

ACADEMIC

YEAR

2018-19

**GUIDANCE FOR  
COMPETITIVE EXAM  
2018-19**

A.Y. 2018-19

ORIENTAL EDUCATION SOCIETY'S  
**ORIENTAL COLLEGE OF PHARMACY**

(Approved by AICTE, PCL, D.T.E., Affiliated to University of Mumbai & Certified by ISO 9001:2008)



Monday, July 30<sup>th</sup>, 2018

**NOTICE**

All Faculty members and Students of B.Pharmacy Final Year and M.Pharmacy, are hereby informed that examination against classes for "GPAT-2018-19" will be held on Monday only, @ 3.15 p.m. as per the following schedule written herewith in the table.

S.N.	Date of Exam	Teacher's Name	Invigilator	Examiner
01	6 <sup>th</sup> August 18	Dr. Ganesh Deshmukh ✓	Virendra Chouhan	Tejas Kapadekar
02	13 <sup>th</sup> August 18	Dr. Sudha Rathod	Shirish Yadav	Manisha Garje
03	27 <sup>th</sup> August 18	Mr. S. K. Kar ✓	Swati Shirsat	Gazala Shaikh
04	3 <sup>rd</sup> September 18	Dr. Pradnya Palekar-Shanbagh ✓	Supriya Aldar	Mansee Deshmukh
05	10 <sup>th</sup> September 18	Mr. Asish Dev ✓	Shravan Yadav	Snehal Bhabad
06	24 <sup>th</sup> September 18	Mrs. Kanishka Ladhmani (X)	Pradnya Chaudhary	Shravan Yadav
07	1 <sup>st</sup> October 18 (X)	Dr. S.L. Boddu (X)	Tejas Kapadekar	Virendra Chouhan
08	15 <sup>th</sup> October 18 (X)	Ms. Darakhshan Shaikh (X)	Manisha Garje	Shirish Yadav
09	22 <sup>nd</sup> October 18 (X)	Dr. Vanita Kanase (X)	Gazala Shaikh	Swati Shirsat
10	29 <sup>th</sup> October 18 (X)	Mr. Imtiyaz Ansari (X)	Mansee Deshmukh	Supriya Aldar
11	5 <sup>th</sup> November 18	Dr. Nutan Rao ✓	Snehal Bhabad	Shravan Yadav
12	26 <sup>th</sup> November 18 (X)	Mr. Amey Deshpande (X)	Shravan Yadav	Pradnya Chaudhary
13	3 <sup>rd</sup> December 18	Dr. Amjad Ali	Shirish Yadav	Manisha Garje
14	10 <sup>th</sup> December 18 (X)	Mrs. Ashwini Kulkarni (X)	Virendra Chouhan	Tejas Kapadekar
15	17 <sup>th</sup> December 18 (X)	Dr. Mohib Khan (X)	Supriya Aldar	Mansee Deshmukh
16	24 <sup>th</sup> December 18	Dr. Vandana Jain ✓	Swati Shirsat	Gazala Shaikh

Principal

Monday, July 30<sup>th</sup>, 2018  
GPAT 18-19 Co-Ordinator



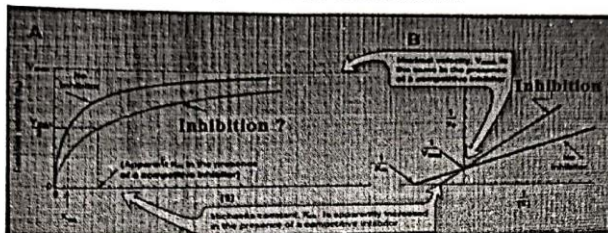
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## GPAT QUESTION PAPER

DATE- 6<sup>TH</sup> AUG 2018

Q1. This type of inhibition (In Red line) is called as.....



(A) Noncompetitive (B) Competitive (C) uncompetitive (D) Mixed inhibition

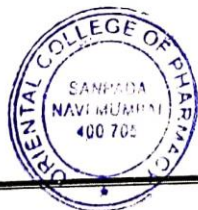
Q2. Which of the following ions may be effectively chelated by EDTA?

I. sodium II. lithium III. lead

(A) I only (B) III only (C) I and II only (D) II and III only

Q3. The term "impalpable" refers to a substance that is

(A) Bad tasting (B) not perceptible to the touch (C) greasy (D) none



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Page 1



**Q4 Techniques used in the development of "biotechnological drugs" include**

I. gene splicing      II. Preparation of monoclonal antibodies      III. lyophilisation

(A) I only (B) III only (C) I and II only (D) II and III only

**Q5. Uses for surfactants in pharmaceutical products include**

I. percutaneous absorption enhancers    II. cleansing agents    III. therapeutic activity

(A) I only (B) III only (C) I and II only (D) I, II, and III

**Q6 High pressure and airless system to spray having pressure range**

(A) 250-1000 P<sub>isg</sub> (B) 400-2000 P<sub>isg</sub> (C) 400-3000 P<sub>isg</sub> (D) 250-3000 P<sub>isg</sub>

**Q7 Poorly manufactured tablets may have small pinholes on the surface. This phenomenon is**

known as:

(A) Picking (B) Mottling (C) Leaching (D) Cracking

**Q8 Creaming is a ..... Process**

(A) Irreversible (B) reversible (C) Difficult (D) Both a & c

**Q9 Hydrolysis of ethyl acetate in acid base medium followed the order of reaction**

(A) I & II Order (B) Pseudo first & II Order (C) II & I Order (D) zero and first

**Q10** The rate of hydrolysis can be controlled by

(A) adding buffers (B) complexation (C) Removal of water (D) decreasing the solubility

**Q 11** Porosity of a porous powder is defined as

(A) Bulk volume/void volume (B) void volume / Bulk volume (C) void volume / true volume

(D) true volume / Bulk volume

**Q12** The HLB range of emulsifier used in the preparation of water in oil emulsion is

(A) 4 to 6 (B) 7 to 12 (C) 13 to 15 (D) 16

**Q13.** Mannitol may be included in lyophilized products as a

(A) buffer (B) bulking agent (C) preservative (D) sweetener

**Q14** Intrusion fluid found in Pycnometer is

(A) Acetone (B) Mercury (C) Isopropyl alcohol (D) Ethyl alcohol

**Q15** when cumulative percent frequency on a probability scale is plotted scale against logarithm of

the particle size, 50 % on the probability scale gives the powder particle diameter of

(A) arithmetic mean (B) arithmetic mode (C) geometric mean (D) harmonic mean



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Q16 The excise –officer of bonded laboratory may permit to take a sample from each batch to finished preparation free of duty up to a maximum amount of

(A) 250 ml (B) 150 ml (C) 100 ml (D) 50 ml

Q17 Every year the register of state pharmacy council is required to print the registers

(A) 1st January (B) 1st may (C) 1st april (D) 1st march

Q18. Volatile oil can be distinguished from fixed oil as they give

(A) give spot test negative (B) give foam test positive (C) they can easily freezed (D) all

Q19. Yellow colour of gentian lutea rhizome is due to

(A) gentisin (B) amarogentin (C) gentiopicrin (D) amarogentin

Q20. Histamine H1 receptor blockers are useful in the treatment of ailment of the following

EXCEPT:

(A) urticaria. (B) seasonal rhinitis. (C) drug reactions. (D) bronchial asthma.

Q.21 one of the following drug is used as prophylactic treatment for migraine

(A) sumatriptan (B) alnitidan (C) propranolol (D) ergotamine

Q.22 which of the following statement is not true

(A) Flunarizine is calcium channel blocker which is use as a prophylaxis treatment of migraine (B)

PG'2 having platelet aggregatory property

(C) Azapirones are partial agonist of 5HT1A receptor

(D) PG's promote mucus & HCO-3 secretion in GIT

Q23 Which of the following is not correct:

(A)  $\text{pH} = \text{pKa} + \log \frac{[\text{HA}]}{[\text{A}^-]}$  (B)  $\text{pH} = \text{pKa} - \log \frac{[\text{A}^-]}{[\text{HA}]}$  (C) Both A & B (D) None

Q.24 vitamin- D function by which receptor

(A)GPCR (B) enzyme linked (C) intrinsic ion channel (D) nuclear receptor

Q .25 ACE inhibitor produce which type of teratogenic reaction

(A)foetal goiter (B) spina bifida (C) virilization (D)hypoplasia of organ

Q26. A drug that decreases the formation of uric acid is

(A)miglitol (B) allopurinol (C) probenecid (D) propylthiouracil

Q27 . Drugs employed in reducing elevated serum cholesterol include(s)

I. gemfibrozil

II. cervastatin



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Page 5

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III. pioglitazone

(A) I only (B) III only (C) I and II only (D) I, II, and III

Q28. Which of the following beta-adrenergic blocking agents also exhibit alpha1-adrenergic blocking action?

I. timolol II. sotalol III. labetalol

(A) I only (B) III only (C) I and II only (D) II and III only

Q29. Didanosine can best be described as (an):

(A) antiprotozoal (B) reverse transcriptase inhibitor (C) protease inhibitor (D) beta-lactamase inhibitor

Q30 The "first-dose" effect is characterized by marked hypotension and syncope on taking the first few doses of medication. This effect is seen with the use of

