

Department of Pharmacy

Quaid.i.Azam University Islamabad

Sample Test, M.Phil Admission

Read each question carefully, for each question, there is ONE answer, circle the appropriate answer for each question.

- 1: Which one is the heaviest particulate component of the cell?
a) Nucleus b) Mitochondria d) Cytoplasm d) Golgi apparatus
- 2: The chief active constituent of fennel:
a) Carvone b) Borneol c) Dill-Apiole d) Fenchone
- 3: Which of the following statement do you agree with?
a) Quinolones are active against middle ear infection. b) Ciprofloxacin leads to clinical antagonism when used with cotrimoxazole c) Levofloxacin is used in urinary tract infections d) All of the above
- 4: Alkaloid present in Black pepper is:
a) Caryophyllene b) Cinnamaldehyde b) 1-phellandrene d) Piperine
- 5: Aceclofenac-----
a) Enhance glycosaminoglycan synthesis b) Causes GIT irritation. c) Somewhat selective on COX-2 and COX-
d) Belongs to narcotic analgesic e) All of the above
- 6: In Datura stramonium, the hyoscyne/hyoscyamine ratio fall about 80% in young seedling to ----- in mature fruiting plants.
a) 50% b) 40% c)10% d)30%
- 7: Poppy straw is the industrial raw material of morphine production because
a) Poppy straw contains only morphine b) Poppy straw does not contain other alkaloids c) Poppy straw has the maximum morphine content d) Poppy straw is the cheapest available raw material e) Poppy straw contains morphine derivative
- 8: Which one is a dibasic sugar acid?
a) Glucaric acid b) Glucuronic acid c) Uronic acid d) Gluconic acid
- 9: Which of the following is NOT the class of secondary metabolite.
a) Amino acids b) Terpenes c) Phenolics d) Alkaloids
- 10: How many isoprene units, are there in sesquiterpenes?
a) 1 b) 2 c) 3 d) 8
- 11: Which of the following statement regarding penicillin is not correct?
a) Methicillin is resistant to beta-lactamases b) Oral bioavailability of benzyl penicillin is poor c) Patient allergic to penicillin will be allergic to all penicillin. d) Probenecid increase penicillin excretion by blocking renal tubular reabsorption e) None of the above
- 12: Folic acid has tetrahydrofolate coenzyme activity which is based on the
a) Pyrimidine ring b) Purine ring c) Pyrazine ring d) Pteridine ring e) Pyridine ring
- 13: Vancomycin belong to the group of antibiotics-----;
a) Lincosamide antibiotic b) Polypeptide antibiotic c) Nitrofurantoin derivative d) Glycopeptide antibiotic
- 14: Which of the following terms indicates a loss of moisture?
a) Deliquescence b) Efflorescence c) Hygroscopicity d) Polymorphism e) Condensation
- 15: Which of the following statements is FALSE regarding tablet formulation?
a) Diluents are fillers to add bulk to the tablet b) Lubricants help the patient to swallow the tablet more easily c) Binding agents may be added dry or in solution d) Disintegrants draw water into the tablet causing it to burst e) Glidants promote the flow of materials during compression.
- 16: What is the right method for making assay for volatile oil content of drugs?
a) Water-damp distillation b) Extraction of light petrol c) Distillation by Marcusson's method
- 17: The anti-inflammatory action of glucocorticoids is due to;
a) Xanthine Oxidase b) Phospholipase A2 c) Cyclooxygenase d) Histidine decarboxylase
- 18: The oral colchicine in gout is avoided due to which of the following situation;
a) Hepatic damage b) Bronchospasm c) GIT disturbances d) Agranulocytosis
- 19: Factors that determine bioequivalence of two brands of a drug include the:

