

PHARMACY INDIA

PRACTICE WORK SHEET - 2

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

 $\otimes \odot \varnothing$

WRONG METHODS CORRECT METHODS







PRACTICE WORK SHEET - 2



NDIA'S TSTOFFLINE TEST SERIES WITH DETAILED EXPLANATION

FEATURES

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



PHARMACY INDIA

Street No - 4, Dayalpuram, Khatauli, District - M.Nagar. Pin Code - 251201. U.P

Pharmacyindia.co.in

□ Pharmacyindia24@gmail.com

8006781759.6395596959

Practice Worksheet

PHARMACEUTICS

- 1. The USP defines _____ as liquid preparations of vegetable drugs, containing akohol as a solvent or as a preservative, or both, so made that, unless otherwise specified in an Individual monograph, each milliliter contains the therapeutic constituents of 1 gram of the standard drug that it represents
 - (a) Tinctures
- (b) Extracts
- (c) Infusion
- (d) Fluid extracts
- 2. Match List I with List II List-I (Equipment)
 - 1. Low shear mixer
 - 2. Rotary tablet machine
 - 3. Capsule filling machine
 - 4. Compaction mill

List-II (Model/Trade Name/Type)

- [P]Manestry Drycota
- [Q] Chilsonator (Fitzpatrick)
- [R]Slated Double Cone Mixer
- [S] Prosoly (JRS Pharma)
- [T] PCF 1200 Model (Pharma Land)

Choose the correct answer from the options given below

- (a) 1-[P], 2-[Q], 3-[S], 4 -[R]
- (b) 1-[Q], 2-[R], 3-[P], 4-[S]
- (c) 1-[R], 2-[P], 3-[S], 4-[Q]
- (d) 1-[P], 2-[Q], 3-[S], 4-[R]
- 3. The properties of solutions containing surface active agents change sharply over a narrow concentration range and are called as
 - (a) Critical micelle concentration
 - (b) lonic concentration
 - (c) Hydrogen ion concentration
 - (d) Surface tension
- 4. HEPA filters are defined as A or more efficient in removing, from the air. B

particles generated by vaporization of the hydrocarbon Emory 3004

- (a) A-99.99% B-0.1 mm
- (b) A-99.00 % B-0.3 mm
- (c) A-99.99% B-0.3 mm
- (d) A-99.00 % B-0.1 mm
- 5. Name the popular system for ocular delivery of pilocarpine. Based on membrane-controlled reservoir systems
 - (a) Ocusert
- (b) Alzet pump
- (c) Progestasert
- (d) Nitrodur
- 6. Identify the mismatched pair
 - (a) Flow through cell- USP apparatus-4
 - (b) Reciprocating cylinder- USP Apparatus-3
 - (c) Paddle over disc- USP Apparatus-5
 - (d) Reciprocating holder- USP Apparatus-6
- 7. Neosorb is the trade name of
 - (a) Sorbitol
- (b) Mannitol
- (c) Inositol
- (d) MCC
- 8. Identify the condition for determination of bloom strength of gelatin
 - (a) 4mm, 66.66 %w/w, 20°C, 24 hours
 - (b) 4mm, 66.66 %w/w,10°C, 24 hours
 - (c) 4mm, 6.66 %w/w,250 C, 20 hours
 - (d) 4mm, 6.66%w/w, 10°C, 17hours
- 9. The entire cycle of the capsule shell manufacturing lasts for
 - (a) 30 minutes
- (b) 90 minutes
- (c) 45 minutes
- (d) 60 minutes
- 10. Surfactants having an HLB value of more than 16 are useful as:
 - (a) Solubilizing agents
 - (b) Detergents
 - (c) Antifoaming agents
 - (d) w/o emulgents
- 11. Unit of kinematic viscosity is:
 - (a) Dynes/cm2
- (b) Stoke
- (c) Dynes.sec/cm
- (d) Poise