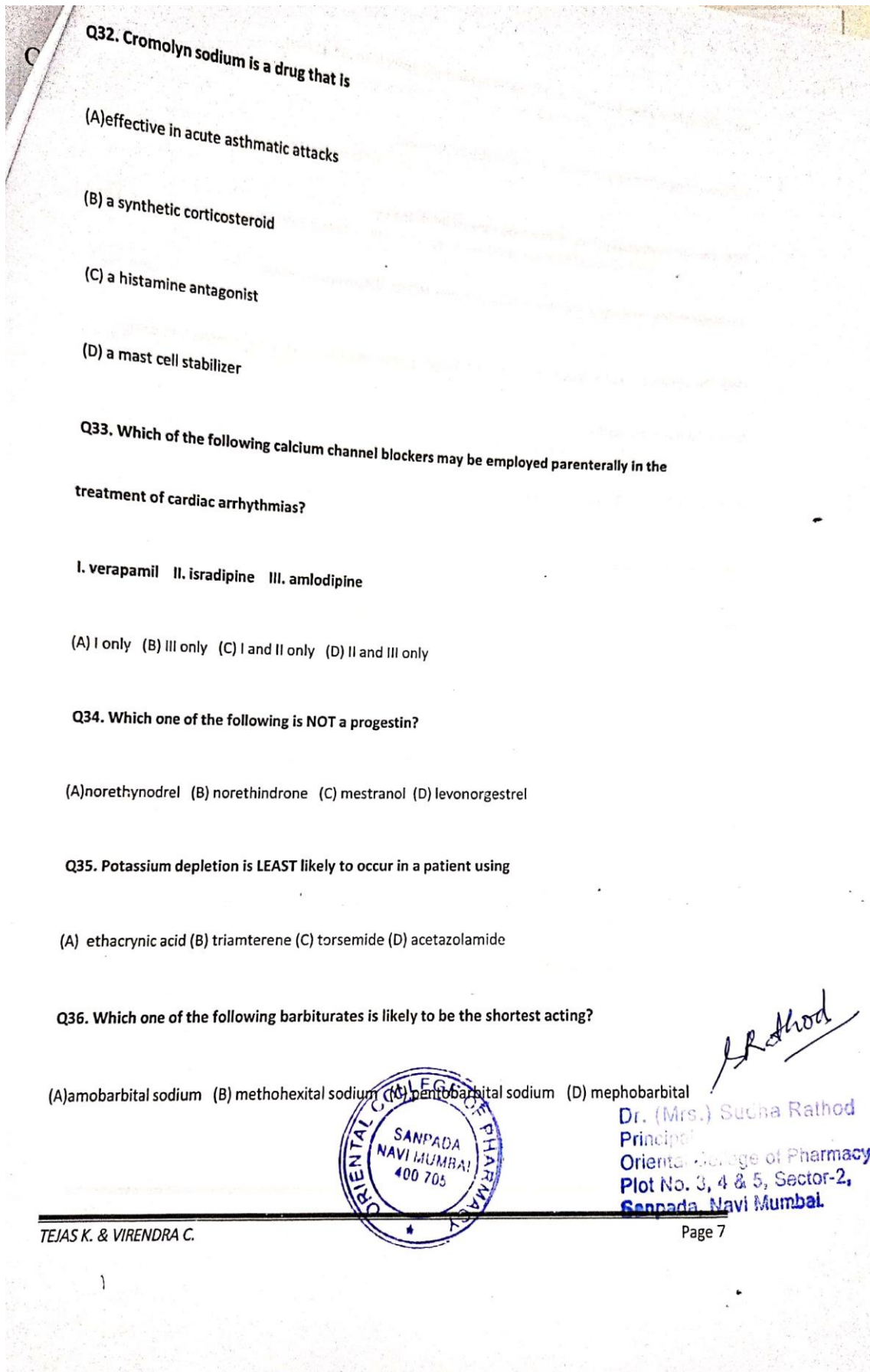
I. doxazosin II. enalapril III. Sotalol

(A) I only (B) III only (C) I and II only (D) I, II, and III only

Q31 Dalteparin sodium acts in the body to

(A) regulate menstrual activity (B) prevent blood clot formation (C) inhibit thyroid function (D) inhibit viral replication







**Q37. The primary function of simethicone in antacid products is to act as (an):**

(A) suspending agent (B) adsorbent (C) buffer (D) antifatulent

**Q38. The antiparkinson effect of levodopa may be inhibited by**

(A) niacinamide (B) d-alpha tocopherol (C) pyridoxine HCl (D) dihydrotachysterol

**Q39. The child's dose of a drug is reported as 1.2 mg/kg body weight. What is the appropriate dose**

**for a child weighing 60 lb?**

(A) 6 mg (B) 9 mg (C) 32 mg (D) 72 mg.

**Q40. Calcium chloride ( $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ ) has a formula weight of 147. What weight of the chemical is**

**needed to obtain 40 mEq of calcium? (Ca = 40.1; Cl = 35.5; H<sub>2</sub>O = 18)**

(A) 0.80 g (B) 2.22 g (C) 1.47 g (D) 2.94 g

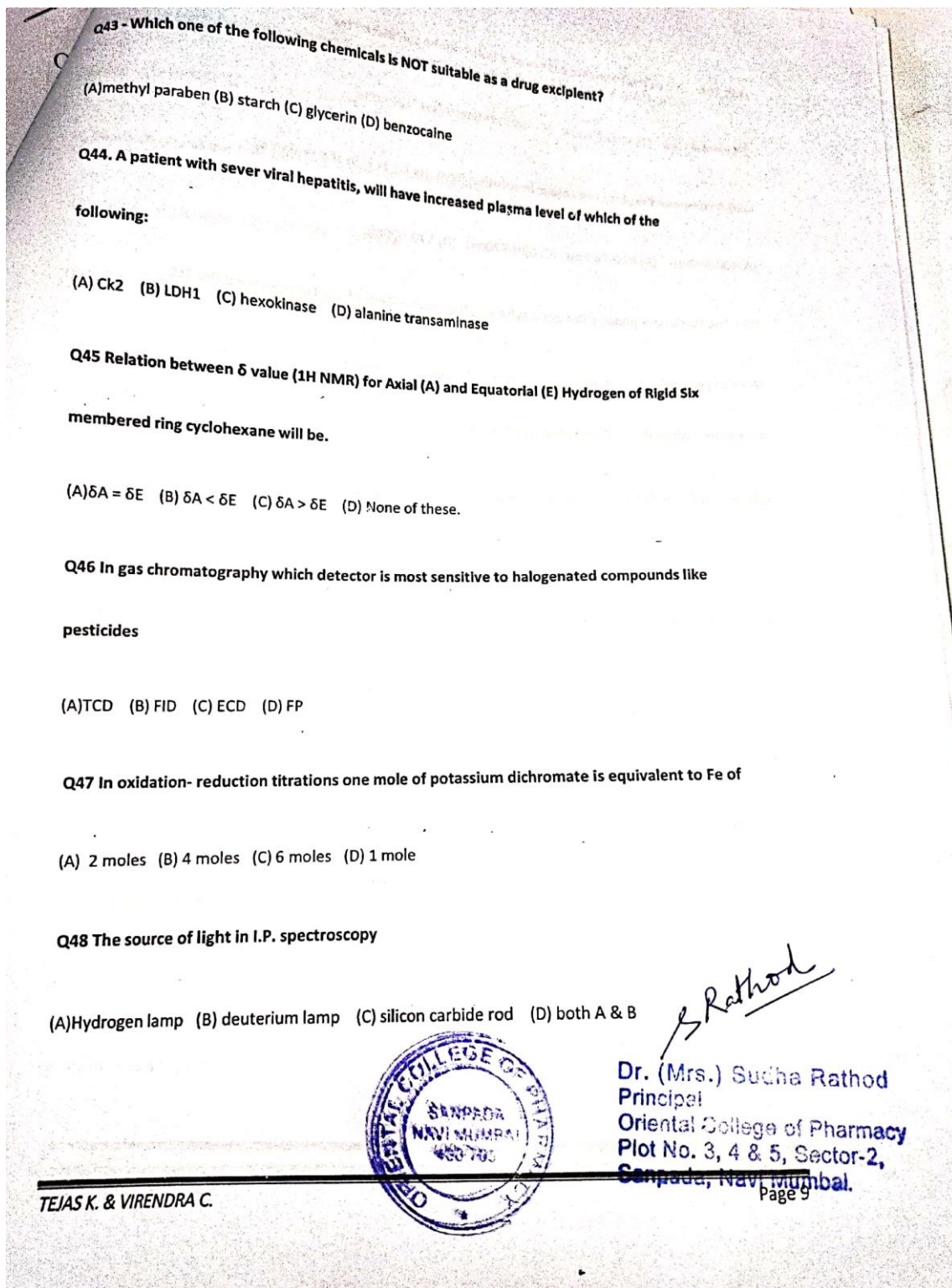
**Q41. The concentration of mercury in a water sample is reported as 5 ppm. Express this**

**concentration as a percentage.**

(A) 0.00005% (B) 0.0005% (C) 0.005% (D) 0.05%

**Q42 Stereochemistry of penicillins is**

(A) 2S, 5R, 6R (B) 2R, 5S, 6R (C) 2R, 5S, 6S (D) 2S, 5S, 6R



Q49 The value of stretching frequency of a bond can be calculated by

(A) Hooke's law (B) stroke's law (C) Lambert Beer's law (D) none

Q50 A compound gives red colour in solution from. Its  $\lambda_{max}$  is in the region of

(A) 400-450 m $\mu$  (B) 620-760 m $\mu$  (C) 520-570 m $\mu$  (D) 570-590 m $\mu$

Q51 The stationary phase silica gel G is having the composition of ..... for preparing the TLC.

(A) silica gel + calcium sulphate (B) silica gel + binder + fluorescent indicator (C) silica gel + aluminum hydroxide (D) cellulose with binder.

Q52 Which of the following statement is not correct regarding alkaloids

(A) they are generally basic in nature (B) Always have nitrogen in heterocyclic ring (C) distributed mostly in higher plants (D) none.

Q53 *Phytolacca Americana* a substitute for belladonna is identified by

(A) presence of idioblasts (B) anisocytic stomata (C) microshenoidal calcium oxalate crystals (D) cluster crystals

Q54 Bixin is synthesized from

(A) geraniol (B) geranyl pyrophosphate (C) geranyl geraniol (D) farnesol



Q55 Which of the following is preferred method for estimation of sesquiterpenoidal compounds

(A) HPLC (B) HPTLC (C) TLC (D) GC-MS

Q. 56 which one of the following is hydrophobic amino acids

(A) Valine (B) leucine (C) isoleucine. (D) none

Q57 What is the correct region behind sickle cell anemia defect in HbS?

(A) Normally the 6th amino acid in the beta chain is glutamic acid, this is replaced by valine in the HbS molecule.

(B) Normally the 9th amino acid in the beta chain is glutamic acid, this is replaced by valine in the HbS molecule.

(C) Normally the 6th amino acid in the beta chain is glutamic acid, this is replaced by leucine in the HbS molecule.

(D) Normally the 6th amino acid in the beta chain is glutamic acid, this is replaced by isoleucine in the HbS molecule.

Q 58 (-) Hyoscyamine is

(A) 15-20 times more active as a mydriatic than (+) Hyoscyamine

(B) inactive as a mydriatic



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(C) 3-5 times less active as a mydriatic than (+) Hyoscyamine

(D) 100 times more active as a mydriatic than (+) Hyoscyamine

Q.59 The number of peaks given by the  $^1\text{H NMR}$  spectrum of 2-methyl-1-pentene is

(A) 5 (B) 4 (C) 3 (D) 6

Q60 In HPLC, the analytical performance improves when

(A) Particle diameter is increased

(B) Particle diameter is decreased

(C) Coarser particles are paired with small column

(D) Low temperature is used

Q61  $M = (m_2)^2 / m_1$  here  $m_2$  is daughter ion &  $m_1$  is parent ion or molecular ion then M is

(A) Fragment ion (B) Metastable ion (C) Molecular Ion (D) Rearrangement ion

Q62 In per gram of powdered Lycopodium number of spores will be

(A) 94,000 (B) 94,000,000 (C) 94,000 (D) 94,000,000

Q63 Halphen's test is for the identification of

(A) Sesame oil (B) Argemone oil (C) Cotton seed oil (D) Olive oil

Q64. Microscopic characters of anticancer rhizome or roots of *Podophyllum peltatum*, Family Berberidaceae are

(A) In the rhizome eccentric pith is situated towards the upper surface & the vascular bundles are curved. The root exhibit a thick cork and central wood.

