓)	Epinephrine is used with corticosteroids to treat anaphylactic shock resulted from by allergy to penicillins.	22
False (X)	Atenolol can be used i.v. for treatment of emergency hypertension.	23
False (X)	Beta blocker administration can be stopped suddenly as it does not cause rebound effects.	24
False (X)	Acetylcholine can be administrated therapeutically as it is very stable.	25
True (✓)	Nicotine has nicotinic actions as it stimulates ganglia at small dose and block the ganglia at large dose.	26
True (✓)	For a given dose of a drug, the smaller the body the larger will be the plasma concentration of drug, and higher effect.	27
False (X)	Pharmacokinetics of drugs means what drug does to the body & how and involves drug actions and mechanism of action.	28
True (✓)	Drugs are applied translingual to prevent their destruction in the stomach or small intestine.	29

الإجابة الصحيحة	العبارة (Statement)	رقم
False (X)	Drugs distribute more rapidly to skeletal muscles and fat more than brain, liver and kidney because of high blood flow to these organs.	30