- 69. Papaverine, Narcotine and Narceine belongs to
 - (a) Benzyl Isoquinoline ring system
 - (b) Phenanthrene ring system
 - (c) Yohimbine ring system
 - (d) None of the above
- 70. Here given is Plants and their respected family. Match the following with correct answer.
 - 1.Iridaceae
- [P] Gaultheria
- 2. Ericaceae
- [Q] Saffron
- 3. Meliaceae
- [R] Ambergris
- 4. Physeteridae [S] Neem
- 5. Labitae [T] Tulsi
- (a) 1 [P], 2 [Q], 3 [R], 4 [S], 5 [T]
- (b) 1 [P], 2 [Q], 3 [S], 4 [T], 5 [R]
- (c) 1 [Q], 2 [P], 3 [S], 4 [R], 5 [T]
- (d) 1 [Q], 2 [P], 3 [R], 4 [S], 5 [T]
- 71. A sample of Cinnamomum zeylanicum purchased from market was evaluated for its authenticity. It shows
 - (a) Presence of cork and cortex
 - (b) Absence of xylem parenchyma
 - (c) Absence of cork and cortex
 - (d) Absence of phloem fibres
- 72. Presence of sunken stomata found in
 - (a) Eucalyptus (b) Clove
 - (c) Cinnamon (d) Dill
- 73. The Aglycone of the cardiac glycoside synthesized through the biogenetic pathway of
 - (a) Shikimic acid
 - (b) Hexose mono phosphate
 - (c) Melonic acid
 - (d) Mevalonic acid
- 74. The difference in chemical structure of Digitoxigenin from that of Gitoxigenin is
 - (a) Presence of OH group at 16th position
 - (b) Absence of OH group at 16th position
 - (c) Presence of methyl group at 16th position
 - (d) Absence of methyl group at 16th position
- 75. The swelling factor of Isapgol husk is
 - (a) 8-11
- (b) 3-8
- (c) 2-7
- (d) 10-14
- 76. Pancreatin contain enzymes namely

- (a) Diastase, Pepsin, Trypsin
- (b) Protease, Amylase, lipase
- (c) Protease, Lipase, Trypsin
- (d) Pepsin, Trypsin, Lipase

PHARMACEUTICAL CHEMISTRY

- 77. Desmethyl diazepam is an active metabolite, having an elimination half-life of more than 40 hours, of all the following drugs EXCEPT
 - (a) Flurazepam
 - (b) Chlordiazepoxide
 - (c) Clorazepate
 - (d) Diazepam
- 78. Which of the following method is used for the determination of osmotic pressure
 - (a) Beckmann's method
 - (b) Berkeley and Hartley's method
 - (c) Cottrell's method
 - (d) Landsberger's method
- 79. Which is NOT the colligative property
 - [P] Depression of freezing point
 - [R] Elevation of vapour pressure
 - [0] Elevation of boiling point
 - [S] Osmotic pressure
 - Choose the correct one of the following
 - (a) [P], [Q] and [S] [b] [P] and [Q]
 - (c) [P] and [S]
- (d) [R] only
- 80. Substitution constant for Meta benzoic acids is denoted by
 - (a) σm (sigma m)
- (b) pka(H)
- (c) pm (rho m)
- (d) pHm
- 81. Which of the following is NOT an intensive property
 - (a) Concentration
- (b) Density
- (c) Pressure
- (d) Volume
- 82. A diuretic compound Cyclothiazide substituent at C-3

of 1, 2, 4-Benzothiadiazine nucleus

- (a) 5-Bornen-2-vl
- (b) 5-Norbornen-2-yl
- (c) 2-Bornen-5-yl
- (d) 2-Norbornen-5-yl
- 83. Why trans-isomers are more stable than cis-isomers of compounds
 - (a) Due to less steric repulsion than cis isomers

- (b) 2.417×10^{-2}
- (c) 3.402×10^4
- (d) 1.042×10^4

107. Xenon arc lamp is source of light in

- (a) Colorimeter
- (b) IR
- (c) Flame photometer
- (d) UV

108. Red shift in UV spectroscopy is caused by

- (a) Increasing conjugation
- (b) Decreasing solvent polarity
- (c) Decreasing conjugation
- (d) Increasing solvent polarity

109. The C = O band present in cyclopentanone splits into two bands. This occurs due to

- (a) Presence of impurities
- (b) Fermi resonance
- (c) Coupled interactions
- (d) Interference by CO₂

110. The solvent not used for IR is

- (a) Chloroform
- (b) Carbon tetrachloride
- (c) Carbon disulphide
- (d) H₂O

111. What is Fourier Transformed in FT-NMR to obtain the spectrum

- (a) FID
- (b) Interferogram
- (c) Power spectrum
- (d) Digital filter

112. The distance between the centres of two adjacent peaks in a multiplet is called as

- (a) Spin-Spin coupling
- (b) Coupling constant
- (c) Spin-lattice coupling
- (d) Relaxation constant