(B) Exhibit a varying number of concentric rings of fibrous vascular strands in which the phloem is towards the outer side and xylem is on the inner side.

(C) Cylindrical or sub cylindrical, flattened dorsiventrally. Shows a broken circle of vascular tissue with a distinct phloem.

(D) An erect, short, conical rhizome which may be longitudinally sliced, Shows a wellmarked, dark cambium line.



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Page 13

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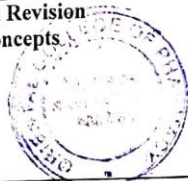
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DATE-26<sup>TH</sup> JULY 2018

Topics Given by Students to be covered in GPAT lectures.

SUBJECTS	TOPICS
<b>PHARMACEUTICS DEPARTMENT</b>	
Physical Pharmacy	Colligative property-Numericals Thermodynamics Phase rule Electrochemistry Kinetics Numerical and Concepts Viscosity and Rheology
Pharmaceutics	Dosage forms Historical Background IP,BP,USP GMP Capsules, Tablets, Aerosols aspects Two phase system Preformulation Stability studies Psology-Numericals Biopharmaceutics
Biotechnology & Microbiology	Cell culture- Plant and Animal R RNA Fermentation Derived products Proteomics Microscopy Bacteria, Fungi, Virus Sterilization Aseptic Techniques Immunology
Pharmaceutical Engineering	Distillation Evaporation Crystallization - Machine and Instruments
<b>DEPARTMENT OF PHARMACOLOGY</b>	
Anatomy Physiology and Patho-physiology & Pharmacology	General Concept and Revision ANS, CVS general concepts Urinary System Immunology Proteins, Vitamins
<b>DEPARTMENT OF PHARMACOGNOSY</b>	
	Biological sources, classification, pathways, Toxic drugs, Neutraceuticals, microscopy, extraction and isolation, identification tests, plant parts of Glycosides, Alkoloids, Terpenoids



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DEPARTMENT OF QUALITY ASSURANCE	
	UV, IR, RAMAN Polarimetry NMR sums Polarography Nepherometry and Turblimetry
DEPARTMENT OF PHARMACEUTICAL CHEMISTRY	
Organic Chemistry	Acidity/Basicity , pH,pKa- concept with application in medicinal chemistry Detection of Groups IUPAC nomenclature Name Reactions Stereochemistry Heterocyclic with IUPAC
Pharmaceutical Chemistry	Isotope Chemistry Drug Metabolism Classification of drugs-SAR of IMP Drugs
Biochemistry	Concepts, Pathways, Disorders

All teachers select subject of choice for GPAT lectures from above list and give the name of topics in handwriting against your name on another sheet supplied with signature.



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Name of Teachers	Topics
<b>PHARMACEUTICS DEPARTMENT</b>	
<b>DR. SUDHA RATHOD</b>	Viscosity & Rheology . <i>Sudha Rathod</i> 26/7/18
<b>DR. PRADNYA PALEKAR SHANBHIA</b>	Posology- Numericals [Handwritten] Biopharmaceutics [Handwritten] 27/7/18 .
<b>MR. SWAPANKUMAR KAR</b>	1) Dosage forms . 2) Capsule, Tablets, Aerosols . 3) GMP . <i>Swapankumar Kar</i> 27/7/18
<b>DR. GANESH DESHMUKH</b>	Colligative Property chemical kinetics Thermodynamic ] <i>GD</i> 27/07/2018
<b>MR. ASISH DEV</b>	Stability studies Preformulation <i>Asish Dev</i> 27/7/18
<b>MRS. KANISHKA LAKHMANI</b>	Crystallization <i>Kanishka</i> 27/7/18  <i>Sudha Rathod</i>



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PHARMACEUTICAL CHEMISTRY DEPARTMENT	
DR. AMJAD ALI	Drug metabolism 26/7/18
DR. NUTAN RAO	Classification of Drugs & BAR of IMP Drugs Date: 27/7/18
MRS. AMEY DESHPANDE	Acidity / Basicity, PH, pKa with applications in med chem Date: 27/7/18
MRS. ASHWINI KULKARNI	Stereochemistry Date: 27/7/18
QUALITY ASSURANCE DEPARTMENT	
DR. SNEHLATHA BODDU	UV, IR, Raman, NMR Sums, Nephelometry & Red Turbidityometry. Date: 27/7/18
MS. BARAKASHAN SHAIKH DARAKHSHAN	Biochemistry:- Concept, pathways & Method disorders. Date: 27/7/18



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<b>PHARMACOLOGY DEPARTMENT</b>	
<b>DR. VANITA KANASE</b>	Urinary System Immunology <i>V Kanase</i> 27/7/2018
<b>MR. IMTIYAZ ANSARI</b>	Anatomy → CVS general consideration P-cology → Drugs acting on ANS. <i>I Ansari</i> 27/7/18
<b>PHARMACOGNOSY DEPARTMENT</b>	
<b>DR. MOHIB KHAN</b>	
<b>DR. VANDANA JAIN</b>	lipids, tannins & <i>V Jain</i>



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PHARMACOGNOSY.

ORIENTAL COLLEGE OF PHARMACY, SANPADA  
Final Year B.Pharmacy Sem-VIII 2018-19

Subject: CPAT lect & Test

Date: lecture on 15 & test on 16

Dr. Vandana Jain

Roll No	Name	Sign	Roll No.	Name	Sign
1	Agarwal Niket Rajesh	<i>Niket</i>	35	Pathak Paritosh Mahesh	
2	Attar Tahsin Khansaheb		36	Patil Pushkara Prakash	<i>Pushkara</i>
3	Bangar Pravin Shankar		37	Poojary Harshita Krishna	
4	Bodade Sarika Gajanan		38	Rajpurohit Aruna Vijay Singh	
5	Chauhan Anjali Laldhar	<i>Anjali</i>	39	Renudevi Ramyash	<i>Ramyash</i>
6	Choudhary Jitendra		40	Salunke Deepali Vilas	
7	Choudhary Mohd. Qasim		41	Sankpal Kajal Ashok	
8	Dhanawade Varsha Suresh		42	Sapkal Pradnya Balu	
9	Dhumal Payal Suresh		43	Saroj Ravindra Rajesh	
10	D'Souza Jcvita Francis	<i>Jcvita</i>	44	Sarvagod Shilpa Shashikant	
11	Ghogale Riddhesh Vishvajit		45	Sawant Shruti Navneet	
12	Goud Romy Bhagwandas		46	Sawant Vanita Vijay	
13	Gupta Akanksha Rajesh		47	Sawant Viraj Eknath	
14	Gupta Nilesh Laxmi Prasad		48	Shaikh Abu Sayam Javed Alam	
15	Gupta Nitesh Shambhu		49	Shelar Nikita Ashoka	
16	Jain Jayesh Hirachand		50	Shinde Sujata Shahaji	<i>Sujata</i>
17	Jain Ronak Barcha Rajmal	<i>Ronak</i>	51	Singh Aditya Ajit	
18	Jaiswal Archana Munnalal		52	Singh Anurag Narendra	
19	Johal Jasmitkaur Daljitsingh		53	Solanki Govindkumar Rameshkumar	
20	Kalave Sana Asgarali		54	Talwar Nikita Suresh	<i>Nikita</i>
21	Kazi Nabila Rashid		55	Thakare Priyanka Sanjay	
22	Khan Abdullah Karam Husain		56	Thakare Tanvi Ravindra	
23	Khan Hamid Wajhul Qamar		57	Thakare Trupti Ravindra	
24	Khan Humera Mohd Subhan		58	Tiwari Narayandutt Rakesh	
25	Khan Mohd. Bilal Mohd Ashraf		59	Valladares Olohv Ricky	
26	Khan Rukshar Riyaz		60	Varma Shivam Ramendra	
27	Khan Salman Ahmad Mohmmad		61	Yadav Abhaykumar Atmaprasad	
28	Mhatre Diksha Anant		62	Yadav Laxmi Vijay Chand	
29	Mohammed Anjada Hassan		63	Yadav Shubham Ramjeet	
30	Mukadam Ayesha Imtiyaz		64	Khan Javeed	
31	Navale Tejaswini Arvind	<i>Tejaswini</i>	65	Khan Shakeel	
32	Pal Namitadevi Bhulai		66	Yadav Pooja	
33	Pal Priya Rajdhari		67	Deshmukh Areej	
34	Patel Smith Jitendra				



13 students appeared for test  
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1 Quinoline alkaloids are biosynthesized via which one of the following pathways?

- (A) Shikimic acid - tyrosine (B) Shikimic acid - tryptophan  
(C) Shikimic acid - cathinone (D) Shikimic acid - phenylalanine

2 A powdered drug has the following microscopic characters:

Anther cells, arenchyma, pollen grains, phloem fibers, volatile oil cells and stone cells. The powder is obtained from which of the followings?

- (A) Clove bud powder (B) Clove bud powder with stalk  
(C) Mother Clove (D) None of the above

3. Which of the following ergot alkaloids is water soluble and shows blue fluorescence?

- (A) Ergosine (B) Ergotamine (C) Ergocristine (D) Ergometrine

4. Goldbeater's skin test is used to detect the presence of which one of the following classes of compounds?

- (A) Tannins (B) Steroids (C) Glycerides (D) Resins

5. Phenylethylisoquinoline is the precursor of which of the following alkaloids?

- (A) Colchicine (B) Papaverine (C) Emetine (D) Cephaline

6. Arrange the following fatty acids in decreasing order of their unsaturation (highest to lowest):

- [P] Stearic [Q] Oleic acid [R] Linolenic acid [S] Linoleic acid  
(A) P>Q>R>S (B) S>R>P>Q (C) R>S>Q>P (D) Q>P>R>S

7. Each of the following options lists a phytoconstituent, its phytochemical grouping, pharmacological activity and corresponding semisynthetic analogue. Find a MISMATCHING option.

- (A) Podophyllotoxin, lignan, anticancer, etoposide  
(B) Sennoside, anthraquinone, laxative, sinigrin  
(C) Atropine, alkaloid, anticholinergic, homatropine  
(D) THC, terpenophenolic, psychoactive, nabilone

8. Inhibition/induction of which of the following Cytochrome P450 enzyme system is most likely to be involved in important drug-drug interactions?