- a) Taste of the preparations. b) Physical appearance of the preparations. c) Pharmacokinetic parameters of the preparations. d) Cost of the preparations.
- 20: Lactose intolerance is classified as a(n):
 a) Allergy b) Enzyme deficiency c) Mineral deficiency d) Transporter abnormality e) Vitamin deficiency.
- 21: Which of the statement regarding Buprenorphine do you agree with?
 a) Good analgesic for naive patients but addicts b) Fast but longer duration of action up to 24 h c) Pharmacological effects are similar to pentazocine d) Has no significant effect in analgesic and respiratory depression
- 22: Which of the following statements regarding transcription is correct?
 a) The enzyme responsible for initiating transcription is RNA polymerase b) The enzyme responsible for initiating transcription is DNA polymerase c) During transcription, the genetic information contained in the nucleotide sequence of tRNA is translated into a protein structure. d) The process of transcription includes the splicing of exons.
- 23: Academic detailing by pharmacists provides a service to physicians by:
 a) Educating on improved prescription legibility b) Advising on optimal patient interviewing techniques. c) Recommending strategies to avoid medication wastage d) Providing current information on best prescribing practices.
 b) Promoting the use of physician samples given to patients.
- 24: Reasons for using coatings on tablets include all of the following, EXCEPT:
 a) To mask the taste of the drug. b) To mask the odor of the drug. b) To improve the appearance of the tablet c) To increase the drug's release rate. d) To protect the drug from stomach acid.
- 25: Mercapturic acid derivatives in phase II metabolism can result from reactions of:
 a) Glutathione conjugates.
 b) glucuronide conjugates.
 c) Glycine conjugates.
 d) Glutamate conjugates.
 e) Sulfate conjugates.
- 26: Accumulation occurs because drug from previous doses was not being removed completely.
 a) True
 b) False
- 27: Which one of these is the best way to preserve drugs for intravenous use?
 a) Lyophilisation
 b) Drying
 c) Freezing
 d) In solution form
- 28: Which ONE of the following is NOT true of hospital pharmacy services:
 a) Most hospital prescriptions are dispensed in community pharmacies
 b) Hospital pharmacies tend to be part of support directorates
 c) Each ward or consultant is responsible for their own budget
 d) Pharmacists may 'pay for' part of their own salary by saving their directorate money
 e) The cost of day-to-day running of the department usually comes from a central fund
- 29: Which ONE of the following strategies could a pharmacist use to improve adherence?
 a) Label the medication 'take as directed'
 b) Suggest memory aids such as reminder charts or monitored dosage systems
 c) Encourage patients to listen to advice without questioning it
 d) Withholding information regarding reducing costs, such as prepayment certificates
 e) Ignoring patient's beliefs with regard to their treatment
- 30: Temperature and pressure are the only factors which affect the reaction rate. State true or false
 a) True
 b) False
- 31: Which of the following term describe saponification?
 a) Cleaving of ester molecules into carboxylic acid and alcohol
 b) Dehydration synthesis by removing water
 c) Hydrolysis of a salt by adding a weak acid
 d) Synthesis of two alkyl groups to make an ether
- 32: Diffusion coefficient of drug D, Greater the value faster us the dissolution.
 a) True
 b) False
- 33: Which one of the following has a high perfusion rate?
 a) Fat

- b) Muscle and skin
 - c) Lungs and kidney
 - d) Bone
- 34: Which one of the following will be characteristics of diabetes type 2?
- a) The body becomes resistant to insulin
 - b) Immune cells destroy beta cells
 - c) Immune cells destroy kidney
 - d) Increase of blood sugar
- 35: The principle of prodrug design is known as chemical formulation.
- a) True
 - b) False
- 36: What is placebo?
- a) The subjects do not know which study treatment they receive
 - b) Patients injected with placebo and active doses
 - c) Fake treatment
 - d) Signed document of the recruited patient for the clinical trial procedures
- 37: Each face of the crystal has a different interfacial barrier.
- a) True
 - b) False
- 38: Which of the following information should be on the 2nd part of the prescription?
- a) Name of medicine
 - b) How to take the medicine
 - c) Quantity to be dispensed
 - d) Signature of the doctor.
- 39: Which of the following characteristics is suitable for transdermal drug?
- a) Large drug dose
 - b) Large molecular size
 - c) Drugs with narrow therapeutic indices
 - d) Drugs which are metabolized in the skin
- 40: Which of the following are natural local anesthetics?
- a) Cocaine
 - b) Benzocaine
 - c) Benzyl alcohol
 - d) Clove oil
- 41: The renal clearance of a drug bound to plasma protein is increased after displacement with another drug
- a) True
 - b) False
- 42: What is the antagonist for heroin?
- a) Naloxone
 - b) Oxycodone
 - c) Fentanyl
 - d) Endomorphins
- 43: We tell a person has a high blood pressure when the diastolic pressure is _____
- a) More than 140 mm Hg
 - b) More than 90 mm Hg
 - c) More than 110 mm Hg
 - d) More than 200 mm Hg
- 44: Who sells to the customers?
- a) Semi wholesalers
 - b) Wholesalers
 - c) Retailer
 - d) Distributor
- 45: Which ONE of the following pharmacist roles most often includes providing ward-based checks on inpatient prescriptions?
- a) Radio-pharmacist
 - b) Dispensary manager
 - c) Technical services manager
 - d) Clinical pharmacist
 - e) Purchasing pharmacist
- 46: Active immunity can be conferred by the administration of
- a) Antitoxins

- b) Antisera
 - c) Prostaglandins
 - d) Vaccines
 - e) Antibiotics
- 47: Which of the following is a cationic surface active agent?
- a) Cetrimide
 - b) Sodium stearate
 - c) Potassium oleate
 - d) Polyvinyl alcohol
- 48: The ultraviolet region of the spectrum used in drug analysis
- a) 50 - 200 nm
 - b) 200 - 400 nm
 - c) 200 - 750 nm
 - d) 400 - 600 nm
 - e) 600 - 800 nm
- 49: Which of the following is not a white blood cell?
- a) Basophil
 - b) Eosinophil
 - c) Reticulocyte
 - d) Lymphocyte
 - e) Neutrophil
- 50: The functional group which contributes to the instability of aspirin is
- a) Alcohol
 - b) Ketone
 - c) Ester
 - d) Heterocyclic
 - e) Ether