113. The phenomenon of emission of light radiation by substance, when excitation occurs is called as

- (a) Fluorescence
- (b) Luminescence
- (c) Phosphorescence
- (d) Absorption

114. MALDI is a

- (a) Ionization source
- (b) Inlet system
- (c) Detector
- (d) Peak

OTHER SUBJECTS

115. Which of the following is false about HMP shunt

- (a) No ATP formation
- (b) Formation of NADPH
- (c) Synthesis of ribose-5-phosphate
- (d) Non-oxidative phase of HMP pathway is irreversible

116.All the following can determine the protein structure EXCEPT

- (a) Mass spectrometry
- (b) X-ray crystallography
- (c) High performance liquid chromatography
- (d) NMR spectroscopy

117. How many molecules of acyl-CoA are produced in beta-oxidation of palmitic acid

- (a) Six (b
- (b) Seven
- (c) Eight
- (d) Nine

118. Class of enzymes which use oxygen as a hydrogen acceptor are known as

- (a) Dehydrogenases
- (b) Oxidases
- (c) Cytochromes
- (d) Nicotinamide coenzymes

119. Match the following vaccines under Column I with their respective content under Column II

Vaccine Content

- 1. OPV [P] Killed bacteria 2. Typhoid (TAB) [Q] Live bacteria
- 3. Tetanus
- [R] Killed virus
- 4. BCG
- [S] Live virus
- [T] Toxoid

Choose the correct answer form the options given below

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

120. Which of the following coenzymes is not derived from vitamins

- (a) CoA-SH
- (b) TPP
- (c) Pyridoxal phosphate (PLP)
- (d) Coenzyme Q

- Reye syndrome typically occurs after a viral illness, particularly an upper respiratory tract
 infection, influenza, varicella, or gastroenteritis, and is associated with the use of aspirin
 during the illness.
- Therefore 3-year-old child with the symptoms of influenza is contraindicated with the use of aspirin. This is due to increased risk of Reye's syndrome.

44. Ans (c) PERIPHERALLY ACTING MUSCLE RELAXANTS

CLASSES	SUB-CLASSES	DRUGS		
Neuromuscular	Nondepolarizing	Short acting: Mivacurium		
blocking agent	(Competitive	Intermediate: Vacuronium, Atracurium,		
	blockers)	Cisatracurium, Rocuronium, Rapacuronium.		
		Long acting: Pancuronium, Doxacurium,		
		Pipecuronium, 8-Tubocurarine		
	Depolarizing	Succinyl choline (Suxamethonium),		
	blockers	Decamethonium		
Directly acting	Dantrolene sodium, Quinine			
ag <mark>e</mark> nt				

45. Ans (b) GABA RECEPTOR

GABA RECEPTOR	AGONIST	ANTAGONIST
GABA _B receptor (Intrinsic ion channel →	Baclofen	Saclofen
Increases Cl-conduction)		

46. Ans (a)

LA causing methemoglobinemia

В	A	L
Benzocaine	Prilocaine (Max)	Lignocaine

47. Ans (d)

GnRH agonist	GnRH antagonists
Buserelin	 Cetrorelix
Goserelin	 Ganirelix
Leuprolide	• Abarelix
• Nafarelin	
Deslorelin	
Triptorelin and histrelin	

48. Ans (d) CLASSIFICATION OF GLUCOCORTICOIDS

TYPES	EXAMPLES	
Long-acting glucocorticoids	Dexamethasone, Betamethasone	
Intermediate acting glucocorticoids	Prednisolone, Methyl prednisolone,	
	Triamcinolone, Deflazacort	
Short acting glucocorticoids	Hydrocortisone	

49. Ans (c) THYROID INHIBITORS

CLASSES	DRUGS

 RULE 1: If four atoms attached to the stereocenter are different, priorities depend on atomic numbers.