- (A) CYP3A4 (B) CYP2D6 (C) CYP2C9 (D) CYP1A2

9. Which of the following statements is FALSE for artemisinin?

- (A) It is a sesquiterpene lactone endoperoxide  
(B) It is a drug of choice in prophylaxis of malaria



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- (C) It does not cure relapsing malaria  
(D) It is useful in treatment of cerebral falciparum malaria

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[S] It contains derivatives of protopanaxadiol. *compounds are not beta*  
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36. Bioflavonoids are also known as

- A. Vitamin K
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Codeine  
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13  
449

16/1/19

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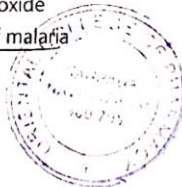
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D. arecaceae

30. A local source of cyanogenic glycosides is:

- o A. *Cyanogenum Esculenta*  
o B. *Manihot esculentum*  
o C. *Manihot cympong*

31. The principal cinchona alkaloid employed therapeutically as anti-protozoal drug

- D. Manihot esculenta
- A. quinine
- B. chloroquine
- C. C. quinacrine
- D. D. quinidine

32. The pathologic product of sperm whale is:

- A. copaiba
- B. ambergris
- C. bayberry
- D. Carnauba
- E. Teaberry

32. These are major carotenoids in plants, except:

- A. b-carotene
- B. lycopene
- C. a-carotene
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33. Alkaloids as salts may be liberated from plant components using:

- A. acidulated water
- B. sodium carbonate
- C. methanol
- D. ether

34. This is the parent nucleus of the chlorophylls:

- A. . bilan
- B. porphine
- C. tetraporphinpyrrole
- D. magnesium

35. The solid resin from turpentine:

- A. benzoin
- B. styrax
- C. tolu
- D. rosin

36 Bioflavonoids are also known as

- A. Vitamin K
- B. Vitamin P
- C. Vitamin M
- D. Vitamin C

37. Opium does NOT contain the following EXCEPT -

- Meconic acid
- Starch
- Calcium Oxalate
- Tannins

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- Bitterness value
- Hemolytic activity
- Swelling Index
- All of the above

39. White ginseng is

- White colored variety of ginseng roots
- Obtained by washing to remove colour of ginseng roots

- Washed roots without secondary roots, sun dried and oftenly peeled
- None of the above

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- Antimalarial agents
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42. Opium alkaloid containing isoquinoline ring system is

- Morphine
- Codeine
- Thebaine
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43. Which constituents of Guggulipids is responsible for hypolipidemic activity

- Gums
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44. Which one of the following is S glycoside

- Digoxin
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Pushkara  
ROLL No.: 36  
16/11/19

17  
44

1. Quinoline alkaloids are biosynthesized via which one of the following pathways?
- (A) Shikimic acid - tyrosine    (B) Shikimic acid - tryptophan  
 (C) Shikimic acid - cathinone    (D) Shikimic acid - phenylalanine

2. A powdered drug has the following microscopic characters:

Anther cells, arenchyma, pollen grains, phloem fibers, volatile oil cells and stone cells. The powder is obtained from which of the following?

- (A) Clove bud powder    (B) Clove bud powder with stalk  
(C) Mother Clove    (D) None of the above

3. Which of the following ergot alkaloids is water soluble and shows blue fluorescence?

- (A) Ergosine    (B) Ergotamine    (C) Ergocristine    (D) Ergometrine

4. Goldbeater's skin test is used to detect the presence of which one of the following classes of compounds?

- (A) Tannins    (B) Steroids    (C) Glycerides    (D) Resins

5. Phenylethylisoquinoline is the precursor of which of the following alkaloids?

- (A) Colchicine    (B) Papaverine    (C) Emetine    (D) Cephaline

6. Arrange the following fatty acids in decreasing order of their unsaturation (highest to lowest):

- [P] Stearic    [Q] Oleic acid    [R] Linolenic acid    [S] Linoleic acid
- (A) P>Q>R>S    (B) S>R>P>Q    (C) R>S>Q>P     (D) Q>P>R>S

7. Each of the following options lists a phytoconstituent, its phytochemical grouping, pharmacological activity and corresponding semisynthetic analogue. Find a MISMATCHING option.

- (A) Podophyllotoxin, lignan, anticancer, etoposide  
(B) Sennoside, anthraquinone, laxative, sennigrin  
(C) Atropine, alkaloid, anticholinergic, homatropine  
 (D) THC, terpenophenolic, psychoactive, nabilone

8. Inhibition/induction of which of the following Cytochrome P450 enzyme system is most likely to be involved in important drug-drug interactions?

- (A) CYP3A4    (B) CYP2D6    (C) CYP2C9    (D) CYP1A2

9. Which of the following statements is FALSE for artemisinin?

- (A) It is a sesquiterpene lactone endoperoxide  
 (B) It is a drug of choice in prophylaxis of malaria



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- It does not cure relapsing malaria  
(D) It is useful in treatment of cerebral falciparum malaria

**10. Which of the following statements are true for ginseng root?**

- [P] It is among the most traded plant material of Brazil. [Q] It is obtained from *Panax ginseng* and *Panax quinquefolium*. [R] It is obtained from young plants of six months to one year age.  
(A) P&Q (B) R&S (C)  Q&R (D) Q & S

**11. Which of the following alkaloids is derived from tyrosine?**

- (A)  Quinine (B) Morphine (C) Atropine (D) Ephedrine

**12. Anomocytic stomata, trichomes with collapsed cell and absence of calcium oxalate crystals are some of the microscopic features of which plant?**

- (A) Digitalis (B)  Hyoscyamus (C) Mentha (D) Senna

**13. A glycoalkaloid,**

- [P] contains sulphur in addition to nitrogen in its molecule.  
[Q] is glycosidic in nature.  
(R) can be hydrolysed to an alkaloid.  
[S] always contains endocyclic nitrogen in its molecule.  
Choose the correct option.  
(A) P&R (B) Q&S (C) Q&R (D)  P&Q

**14. Which of the following drugs is a triterpenoid containing root?**

- (A) Valerian (B)  Brahmi (C) Satavari (D) Adusa

**15. The following options carry the name of the plant, part used and its family. Find a WRONG combination.**

- (A)  Aegle marmelos, fruit & Rutaceae  
(B) Conium maculatum, fruit & Umbelliferae  
(C) Glycyrrhiza glabra, root and stolon & Leguminosae  
(D) Strophanthus gratus, seed & Scrophulariaceae

**16. Each of the following options lists the name of the drug, its class, pharmacological action and plant source. Choose an option showing a WRONG combination.**

- (A) Asafoetida, oleo-gum-resin, anti-flatulence, *Ferula foetida*  
(B) Benzoin, balsam, antiseptic, *Styrax benzoin*  
(C)  Myrrh, gum-resin, antiseptic, *Commiphora wightii*  
(D) Papaine, enzyme, proteolytic, *Carica papaya*



17. Determine the correctness or otherwise of the following Assertion [a] and the Reason [r]:

Assertion (a) : Tannins are polyphenolic substances occurring in plant cell sap. Hydrolysable and condensed tannins are differentiated by match stick test.

Reason (r) : The condensed tannins are resistant to acid hydrolysis, therefore stain the lignin present in match stick.

- (A) Both (a) and (r) are true, and r is reason for (a)  
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18. In acetate mevalonate pathway geranyl pyrophosphate leads to formation of monoterpenes, the major constituents of volatile oils.

[P] Geranyl pyrophosphate contains two isoprene units

[Q] Monoterpenes have 15 carbon atoms

[R] The two isoprene units condense in head to tail fashion to give monoterpenes

[S] Isoprene unit has molecular formula of C<sub>5</sub>H<sub>8</sub>.

Which one of the given statements is correct?

- (A) P is true, Q is false, R is true, S is false  
 (B) P is false, Q is true, R is true, S is false  
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19. The alkaloid found in calabar bean

- A. physostigmine  
 B. Cocaine  
 C. colchicines  
 D. emetine

20. Devil's dung used as a carminative, and anti-spasmodic.

- A. jalap  
 B. gamboges  
 C. asafetida  
 D. witch hazel

21. The following is/are the properties of nonhydrozable tannins except:

- A. They give a bluish to black color with ferric chloride.  
 B. They usually contain phloroglucinol nucleus in part.  
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 D. They yield catechol when heated.

22. This does not possess narcotic properties and is therefore sometimes called anarcotine.

- A. Noscapine



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- B. hydrocodone  
 C. papaverine HCl  
 D. hydromorphone
23. The hallucinogen derived from egrot:
- A. THC  
 B. ETO  
 C. EDTA  
 D. LSD
24. The undissolved portion of the drug that remains after extraction:
- A. solutE  
 B. marc  
 C. solvent  
 D. active drug
25. Plant sources of purine bases alkaloids:
- A. kola  
 B. tea  
 C. cacao  
 D. all of these
26. Milky white viscid secretion from the salivary glands of the worker hive bee, *Apis mellifera*, and is used as a general tonic, toward the effects of old age:
- A. lac  
 B. royal jelly  
 C. ginseng  
 D. propolis
27. Class of natural products with potent and diverse biological activities involved in platelet aggregation, pain and inflammation.
- A. enzyme  
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 C. prostaglandins  
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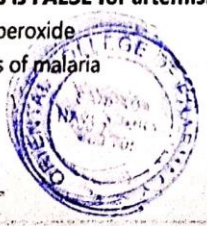
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- B. hydrocodone  
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23. The hallucinogen derived from egrot:  
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D. propolis
27. Class of natural products with potent and diverse biological activities involved in platelet aggregation, pain and inflammation.  
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C. porstaglandis  
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**11. Which of the following alkaloids is derived from tyrosine?**

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**14. Which of the following drugs is a triterpenoid containing root?**

- (A) Valerian (B) Brahmi (C) Satavari (D) Adusa

**15. The following options carry the name of the plant, part used and its family. Find a WRONG combination.**

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**16. Each of the following options lists the name of the drug, its class, pharmacological action and plant source. Choose an option showing a WRONG combination.**

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(D) Papaine, enzyme, proteolytic, *Carica papaya*



17. Determine the correctness or otherwise of the following Assertion (a) and the Reason (r):

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- B. hydrocodone  
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23. The hallucinogen derived from ergot:  
 A. THC  
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 C. EDTA  
 D. LSD
24. The undissolved portion of the drug that remains after extraction:  
 A. solute  
 B. marc  
 C. solvent  
 D. active drug
25. Plant sources of purine bases alkaloids:  
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28. Attacks protopectin yielding soluble pectin:  
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 o B. *Manihot esculentum*  
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36 Bioflavonoids are also known as

- A. Vitamin K
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Antiamoebic agents  
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Soxhlet apparatus  
Percolator  
Clavenger apparatus  
All of the above

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**43. Which constituents of Gugulipids is responsible for hypolipidemic activity**  
Gums  
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**44. Which one of the following is S glycoside**  
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25

1. Quinoline alkaloids are biosynthesized via which one of the following pathways?

- (A) Shikimic acid - tyrosine (B) Shikimic acid - tryptophan  
(C) Shikimic acid - cathinone (D) Shikimic acid - phenylalanine

2. A powdered drug has the following microscopic characters:

Anther cells, arenchyma, pollen grains, phloem fibers, volatile oil cells and stone cells. The powder is obtained from which of the following?

