

PHARMACY INDIA

PRACTICE WORK SHEET - 7

Name of Candidate:
Date:
Mobile No.:
College Name:

Candidate Sign

INSTRUCTIONS:-

- 1. The Questions Booklet contains 125 questions. Examinee is required to answer all 125 questions in the OMR Answer-Sheet and not in the questions Booklet. All questions carry equal marks.
- 2. Examine the Questions Booklet and OMR Answer-Sheet very carefully before you proceed. Faulty Questions Booklet due to missing or duplicate paper/question or having any other discrepancy should be immediately replaced.
- 3. Features:- (i) Each Worksheet Contain 125 Question (ii) Subject Wise Distribution (iii) According To Syllabus (iv) Designed By Team Of Experts

Invigilator Sign

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WRONG METHODS CORRECT METHODS





PRACTICE WORK SHEET - 7



INDIA'S TST OFFLINE TEST SERIES WITH DETAILED EXPLANATION

FEATURES

- **Each Worksheet Contain 125 Question**
- **Subject Wise Distribution**
- **According To Syllabus**
- **Designed By Team Of Experts**



PHARMACY INDIA

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Practice Worksheet

PHARMACEUTICS

OROS is a technology developed for/as

- (a) Oral release rapid onset system
- (b) Orally rapid disintegrating tablets
- (c) Osmotic controlled oral drug delivery system
- (d) Transdermal drug delivery system

2. The Gibb's Phase rule

- (a) Holds only for systems with more than components
- (b) Predicts that a maximum of three phase can exits in one components system
- (c) Does not count phase compositions as intensive variables
- (d) Does not count pressure and temperature as intensive variables

3. The displacement value is defined as

- (a) Quantity of drug which displace one part of the base
- (b) Quantity of base which displace one part of the drug
- (c) Quantity of drug which displace one part of the acid
- (d) Quantity of base which displace one part of the acid

4. Clausius-Clapeyron equation is use to express the relationship between

- (a) Vapor pressure and absolute temperature
- (b) Rate of vaporization at a definite temperature

- (c) Rate of vaporization at a definite pressure
- (d) Vapor pressure and boiling point

5. IPEC deals with

- (a) Excipient (b) USFDA
- (c) GMP (d) GLP
- 6. The units of area under the curve (AUC) are
 - (a) cm^2 (b) mg/cm^2
 - (c) $mg/ml \times min$ (d) cm^2/hr
- 7. Which of the following is a quantity?
 - (a) True volume (b)
 - (b) Bulk density
 - (c) True density (d) Porosity
- 8. Which of the following are NOT true
 - [P] Pseudoplastic flow is exhibited by liquid dispersion of tragacanth
 - [Q] Dilatant material are also called Shear-thickning material
 - [R] Pseudoplastic flow is characterized by the yield value
 - [S] Dilatant flow is exhibited by flocculated particles
 - (a) [P], [Q] (b) [R], [S]
 - (c) [P], [R] (d) [Q], [R]
- 9. Measuring zeta potential is useful in determining which property of a liquid formulation
 - (a) Viscosity (b)
- (b) Stability
 - (c) Solubility (d) Particle size
- 10. What is the surface tension of water of at 25°C
 - (a) 58 dyne/cm (b) 68 dyne/cm
 - (c) 72 dyne/cm (d) 82 dyne/cm
- 10. Ans (c)
 - The surface tension of water at 25°C is 70.4 dyne/cm.
- 11. Passive diffusion follows which order of kinetics
 - (a) Non selective and mixed order

- (c) It inhibits peripheral conversion of Thyroxine to Triiodothyronine
- (d) It does not inhibit peripheral conversion of Thyroxine to Triiodothyronine
- 55. Enzyme not involved in Biotransformation of drug by oxidation
 - (a) Cytochrome P-450 haemoprotein
 - (b) Monooxygenase
 - (c) Cytochrome P-450 reductase
 - (d) Cytochrome oxidase
- 56. For drug with first order kinetics the time required to achieve steady state level can be predicted from
 - (a) Volume of distribution
 - (b) Half life
 - (c) Clearance
 - (d) Loading dose
- 57. In a conscious patient of poisoning, use of an emetic is permissible in case the ingested poison is
 - (a) Ferrous sulfate
 - (b) Sodium hydroxide
 - (c) Kerosine
 - (d) Morphine
- 58. All are antiemetic EXCEPT
 - (a) Domperidone
 - (b) Ondansetron
 - (c) Phenazocine
 - (d) Cyclizine
- 59. The following is true of proton pump inhibitors except:
 - (a) They are the most effective drugs for Zolinger Ellison syndrome
 - (b) Their prolonged use can cause atrophy of gastric mucosa
 - (c) They inhibit growth of H. pylori in stomach