- **RULE 2:** If two atoms are isotopes of the same element, the atom of higher mass number has the higher priority
- **RULE 3:** If the relative positions of two groups cannot be determined as earlier, they are decided by a comparison of priority atom at the first point difference.
- **RULE 4:** If two carbon chains are attached to the stereogenic carbon the chain with a secondary carbon is of higher priority than the one with primary carbon.
- RULE 5: In case of double or triple band both the atoms are considered to be duplicated or triplicated
- RULE 6: To assign R and S configuration the molecule has to be viewed with the lowest priority group at the back.
- RULE 7: When the lowest priority group is towards eyes interchanging of the position of any
 two groups twice at stereocenter retains its configuration and also puts group of lowest
 priority assay from the viewer.

85. Ans (a) ALDOL CONDENSATION

 Aldol Condensation can be defined as an organic reaction in which condensation an enol or an enolate ion reacts with a carbonyl compound to form a 3-hydroxyakdehyde or Bhydroxyketone, followed by dehydration to give conjugated enone takes place.

86. Ans (a) BALZ SCHIEMANN REACTION

Balz Schiemann reaction is a chemical reaction in which primary aromatic amine is transformed into an aryl fluoride through diazonium tetrafluroborate. Benzene diazonium chloride and HBF, are reagents used in Balz Schiemann reaction.

$$NH_2$$
 $N\equiv NBF_4$
 $N\equiv NBF_5$
 $N\equiv NBF_4$
 $N\equiv NBF_5$
 $N\equiv$

87. Ans (b) RAOULT'S LAW

Practice Worksheet 33

121. Ans (b)

Summary of the important enzymes useful for the diagnosis of specific diseases is tabulated below

S. NO.	ENZYMES	DISEASES OR DISORDERS	
1.	Amylase	Acute pancreatitis	
2.	Alanine transaminase	Acute hepatitis of viral or toxic	
		Origin, jaundice and cirrhosis of liver	
3.	Aspartate transami <mark>nase</mark>	Myocardial	
		Infarction	
4.	Alkaline p <mark>hosphata</mark> se	Rickets, hyperparathyroidism,	
		carcinoma of	
		Bone, and obstructive jaundice	
5.	Ac <mark>id ph</mark> osphatase	Cancer of prostate gland	
6.	Lac <mark>tate</mark> dehydrogenase	Myocardial infarction,	
		Infective hepatitis, leukemia and	
	- W	muscular	
		Dystrophy	
7.	Creatine phosphokin <mark>ase</mark>	Myocardial infarction	
	(CPK)		
8.	γ-Glutamyl transpep <mark>tidase</mark>	Alcoholism.	

122. Ans (a)

SCIENTIST AND THEIR CONTRIBUTION

SCIENTIST	ASSOCIATED WITH		
Louis Pasteur	Father of microbiology		
Rebert Koch	Father of medical microbiology Discovered M.		
	tuberculosis and V. cholera Introduced staining		
	techniques methods of obtaining bacteria in pure		
	culture on solid media Suggested Koch's postulate		
Joseph Lister	Father of Aseptic surgery		
	Proved that sepsis could be prevented by Hand hygiene		
Antony Van	Invented microscope (Father of compound		
Leeuwenhoek	microscope) Father of Bacteriology		
Edward Jenner	Father of Immunology, Discovery of small pox		
	vaccine		

123. Ans (b)

VARIOUS PHASES OF BACTERIAL GROWTH CURVE				
	LAG	LOG	STATIONARY	DECLINE
Bacteria divide	No	Yes	Yes	No
Bacterial death	No	No	Yes	Yes
Total count	Flat	Raises	Raises	Flat
Viable count	Flat	Raises	Flat	Falls
Bacterial growth curve	Increase enzymes and metabolites,	Cell uniformly stained, active	Produce granules, spores, exotoxin,	Produce involution forms

Heartiest congratulations



FOR THE REMARKABLE RESULT IN **GPAT 2023**



AIR-07



470+ **Selection**



AIR-47

AIR-99



AIR-322



AIR-697



AIR-143



AIR-354



SHIVAM RAJPUT

AIR-787 TULSI MISHRA

AIR-150



AIR-487



AIR-869



AIR-211



AIR-505



AIR-909



AIR-250





AIR-971



AIR-257



AIR-636





AIR-297



AIR-677



AIR-1110





PHARMACY INDIA

Street No - 4, Dayalpuram, Khatauli, District - M.Nagar, Pin Code - 251201. U.P

Pharmacvindia.co.in

8 8006781759.6395596959

№ Pharmacyindia24@gmail.com