- (A) Clove bud powder (B) Clove bud powder with stalk  
(C) Mother Clove (D) None of the above

3. Which of the following ergot alkaloids is water soluble and shows blue fluorescence?

- (A) Ergosine (B) Ergotamine (C) Ergocristine (D) Ergometrine

4. Goldbeater's skin test is used to detect the presence of which one of the following classes of compounds?

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5. Phenylethylisoquinoline is the precursor of which of the following alkaloids?

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6. Arrange the following fatty acids in decreasing order of their unsaturation (highest to lowest):

- [P] Stearic [Q] Oleic acid [R] Linolenic acid [S] Linoleic acid

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7. Each of the following options lists a phytoconstituent, its phytochemical grouping, pharmacological activity and corresponding semisynthetic analogue. Find a MISMATCHING option.

- (A) Podophyllotoxin, lignan, anticancer, etoposide  
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(D) THC, terpenophenolic, psychoactive, nabilone

8. Inhibition/induction of which of the following Cytochrome P450 enzyme system is most likely to be involved in important drug-drug interactions?

- (A) CYP3A4 (B) CYP2D6 (C) CYP2C9 (D) CYP1A2

9. Which of the following statements is FALSE for artemisinin?

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18/4B

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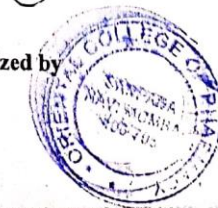
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- Bitterness value
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- White colored variety of ginseng roots
- Obtained by washing to remove colour of ginseng roots
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15  
44

Roll no:- 39  
Renu prajapati

1 Quinoline alkaloids are biosynthesized via which one of the following pathways?

- (A) Shikimic acid - tyrosine (B) Shikimic acid - tryptophan  
(C) Shikimic acid - cathinone (D) Shikimic acid - phenylalanine

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6. Arrange the following fatty acids in decreasing order of their unsaturation (highest to lowest):

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7. Each of the following options lists a phytoconstituent, its phytochemical grouping, pharmacological activity and corresponding semisynthetic analogue. Find a MISMATCHING option.

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10. Which of the following statements are true for ginseng root?

- [P] It is among the most traded plant material of Brazil. [Q] It is obtained from *Panax ginseng* and *Panax quinquefolium*. [R] It is obtained from young plants of six months to one year age. [S] It contains derivatives of protopanaxadiol.

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Choose the correct option.

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14. Which of the following drugs is a triterpenoid containing root?

- (A) Valerian (B) Brahmi (C) Satavari (D) Arusa

15. The following options carry the name of the plant, part used and its family. Find a WRONG combination.

- (A) *Aegle marmelos*, fruit & Rutaceae  
(B) *Conium maculatum*, fruit & Umbelliferae  
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17. Determine the correctness or otherwise of the following Assertion [a] and the Reason [r]:

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Which one of the given statements is correct?

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170  
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- B. hydrocodone
- C. papaverine HCl
- D. hydromorphone

23. The hallucinogen derived from ergot:

- A. THC
- B. ETO
- C. EDTA
- D. LSD

24. The undissolved portion of the drug that remains after extraction:

- A. solutE
- B. marc
- C. solvent
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25. Plant sources of purine bases alkaloids:

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- B. tea
- C. cacao
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- B. royal jelly
- C. ginseng X
- D. propolis X

27. Class of natural products with potent and diverse biological activities involved in platelet aggregation, pain and inflammation.

- A. enzyme
- B. hormones
- C. prostaglandis
- D. tubocurarine

28. Attacks protopectin yielding soluble pectin:

- A. protopectase
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(D) Papaine, enzyme, proteolytic, *Carica papaya*

17. Determine the correctness or otherwise of the following Assertion [a] and the Reason [r]:

Assertion (a) : Tannins are polyphenolic substances occurring in plant cell sap. Hydrolysable and condensed tannins are differentiated by match stick test.

Reason (r) : The condensed tannins are resistant to acid hydrolysis, therefore stain the lignin present in match stick.

- (A) Both (a) and (r) are true, and r is reason for (a)  
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18. In acetate mevalonate pathway geranyl pyrophosphate leads to formation of monoterpenes, the major constituents of volatile oils.

[P] Geranyl pyrophosphate contains two isoprene units

[Q] Monoterpenes have 15 carbon atoms

[R] The two isoprene units condense in head to tail fashion to give monoterpenes

[S] Isoprene unit has molecular formula of C<sub>5</sub>H<sub>8</sub>.

Which one of the given statements is correct?

- (A) P is true, Q is false, R is true, S is false  
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(D) P is true, Q is false, R is true, S is true

19. The alkaloid found in Calabar bean

- (A) physostigmine  
B. Cocaine  
C. colchicines  
D. emetine

20. Devil's dung used as a carminative, and anti-spasmodic.

- A. jalap  
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21. The following is/are the properties of nonhydrozable tannins except:

- A. They give a bluish to black color with ferric chloride.  
(B) They usually contain phloroglucinol nucleus in part.  
C. They are usually precipitated by bromine water TS.  
D. They yield catechol when heated.

22. This does not possess narcotic properties and is therefore sometimes called anarcotine.

- (A) Noscapine



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- B. hydrocodone  
~~C. papaverine HCl~~  
 D. hydromorphone
23. The hallucinogen derived from egrot:  
 A. THC  
~~B. ETO~~ (1)  
 C. EDTA  
~~D. LSD~~
24. The undissolved portion of the drug that remains after extraction:  
 A. solutE  
~~B. marc~~ (1)  
 C. solvent  
~~D. active drug~~
25. Plant sources of purine bases alkaloids:  
 A. kola  
 B. tea  
 C. cacao  
~~D. all of these~~ (1)
26. Milky white viscid secretion from the salivary glands of the worker hive bee, *Apis mellifera*, and is udes as A general tonic, toward the effects of old age:  
 A. lac  
~~B. royal jelly~~ (1)  
 C. ginseng  
 D. propolis
27. Class of natural products with potent and diverse biological activities involved in platelet aggregation, pain and inflammation.  
 A. enzyme  
 B. hormones  
~~C. porstaglandis~~ (1)  
 D. tubocurarine
28. Attacks protopectin yielding soluble pectin:  
 A. protopectase  
~~B. pectose~~ X  
 C. pectinase  
 D. pectase
29. The new name of the family Palmae:  
 A. poaceae  
 B. asteraceae X  
 C. caesalpinaceae  
~~D. arecaceae~~
- 30 A local source of cyanogenic glycosides is:  
~~A. Cyanogenum Esculenta~~  
 o B. *Manihot esculentum*  
 o C. *Manihot cympon*

2

31. The principal cinchona alkaloid employed therapeutically as anti-protozoal drug

- D. Manihot esculenta
- A. quinine
- B. chloroquine
- C. C. quinacrine
- D. D. quinidine

32. The pathologic product of sperm whale is:

- A. copaiba
- B. ambergris
- C. bayberry
- D. Carnauba
- E. Teaberry

32. These are major carotenoids in plants, except:

- A. b-carotene
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- A. acidulated water
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- C. methanol
- D. ether

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- A. . bilan
- B. porphine
- C. tetraporphinpyrrole
- D. magnesium

35. The solid resin from turpentine:

- A. benzoin
- B. styrax
- C. tolu
- D. rosin

36 Bioflavonoids are also known as

- A. Vitamin K
- B. Vitamin P
- C. Vitamin M
- D. Vitamin C

37. Opium does NOT contain the following EXCEPT -

- Meconic acid
- Starch
- Calcium Oxalate
- Tannins

38. Saponins are characterized by



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- 2
- ①
- Bitterness value
  - Hemolytic activity
  - Swelling Index
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39. White ginseng is
- White colored variety of ginseng roots
  - Obtained by washing to remove colour of ginseng roots
  - Washed roots without secondary roots, sun dried and oftenly peeled
  - None of the above
- ④

40. Bitters are used therapeutically as
- Antimarial agents
  - Antiamoebic agents
  - Antifungal agents
  - Appetizing agents
- X

41. Volatile oils are extracted by using
- Soxhlet apparatus
  - Perculator
  - Clavenger apparatus
  - All of the above
- X

42. Opium alkaloid containing isoquinoline ring system is
- Morphine
  - Codiene
  - Thebaine
  - Papaverine
- ①

43. Which constituents of Gugulipids is responsible for hypolipdemic activity
- Gums
  - Guggulsterol I and II
  - Guggulsterones E and Z
  - All of the above
- X

44. Which one of the following is S glycoside
- Digoxin
  - Sennoside A
  - Aloin
  - Sinigria
- X



16/11

23  
43

Roll no: 10

1 Quinoline alkaloids are biosynthesized via which one of the following pathways?  
 (A) Shikimic acid - tyrosine (B) Shikimic acid - tryptophan  
 (C) Shikimic acid - cathinone (D) Shikimic acid - phenylalanine

2 A powdered drug has the following microscopic characters:  
 Anther cells, arenchyma, pollen grains, phloem fibers, volatile oil cells and stone cells. The powder is obtained from which of the followings?  
 (A) Clove bud powder (B) Clove bud powder with stalk  
 (C) Mother Clove (D) None of the above

3. Which of the following ergot alkaloids is water soluble and shows blue fluorescence?  
 (A) Ergosin (B) Ergotamine (C) Ergocristine (D) Ergometrine

4. Goldbeater's skin test is used to detect the presence of which one of the following classes of compounds?  
 (A) Tannins (B) Steroids (C) Glycerides (D) Resins

5. Phenylethylisoquinoline is the precursor of which of the following alkaloids?  
 (A) Colchicine (B) Papaverine (C) Emetine (D) Cephaline

6. Arrange the following fatty acids in decreasing order of their unsaturation (highest to lowest):  
 [P] Stearic [Q] Oleic acid [R] Linolenic acid [S] Linoleic acid  
 (A) P>Q>R>S (B) S>R>P>Q (C) R>Q>P (D) Q>P>R>S

7. Each of the following options lists a phytoconstituent, its phytochemical grouping, pharmacological activity and corresponding semisynthetic analogue. Find a MISMATCHING option.  
 (A) Podophyllotoxin, lignan, anticancer, etoposide  
 (B) Sennoside, anthraquinone, laxative, sinigrin  
 (C) Atropine, alkaloid, anticholinergic, homatropine  
 (D) THC, terpenophenolic, psychoactive, nabilone

8. Inhibition/induction of which of the following Cytochrome P450 enzyme system is most likely to be involved in important drug-drug interactions?  
 (A) CYP3A4 (B) CYP2D6 (C) CYP2C9 (D) CYP1A2

9. Which of the following statements is FALSE for artemisinin?  
 (A) It is a sesquiterpene lactone endoperoxide  
 (B) It is a drug of choice in prophylaxis of malaria



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- (C) It does not cure relapsing malaria  
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**10. Which of the following statements are true for ginseng root?**

- [P] It is among the most traded plant material of Brazil. [Q] It is obtained from Panax ginseng and Panax quinquefolium. [R] It is obtained from young plants of six months to one year age. [S] It contains derivatives of protopanaxadiol.  
(A) P&Q (B) R&S (C) Q&R (D)  Q & S

**11. Which of the following alkaloids is derived from tyrosine?**

- (A) Quinine  (B) Morphine (C) Atropine (D) Ephedrine

**12. Anomocytic stomata, trichomes with collapsed cell and absence of calcium oxalate crystals are some of the microscopic features of which plant?**

- (A) Digitalis (B) Hyoscyamus (C) Mentha (D) Senna

**13. A glycoalkaloid,**

- [P] contains sulphur in addition to nitrogen in its molecule.  
[Q] is glycosidic in nature.  
[R] can be hydrolysed to an alkaloid.  
[S] always contains endocyclic nitrogen in its molecule.  
Choose the correct option.