- (d) They have no effect on gastric motility
- 60. With respect to Ticlopidine, Clopidogrel is
 - (a) More likely to cause formation of antiplatelet antibodies
 - (b) Less likely to cause neutropenia
 - (c) More likely to cause severe bleeding
 - (d) Greater antiplatelet effect
- 61. Aspirin prolongs bleeding by inhibiting the synthesis of which of the following
 - (a) Adenosine receptors
 - (b) Cyclic AMP
 - (c) Prostacyclin
 - (d) Thromboxane A₂
- 62. Which comprise the correct adverse effects of Benzthiazide
 - (a) Hyperkalemia,
 Hypermagnesemia,
 Hypocalcemia, Hypoglycemia
 - (b) Hypokalemia,
 Hypomagnesemia,
 Hypocalcemia, Hypoglycemia
 - (c) Hyperkalemia,
 Hypermagnesemia,
 Hypercalcemia, Hyperglycemia
 - (d) Hypokalemia,
 Hypomagnesemia,
 Hypercalcemia, Hyperglycemia
- 63. Thiazides can cause:
 - (a) Hyperkalemic paralysis
 - (b) Hypouricemia
 - (c) Hypolipidemia
 - (d) Impotence
- 64. Prolonged use of which of the following anticonvulsants can produce weight loss
 - (a) Gabapentin
 - (b) Oxacarbazepine
 - (c) Topiramate
 - (d) Valproic acid

(d) NH₂ group at C-3

93. Ring present in Warfarin is

- (a) Naphthalene
- (b) Naphthol
- (c) Phenanthrene
- (d) Chromene

94. Menadione is generally

- (a) Naphthalene-1,1-dione
- (b) Naphthalene-1,2-dione
- (c) Naphthalene-1,3-dione
- (d) Naphthalene-1,4-dione

95. In the given structure of nicardipine X is substituted by

- (a) NH₂
- (b) NO₂
- (c) Cl
- (d) F

96. Guanethidine contains

- (a) Six membered ring with nitrogen
- (b) Eight membered ring with nitrogen
- (c) Six membered ring with oxygen
- (d) Eight membered ring with oxygen

97. 7-chloro-1-methy-5- phenyl -1,4 benzodiazepin-2-one is

- (a) Diazepam
- (b) Clorazepate
- (c) Oxazepam
- (d) Nordiazepam

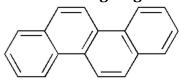
98. Diphenhydramine is generally

- (a) Amino alkyl ether
- (b) Amino alkyl ester
- (c) Amino alkyl hydroxide
- (d) Amino alkyl halide

99. Two or more than two aromatic rings that share a pair of carbon atom are said to be

- (a) Aliphatic chain
- (b) Aromatic ring
- (c) Polynuclear aromatic ring
- (d) All of the above

100. Name the following ring



- (a) Phenylene (b)
- (b) Pyrene
- (c) Chrysene
- (d) Phenanthrene

101. Match the symbols in the List I with the terms used in the List II of conductance measurements and symbols

	List I	List II
	SYMBOLS	TERMS
	1. G	[P] Specific conductance
	2. A	[Q] Electrical conductance
	3. к	[R] Specific resistance
	4. R	[S] Equivalent conductance

Choose the correct answer from the options given below

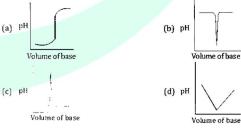
- (a) 1-[R], 2-[P], 3-[S], 4-[Q]
- (b) 1-[Q], 2-[S], 3-[P], 4-[R]
- (c) 1-[Q], 2-[S], 3-[R], 4-[P]
- (d) 1-[P], 2-[R], 3-[Q], 4-[S]

102. Benzene theoretically can

have_____ number of possible fundamental absorption bands in the IR spectrum

- (a) 30
- (b) 15
- (c) 6
- (d) 0

103. The titration of a strong acid with a strong base is represented by plot



104. Potential at the equivalence point for a redox reaction

- (a) $E = (bE_1^0 + a E_2^0)/(a + b)$
- (b) $E=E^0 (00592/n) \times \log Q$
- (c) $E=E^0+(00592/n) \times \log (Red/OX)$
- (d) $E = E_1^0 + E_1^0 / 2$

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105. Back-titration method is used

for

22. Ans (a)

- Although oxybenzone or benzophenone-3 absorbs most efficiently in the UVB range, absorption extends well into the UVA II range.
- It is used primarily as a UVA absorber, but boosts SPF values in combination with absorbers. other UVB.
- Oxybenzone is supplied as a solid material and has poor solubility and a relatively low extinction coefficient.
- However, it also causes contact urticaria.

23. Ans (b)

INGREDIENTS USED IN COSMETIC OF NAIL

INGREDIENTS	EXAMPLES	
Solvents	High boiling: Butyl lactate, ethyl oxalate, isoamyl acetate etc.	
	Medium boiling: Isopropyl acetate, Toluene, Amyl Format IPA,	
	etc.	
	Low boiling: Ether, Acetone, methyl acetate, ethyl acetate etc.	
Diluents	Alcohol, benzene, xylene, toluene	
Plasticizers They impart flexible & gloss to the film & also help in adhes		
	to film to the nails	
	e.g Dib <mark>utyl phthalate, re</mark> sorcinol <mark>, castor oil etc.</mark>	

24. Ans (a)

FACTORS	EFFECTS	
Density of	A density of <1.0 gm/cm ³ is required to exhibit floating	
dosage	property.	
forms		
Shape and size	Dosage forms having a diameter of more than 7.5 mm show a	
of the dosage	better gastric residence time compared with one having 9.9	
form	mm.	
	Ring-shaped and tetrahedron-shaped devices have a better	
	gastric residence time as compared with other shapes.	