- (A) P&R (B) Q&S  (C) Q&R (D) P&Q

**14. Which of the following drugs is a triterpenoid containing root?**

- (A) Valerian  (B) Brahmi (C) Satavari (D) Aduva

**15. The following options carry the name of the plant, part used and its family. Find a WRONG combination.**

- (A) Aegle marmelos, fruit & Rutaceae  
(B) Conium maculatum, fruit & Umbelliferae  
(C) Glycyrrhiza glabra, root and stolon & Leguminosae  
 (D) Strophanthus gratus, seed & Scrophulariaceae

**16. Each of the following options lists the name of the drug, its class, pharmacological action and plant source. Choose an option showing a WRONG combination.**

- (A) Asafoetida, oleo-gum-resin, anti-flatulence, Ferula foetida  
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20  
44

Roll no. 5.  
Ajali

Q1 Quinoline alkaloids are biosynthesized via which one of the following pathways?

- (A) Shikimic acid - tyrosine B) Shikimic acid - tryptophan ✓  
(C) Shikimic acid - cathinone D) Shikimic acid - phenylalanine

Q2 A powdered drug has the following microscopic characters:

Anther cells, arenchyma, pollen grains, phloem fibers, volatile oil cells and stone cells. The powder is obtained from which of the followings?

- (A) ✓ Clove bud powder (B) Clove bud powder with stalk  
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Q3. Which of the following ergot alkaloids is water soluble and shows blue fluorescence?

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(A) P>Q>R>S (B) S>R>P>Q (C) ✓ R>S>Q>P (D) Q>P>R>S

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Q9. Which of the following statements is FALSE for artemisinin?

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Choose the correct option.

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- Bitterness value
- Hemolytic activity
- Swelling Index
- All of the above

**39. White ginseng is**

- White colored variety of ginseng roots
- Obtained by washing to remove colour of ginseng roots
- Washed roots without secondary roots, sun dried and oftenly peeled
- None of the above

**40. Bitters are used therapeutically as**

- Antimalarial agents
- Antiamoebic agents
- Antifungal agents
- Appetizing agents

**41. Volatile oils are extracted by using**

- Soxhlet apparatus
- Perculator
- Clavenger apparatus
- All of the above

**42. Opium alkaloid containing isoquinoline ring system is**

- Morphine
- Codiene
- Thebaine
- Papaverine

**43. Which constituents of Guggulipids is responsible for hypolipidemic activity**

- Gums
- Guggulsterol I and II
- Guggulsterones E and Z
- All of the above

**44. Which one of the following is S glycoside**

- Digoxin
- Sennoside A
- Aloin
- Sinigrin



Dr. (Mrs.) Nutan Rao

Answer key :-

GPAT TEST

PHARMACEUTICAL CHEMISTRY (DR. NUTAN RAO)

TOPIC: CLASSIFICATION AND SAR OF FEW CLASSES OF DRUGS

1) What sort of receptor is the nicotinic receptor?

- a) A G-protein coupled receptor
- b) A kinase linked receptor
- c) An intracellular receptor
- d) An ion channel

2) What sort of receptor is the muscarinic receptor?

- a) A G-protein coupled receptor
- b) A kinase linked receptor
- c) An intracellular receptor
- d) An ion channel

3) Which of the following is a natural chemical messenger for the adrenergic receptor?

- a) Acetylcholine
- b) Dopamine
- c) Serotonin
- d) Noradrenaline

4) What is the predominant adrenoceptor in heart muscle?

- a)  $\alpha_1$ -adrenoceptor
- b)  $\alpha_2$ -adrenoceptor
- c)  $\beta_1$ -adrenoceptor
- d)  $\beta_2$ -adrenoceptor

5) What is the predominant  $\beta$ -adrenoceptor in bronchial smooth muscle?

- a)  $\beta_1$ -adrenoceptor
- b)  $\beta_2$ -adrenoceptor
- c)  $\beta_3$ -adrenoceptor
- d)  $\beta_4$ -adrenoceptor



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6) What is the main clinical use for agonists of the  $\beta_2$ -adrenoceptor?

- a) Treatment of angina
- b) Treatment of hypertension
- c) Treatment of asthma
- d) Treatment of pain

7) What is the main clinical use for antagonists of the  $\beta_1$ -adrenoceptor?

- a) Treatment of glaucoma
- b) Treatment of hypertension
- c) Treatment of asthma
- d) Treatment of pain

8) To which class of compounds do adrenaline, noradrenaline and dopamine belong?

- a) Phenethylamines
- b) Diphenolethylamines
- c) Catecholamines
- d) Adrenergics

9) Which of the following statements is untrue about G-proteins

- a) G-proteins consist of four protein subunits
- b) G-Proteins act as signal proteins
- c) G-Proteins interact with receptors
- d) G-Proteins bind GDP in the resting state

10) Which of the following is true when a G-protein interacts with a receptor?

- a) The G-protein is split into a  $\gamma$ -subunit and an  $\alpha, \beta$ -dimer
- b) The G-protein is split into a  $\beta$ -subunit and an  $\alpha, \gamma$ -dimer
- c) The G-protein is split into an  $\alpha$ -subunit and a  $\beta, \gamma$ -dimer
- d) The G-protein is split into its component protein subunits

11) Which of the following subunits activates adenylate cyclase?

- a) The  $\alpha_1$ -subunit
- b) The  $\alpha_s$ -subunit

- c) The  $\alpha_q$ -subunit
- d) The  $\alpha_o$ -subunit

12) Which of the following terms is used to describe a drug that has the same effect on a receptor as the endogenous chemical messenger?

- a) agonist
- b) antagonist
- c) partial agonist
- d) inverse agonist

13) Which of the following terms is used to describe a drug that binds to a receptor, and activates it, but to a lesser extent than the endogenous chemical messenger?

- a) agonist
- b) antagonist
- c) partial agonist
- d) inverse agonist

14) Which of the following terms is used to describe a drug that binds to a receptor, fails to activate it and prevents the endogenous chemical messenger from binding?

- a) agonist
- b) antagonist
- c) partial agonist
- d) inverse agonist

15) Which of the following terms is used to describe a drug that binds to a receptor, fails to activate it and leads to a drop in inherent biological activity?

- a) agonist
- b) antagonist
- c) partial agonist
- d) inverse agonist

16) Which of the following terms applies to the maximum biological effect resulting from a drug binding to its target?

- a) affinity



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- b) efficacy
- c) potency
- d) stability

17) Which of the following terms is the measure of how strongly a drug binds to a receptor?

- a) affinity
- b) efficacy
- c) potency
- d) stability

18) Which of the following terms applies to the amount of drug required to produce a defined biological effect?

- a) affinity
- b) efficacy
- c) potency
- d) stability

19) Barbiturates work by increasing the activity of this neurotransmitter in the brain.

- SSRI
- MAOI
- GABA
- TYR
- CCK

20) Barbiturates and benzodiazepines excite the activity of which neurotransmitter?

- GABA
- GHB
- Serotonin
- Endorphins
- Dopamine

21) Opioids function by mimicking which type of brain chemical?

- GABA
- Monoamines
- Serotonin
- Endorphins
- Dopamine

22) Position 5 of Barbiturates should be

- Monosubstituted
- Disubstituted
- Unsubstituted
- None of the above

23) Ramelteon is a

- Melatonin receptor agonist
- Melatonin receptor antagonist
- Melanin Receptor agonist
- None of the above

24) Ultra short acting Barbiturate is

- Phenobarbital
- Butobarbital
- Amobarbital
- Thiopental

25) Benzodiazepine with hydroxyl group at 3-position of diazepine ring is

- Diazepam
- Oxazepam
- Temazepam
- Both b and c



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Final year B.Pharm / GPAT Exam.

Pharmaceutical chemistry

Date:- 11/12/18

Dr. Nutan Rao

AY 2018-19.

Roll no	Marks
	(Max 25 Marks)
89	14
86	10
04	14
55	14
07	12
11	18
21	17
42	20
08	21
32	12
59	17
53	18
45	15
20	16
51	23
10	22
62	16
17	15
34	24
31	18



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no

name

Signature:

10  
 02  
 04  
 55  
 31  
 32  
 59  
 62  
 08  
 42  
 39  
 36  
 20  
 45  
 11  
 53  
 34  
 21  
 51

Jonita D'souza  
 Tahsin Attar  
 Saeika bodade  
 Priyanka Thakare  
 Tejaswini Navale  
 Namita Pat  
 OLOHV VALLADARES  
 LAXMI YADAV  
 Vatsha Dhanowade  
 Pradnya Sapkal  
 Renudevi Ramyash  
 Pushkara Patil  
 Sana Kalane  
 Sheethi Sawant  
 Riddhesh Ghogale  
 Govind Salanki  
 Smith Patel  
 Kazi Nabila Rasheed  
 Aditya A Singh

J'souza  
~~Tahsin~~  
~~Saeika~~  
 Priyanka  
~~Navale~~  
~~Pat~~  
~~OLOHV~~  
~~LAXMI~~  
~~Vatsha~~  
 P.B. Sapkal  
 Renu  
 Pushkara  
 Sana  
 Sheethi  
 Riddhesh  
 Govind  
 Patel  
 Kazi  
 Aditya

GPAT Lecture Attendance

Pharm Chem

Dr. Nutan

Topic :- Classification of Drugs

Date :- 10/12/18

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**Oriental College of Pharmacy, Sanpada, Navi Mumbai**