25. Ans (c)

Penetration enhancers: These are the Substances added to pharmaceutical formulation in order to increase the membrane permeation rate or absorption rate of co-administered drug.

CATEGORIES	EXAMPLES	MECHANISM(S)
Bile salts and their	Sodium glycolate, sodium	Increase the fluidity
steroidal	taurocholate, saponins, etc.	of lipid bilayer
detergents		membrane.
Fatty acid	Oleic acid, cod liver oil, capric acid	Increase the fluidity
	and lauric acid.	of lipid bilayer
		membrane.
Polymer and their	Chitosan, trimethyl chitosan,	Increase the fluidity
derivatives	chitosan -4- thiobutylamide	of lipid bilayer
		membrane, increase
		the retentions of

- Trimethoprim has 40% plasma protein bonding Sulfamethoxazole has 60% plasma protein binding.
- Mechanism of Action Inhibits bacterial dihydrofotate reductase (DHFRase)
- Therapeutic use Urinary tract infection, Respiratory tract infection Typhoid fever, Severe travelers diarrhoeas, Whooping cough.

48. Ans (d)

SOURCES OF ANTIBIOTICS

ANTIBIOTIC	MICROORGANISM
Rifampicin	Streptomyces mediterranei
Nys <mark>tatine</mark>	Streptomycec n <mark>oursei</mark>
Candicidin	Bacillus polymyxa
AmphotericinB	Streptomycec nodosus
Bacitracin	B <mark>aci</mark> llus subtilis
Neomycin	Streptomyces fradiae
Tobramycin	Streptomycec tenebrsus
Gentamicin	Micromonospora purpu <mark>ra</mark>
Erythromycin	Streptomycec erythraeus
Mithromycin/Plicamycin	Streptomycec argillaceus
Mitomycin C	Str <mark>eptomy</mark> cec verticillus

49. Ans (a)

CENTRAL ACTING MUSCLE RELAXANTS

Mephenesin group	Mephenesin, Carisoprodol, Chlorzoxazone, Chlormezanone, Methocarbamol	
Benzodiazepines	Diazepam	
GABA derivatives	Baclofen, Thiocolchicoside	
Central a ₂ agonist	Tizanidine	

50. Ans (a)

Duration of action of drugs are as follows

DRUGS	DURATION OF ACTION (MINUTES)
Suxamethonium or Succinylcholine	5-8 (Short acting drug)
Mivacurium	15-30
Pancuronium	60-120
Vecuronium	30-60

51. Ans (d)

- Immediately after release. Acetylcholine is hydrolyzed by the enzyme cholinesterase and choline is recycled. A specific (Acetylcholinesterase - AChE or true cholinesterase) and a nonspecific (Butyrylcholinesterase-BuchE or pseudocholinesterase) type of enzyme occurs in the body.
- Ester-linked Local Anaesthesia such as procaine are rapidly hydrolysed by plasma pseudocholinesterase and the remaining by esterases in the liver. Amide-linked LAS (lidocaine, etc.) are degraded only in the liver microsomes by dealkylation and hydrolysis.

Practice Worksheet 39

120. Ans (b)

• All cholesterol arriving in the large intestine can be metabolized by the colonic bacteria.

Cholesterol is mainly converted into coprostanol, a non-absorbable sterol that is excreted
in the feces.

121. Ans (a)

PATHWAY	DESCRIPTION	LOCATION
Citric Acid Cycle (Krebs	Acetyl COA → CO ₂ and	Mitochondria
Cycle)	H_2O	

122. Ans (d)

TEST	REAGENT	AMINO ACID
Sanger	1-Fluoro 2,4 dinitro benzene	Detection of free amino acid in of
Test		insulin

123. Ans (b)

ТҮРЕ	EXAMPLES
Ketogenic Amino Acid	Leucine, Lysine
Glucogenic (Glycogenic)	Arginine, Glutamate, Glutamine,
Amino Acid	Histidine, Proline, Valine, Methionine,
	Aspartate, Alanine, Serine, Cysteine,
	Hydroxyproline, Threonine and Glycine

124. Ans (b)

- Fimbriae enable the bacterial cell to stick to the surface of host cells. They also help in the formation of pellicles or biofilms.
- They do not play a role in bacterial motility. It also join bacterial cells for transferring bacterial DNA/ gene.

125. Ans (a)

Pour plate technique

- It is based on dilution of microbes and pouring the tested material with gelatin.
- After cooling the gelatin isolated colonies of microorganisms are formed and they easily can
 be transferred on a fresh nutrient medium by a loop for obtaining a microbial pure culture.
- It is the quantitative culture method used to estimate viable bacterial count.

Heartiest congratulations



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