Attendance of Final Year B. Pharm. Students for GPAT class 2018-19

Pharmaceutics by S.K.Kar on 25<sup>th</sup> August 2018

Roll No.	Name	Signature	Roll No.	Name	Signature
1.	Agarwal Niket Rajesh		34.	Patel Smith Jitendra	
2.	Attar Tahsin Khansaheb	<i>Niket</i>	35.	Pathak Paritosh Mahesh	
3.	Bangar Pravin Shankar		36.	Patil Pushkara Prakash	
4.	Bodade Sarika Gajanan		37.	Poojary Harshita Krishna	
5.	Chauhan Anjali Laldhar		38.	Rajpurohit Aruna Vijay Singh	
6.	Choudhary Jitendra		39.	Renudevi Ramyash	
7.	Choudhary Mohd. Qasim		40.	Salunke Deepali Vilas	
8.	Dhanawade Varsha Suresh		41.	Sankpal Kajal Ashok	
9.	Dhumal Payal Suresh		42.	Sapkal Pradnya Balu	
10.	D'Souza Jovita Francis		43.	Saroj Ravindra Rajesh	
11.	Ghogale Riddhesh Vishvajit		44.	Sarvagod Shilpa Shashikant	
12.	Goud Romy Bhagwandas		45.	Sawant Shruti Navneet	
13.	Gupta Akanksha Rajesh	<i>Akanksha</i>	46.	Sawant Vanita Vijay	
14.	Gupta Nilesh Laxmi Prasad		47.	Sawant Viraj Eknath	
15.	Gupta Nitesh Shambhu		48.	Shaikh Abu Sayam Javed Alam	
16.	Jain Jayesh Hirachand		49.	Shelar Nikita Ashoka	
17.	Jain Ronak Barcha Rajmal	<i>Ronak</i>	50.	Shinde Sujata Shahaji	
18.	Jaiswal Archana Munnalal		51.	Singh Aditya Ajit	
19.	Johal Jasmitkaur Dalijitsingh		52.	Singh Anurag Narendra	
20.	Kalave Sana Asgarali		53.	Solanki Govindkumar Rameshkumar	
21.	Kazi Nabila Rashid		54.	Talwar Nikita Suresh	<i>Nabila</i>
22.	Khan Abdullah Karam Husain		55.	Thakare Priyanka Sanjay	
23.	Khan Hamid Wajihul Qamar		56.	Thakare Tanvi Ravindra	
24.	Khan Humera Mohd Subhan		57.	Thakare Trupti Ravindra	
25.	Khan Mohd. Bilal Mohd Ashraf		58.	Tiwari Narayandutt Rakesh	
26.	Khan Rukshar Riyaz		59.	Valladares Olohv Ricky	<i>Rukshar</i>
27.	Khan Salman Ahmad Mohammad		60.	Varma Shivam Ramendra	
28.	Mhatre Diksha Anant		61.	Yadav Abhay K Atmaprasad	
29.	Mohammed Anjada Hassan		62.	Yadav Laxmi Vijay Chand	
30.	Mukadam Ayesha Imtiaz		63.	Yadav Shubham Ramjeet	
31.	Navale Tejaswini Arvind	<i>Navale</i>	64.	Khan Javeed	
32.	Pal Namitadevi Bhulai		65.	Khan Shakeel	
33.	Pal Priya Rajdhari		66.	Yadav Pooja	
			67.	Deshmukh Areej	

Only 06 student attended the class  
Rathod

Class time 13.45 pm - 330 pm  
Dr. (Mrs.) Sudhy Rathod  
Principal  
Oriental College of Pharmacy  
25/08/2018, Sector-2,  
Sanpada, Navi Mumbai.



To Dr. Ganesh Deshmukh Sir,

Oriental College of Pharmacy, Sanpada, Navi Mumbai

GPAT TEST 2018-19  
Marks list of Final Year B. Pharm. Students  
Pharmaceutics by S.K.Kar. Test conducted on 27<sup>th</sup> August 2018

Roll No.	Name	Marks (50)	Roll No.	Name	Marks (50)
1.	Agarwal Niket Rajesh	48	34.	Patel Smith Jitendra	X
2.	Attar Tahsin Khansaheb	X	35.	Pathak Paritosh Mahesh	X
3.	Bangar Pravin Shankar	X	36.	Patil Pushkara Prakash	X
4.	Bodade Sarika Gajanan	X	37.	Poojary Harshita Krishna	X
5.	Chauhan Anjali Lalidhar	X	38.	Rajpurohit Aruna Vijay Singh	X
6.	Choudhary Jitendra	X	39.	Renudevi Ramyash	X
7.	Choudhary Mohd. Qasim	X	40.	Salunke Deepali Vilas	X
8.	Dhanawade Varsha Suresh	X	41.	Sankpal Kajal Ashok	X
9.	Dhumal Payal Suresh	X	42.	Sapkal Pradnya Balu	X
10.	D'Souza Jovita Francis	X	43.	Saroj Ravindra Rajesh	X
11.	Ghogle Riddhesh Vishvajit	X	44.	Sarvagod Shilpa Shashikant	X
12.	Goud Romy Bhagwandas	X	45.	Sawant Shruti Navneet	X
13.	Gupta Akanksha Rajesh	50	46.	Sawant Vanita Vijay	X
14.	Gupta Nilesh Laxmi Prasad	X	47.	Sawant Viraj Eknath	X
15.	Gupta Nitesh Shambhu	X	48.	Shaikh Abu Sayam Javed Alam	X
16.	Jain Jayesh Hirachand	X	49.	Shelar Nikita Ashoka	X
17.	Jain Ronak Barcha Rajmal	46	50.	Shinde Sujata Shahaji	X
18.	Jaiswal Archana Munnalal	X	51.	Singh Aditya Ajit	X
19.	Johal Jasmitkaur Dalijitsingh	X	52.	Singh Anurag Narendra	X
20.	Kalave Sana Asgarali	X	53.	Solanki Govindkumar Rameshkumar	X
21.	Kazi Nabila Rashid	X	54.	Talwar Nikita Suresh	49
22.	Khan Abdullah Karam Husain	X	55.	Thakare Priyanka Sanjay	X
23.	Khan Hamid Wajhul Qamar	X	56.	Thakare Tanvi Ravindra	X
24.	Khan Humera Mohd Subhan	X	57.	Thakare Trupti Ravindra	X
25.	Khan Mohd. Bilal Mohd Ashraf	X	58.	Tiwari Narayandutt Rakesh	X
26.	Khan Rukshar Riyaz	X	59.	Valladares Olohv Ricky	45
27.	Khan Salman Ahmad Mohmmad	X	60.	Varma Shivam Ramendra	X
28.	Mhatre Diksha Anant	X	61.	Yadav Abhay K Atmaprasad	X
29.	Mohammed Anjada Hassan	X	62.	Yadav Laxmi Vijay Chand	X
30.	Mukadam Ayesha Imtiyaz	X	63.	Yadav Shubham Ramjeet	X
31.	Navale Tejaswini Arvind	46	64.	Khan Javeed	X
32.	Pal Namitadevi Bhulai	X	65.	Khan Shakeel	X
33.	Pal Priya Rajdhari	X	66.	Yadav Pooja	X
			67.	Deshmukh Areej	X



From,  
Dr. (Mrs.) Sudha Rathod  
28/08/2018

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# Oriental College of Pharmacy, Sanpada, Navi Mumbai

**GPAT TEST 2018-19**  
**Attendance of Final Year B. Pharm. Students**  
**Pharmaceutics by S.K.Kar on 27<sup>th</sup> August 2018**

Roll No.	Name	Signature	Roll No.	Name	Signature
1.	Agarwal Niket Rajesh		34.	Patel Smith Jitendra	
2.	Attar Tahsin Khansaheb	<i>W.S.</i>	35.	Pathak Paritosh Mahesh	
3.	Bangar Pravin Shankar		36.	Patil Pushkara Prakash	
4.	Bodade Sarika Gajanan		37.	Poojary Harshita Krishna	
5.	Chauhan Anjali Laldhar		38.	Rajpurohit Aruna Vijay Singh	
6.	Choudhary Jitendra		39.	Renudevi Ramyash	
7.	Choudhary Mohd. Qasim		40.	Salunke Deepali Vilas	
8.	Dhanawade Varsha Suresh		41.	Sankpal Kajal Ashok	
9.	Dhumal Payal Suresh		42.	Sapkal Pradnya Balu	
10.	D'Souza Jovita Francis		43.	Saroj Ravindra Rajesh	
11.	Ghogale Riddhesh Vishvajit		44.	Sarvagod Shilpa Shashikant	
12.	Goud Romy Bhagwandas		45.	Sawant Shruti Navneet	
13.	Gupta Akanksha Rajesh	<i>A</i>	46.	Sawant Vanita Vijay	
14.	Gupta Nilesh Laxmi Prasad		47.	Sawant Viraj Eknath	
15.	Gupta Nitesh Shambhu		48.	Shaikh Abu Sayam Javed Alam	
16.	Jain Jayesh Hirachand		49.	Shelar Nikita Ashoka	
17.	Jain Ronak Barcha Rajmal	<i>Rajmal</i>	50.	Shinde Sujata Shahaji	
18.	Jaiswal Archana Munnalal		51.	Singh Aditya Ajit	
19.	Johal Jasmitkaur Dalijitsingh		52.	Singh Anurag Narendra	
20.	Kalave Sana Asgarali		53.	Solanki Govindkumar Rameshkumar	
21.	Kazi Nabila Rashid		54.	Talwar Nikita Suresh	<i>Dalawa</i>
22.	Khan Abdullah Karam Husain		55.	Thakare Priyanka Sanjay	
23.	Khan Hamid Wajhul Qamar		56.	Thakare Tanvi Ravindra	
24.	Khan Humera Mohd Subhan		57.	Thakare Trupti Ravindra	
25.	Khan Mohd. Bilal Mohd Ashraf		58.	Tiwari Narayandutt Rakesh	
26.	Khan Rukshar Riyaz		59.	Valladares Olohv Ricky	<i>R.V.</i>
27.	Khan Salman Ahmad Mohmmad		60.	Varma Shivam Ramendra	
28.	Mhatre Diksha Anant		61.	Yadav Abhay K Atmaprasad	
29.	Mohammed Anjada Hassan		62.	Yadav Laxmi Vijay Chand	
30.	Mukadam Ayesha Intiyaz		63.	Yadav Shubham Ramjeet	
31.	Navale Tejaswini Arvind	<i>Navale</i>	64.	Khan Javeed	
32.	Pal Namitadevi Bhulai		65.	Khan Shakeel	
33.	Pal Priya Rajdhari		66.	Yadav Pooja	
			67.	Deshmukh Areej	



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Oriental College of Pharmacy, Sanpada, Navi-Mumbai  
PRE-GPAT EXAM - 2018-19

Subject: Pharmaceutics (S.K.Kar)

048/50

Note: Answer all questions. Each Question carries 01 mark. No negative marking

Name: Niket R. Agarwal Class: Final Year B Pharm, 2018-19 Roll No.: 101

1. Of the following oral liquid formulations which would be considered as an Oropharyngeal formulation?  
a) Syrup  
b) Elixir  
c) Mouthwash  
d) Linctus
2. Which of the following formulations would not be applicable to ocular administration?  
a) Solution  
b) Liniment  
c) Suspension  
d) Ointment
3. A tablet to treat a headache must first be dissolved in water before swallowing. Which one of the following best describes this type of tablet?  
a) Modified release  
b) Oral disintegrating  
c) Effervescent  
d) Buccal
4. Capsules normally fall into two main categories. Which are they?  
a) Hard gelatin capsules and soft gelatin capsules  
b) Hard gelatin capsules and layered capsule  
c) Soft gelatin capsules and compressed capsules  
d) Compressed and layered capsules
5. Intravenous, intramuscular and subcutaneous are all examples of which routes of administration?  
a) Pulmonary administration  
b) Parenteral administration  
c) Otic administration  
d) Ocular administration
6. Where is the site of administration for a dosage form that uses transdermal delivery?  
a) The eyes  
b) The lungs  
c) Under the tongue  
d) The skin
7. Which of the following dosage forms delivers the API to the GI tract?  
a) Rectal suppositories  
b) Nasal sprays  
c) Vaginal pessaries  
d) Eye drops
8. Name two different types of inhaler?  
a) MDI & API  
b) IV & SC  
c) DPI & MDI  
d) GIT & ATP
9. Nasal administration is commonly used for the relief of?  
a) Headache  
b) Cough  
c) Sore throat  
d) Congestion
10. Ocular administration involves the treatment of which are?  
a) The skin  
b) The eyes  
c) The lungs  
d) The ear
11. Rotosort is a machine used to sort out:  
a) Coated capsules  
b) Filled capsules  
c) Sealed ampoules  
d) Sealed containers
12. Green bones are used for the preparation of a gelatin of the type:  
a) A  
b) B  
c) C  
d) A&B
13. In capsules, ROTOFIL is used for filling:  
a) Powders  
b) Pellets  
c) Liquids  
d) Corrosive liquids



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14) Gelatin and glycerin are used for the preparation of lamellae in a specified ratio. Identify the correct ratio

- a) 1:1
- b) 5:1
- c) 9:1
- d) 10:1

15) The size 000 capsules can fill the volume of

- a) 1.36ml
- b) 0.13ml
- c) 0.96ml
- d) 0.25ml

16) Capsules shell are made with

- a) Starch
- b) Pectin
- c) Gelatin
- d) Shellac

17) Vegetable capsules shell are prepared of:

- a) Gelatin
- b) Chitosan
- c) HPMC
- d) None of the above

18) Gelatin is

- a) Fat
- b) Protein
- c) Carbohydrate
- d) None of the above

19) Smallest capsule size is represented by number

- a) 0
- b) 3
- c) 1
- d) 5

20) The following steps involved in hard gelatin capsule shell production

- a) Dipping
- b) Spinning
- c) Trimming
- d) All of the above

21) The shells of soft gelatin capsules may be made elastic or plastic - like the addition of:

- a) Sorbitol
- b) Povidone
- c) Polyethylene glycol
- d) Hydroxypropyl methylcellulose

22) High bloom strength gelatin is used in manufacture of

- a) Soft gelatin capsules
- b) Hard gelatin capsules
- c) a & b
- d) None of the above

23) Example of Aerosol is:

- a) Smoke
- b) Solid form
- c) Liquid form
- d) Emulsion

24) Containers used for aerosol should withstand pressure of

- a) 130-150 psig at 150°F
- b) 140-180 psig at 130°F
- c) 120-170 psig at 110°F
- d) 190-200 psig at 210°F

25) Anthropogenic aerosols are those that are

- a) Caused by humans
- b) Come from the oceans
- c) Come from dry land
- d) Caused by natural source

26) Which of the following, found in our atmosphere, is an example of a SECONDARY atmospheric aerosols?

- a) Sulphuric acid
- b) Dust
- c) Smoke
- d) Soot

27) Under the ideal gas laws, which of the following is NOT a correct assumption?

- a) Molecules occupy a negligible volume
- b) Gas volume is insensitive to changes in pressure
- c) No energy is lost when molecules collide
- d) Forces between molecules are insignificant

28) Which of the following is NOT true of Raoult's law

- a) Raoult's law applies to miscible solvents in a closed system
- b) The toluene-benzene mixtures obey Raoult's law
- c) A pharmaceutical application of Raoult's law is the formulation of pressurised metered dose inhaler
- d) The behaviour predicted by Raoult's law is independent of inter-molecular forces

( 2 of 4 )



29. Gases do NOT have a role in which of the following pharmaceutical operations

- a) Surface area measurement
- b) Lyophilisation
- c) Distillation
- d) Melting

30. For an aerosol inhaled to the lungs, which of the following is NOT true?

- a) Airflow becomes faster and more turbulent the more deeply it penetrates the lungs
- b) Particles of 5  $\mu\text{m}$  and above impart in the proximal airways
- c) Sedimentation is the major mechanism of deposition for particles between 0.5-3  $\mu\text{m}$
- d) Breath-holding will enhance deposition of sub-micron particles by diffusion

31. For pressurised Metered Dose Inhalers (pMDI) which of the following is NOT true?

- a) pMDI emit aerosols at high velocity
- b) pMDI use liquefied gases as propellants
- c) pMDI may be formulated as solutions or suspensions
- d) pMDI cannot be used with spacers

32. Which of the following is NOT true of jet nebulisers?

- a) Jet nebulisers produce mists
- b) Jet nebulisers use high velocity gas flows to generate the Venturi effect to draw solution into the airflow
- c) Jet nebulisers induce an decrease in the temperature of the nebuliser solution during operation
- d) Jet nebulisers use ultrasonic forces to produce the aerosol

33. Which of the following polymer is widely used in film coating of tablets?

- a) Acacia
- b) Syrup
- c) HPMC
- d) PVA

34. Lamination is:

- a) Separation of a tablet into two or more distinct layers.
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✓ 42. Tablet thickness varies with changes in \_\_\_\_\_  
a) Die fills  
b) Temperature  
c) Compression force

✓ ~~d) a & c~~

✓ 43. GLP stands for?  
a) Good Manufacturing Practices  
b) Good Clinical Practices  
✓ c) Good Laboratory Practices  
d) All the above

✓ 44. cGMP prohibits false therapeutic claims  
a) True  
✓ b) False  
c) Not Sure  
d) May be

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c) Quality needs to be designed into the product from the very beginning of its lifecycle  
✓ d) All the above

✓ 48. 5P's covers People, Premises, Product, Processes and Procedures  
a) True  
b) False  
c) Maybe  
d) Not sure

✓ 49. Contamination may be caused by  
a) poor hygiene practices  
b) inadequate cleaning  
c) residual cleaning agents  
✓ d) All of the above

✓ 50. Manufacture of sterile medicines does not require strict controls on Line clearance and Line opening  
a) True  
✓ b) False  
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d) Not Sure

(4 of 4)

Oriental College of Pharmacy, Sanpada, Navi-Mumbai  
PRE-GPAT EXAM - 2018-19  
Subject: Pharmaceutics (S.K. Kar)

50  
50

Note: Answer all questions. Each Question carries 01 mark. No negative marking

Name: Akanksha Gupta Class: Final Year B Pharm, 2018-19 Roll No.: 13

1. Of the following oral liquid formulations which would be considered as an Oropharyngeal formulation?
- a) Syrup  
b) Elixir  
c) Mouthwash  
d) Linctus
2. Which of the following formulations would not be applicable to ocular administration?
- a) Solution  
b) Liniment  
c) Suspension  
d) Ointment
3. A tablet to treat a headache must first be dissolved in water before swallowing. Which one of the following best describes this type of tablet?
- a) Modified release  
b) Orally disintegrating  
c) Effervescent  
d) Buccal
4. Capsules normally fall into two main categories. Which are they?
- a) Hard gelatin capsules and soft gelatin capsules  
b) Hard gelatin capsules and layered capsule  
c) Soft gelatin capsules and compressed capsules  
d) Compressed and layered capsules
5. Intravenous, intramuscular and subcutaneous are all examples of which routes of administration?
- a) Pulmonary administration  
b) Parenteral administration  
c) Otic administration  
d) Ocular administration
6. Where is the site of administration for a dosage form that uses transdermal delivery?
- a) The eyes  
b) The lungs  
c) Under the tongue  
d) The skin
7. Which of the following dosage forms delivers the API to the GI tract?
- a) Rectal suppositories  
b) Nasal sprays  
c) Vaginal pessaries  
d) Eye drops
8. Name two different types of inhaler?
- a) MDI & API  
b) IV & SC  
c) DPI & MDI  
d) GIT & ATP
9. Nasal administration is commonly used for the relief of?
- a) Headache  
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c) Sore throat  
d) Congestion.
10. Ocular administration involves the treatment of which are?
- a) The skin  
b) The eyes  
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d) The ear
11. Rotosort is a machine used to sort out:
- a) Coated capsules  
b) Filled capsules  
c) Sealed ampoules  
d) Sealed containers
12. Green bones are used for the preparation of a gelatin of the type:
- a) A  
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c) C  
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13. In capsules, ROTOFIL is used for filling:
- a) Powders  
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✓ 14) Gelatin and glycerin are used for the preparation of lamellae in a specified ratio. Identify the correct ratio

- a) 1:1
- b) 5:1
- ✓ c) 9:1
- d) 10:1

✓ 15) The size 000 capsules can fill the volume of

- ✓ a) 1.36ml
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- a) Starch
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- d) Shellac

✓ 17) Vegetable capsules shell are prepared of:

- ✓ a) Gelatin
- b) Chitosan
- c) HPMC
- d) None of the above

✓ 18) Gelatin is

- a) Fat
- ✓ b) Protein
- c) Carbohydrate
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✓ 19) Smallest capsule size is represented by number

- a) 0
- b) 3
- c) 1
- ✓ d) 5

✓ 20) The following steps involved in hard gelatin capsule shell production

- a) Dipping
- b) Spinning
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- ✓ d) All of the above

✓ 21) The shells of soft gelatin capsules may be made elastic or plastic – like the addition of:

- ✓ a) Sorbitol
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- c) Polyethylene glycol
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✓ 22) High bloom strength gelatin is used in manufacture of

- a) Soft gelatin capsules
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- c) a & b
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✓ 23) Example of Aerosol is:

- ✓ a) Smoke
- b) Solid form
- c) Liquid form
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✓ 24) Containers used for aerosol should withstand pressure of

- a) 130 -150 psig at 150 °F
- ✓ b) 140 -180 psig at 130 °F
- c) 120 -170 psig at 110 °F
- d) 190-200 psig at 210 °F

✓ 25) Anthropogenic aerosols are those that are

- ✓ a) Caused by humans
- b) Come from the oceans
- c) Come from dry land
- d) Caused by natural source

✓ 26) Which of the following, found in our atmosphere, is an example of a SECONDARY atmospheric aerosols?

- ✓ a) Sulphuric acid
- b) Dust
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✓ 27) Under the ideal gas laws, which of the following is NOT a correct assumption?

- a) Molecules occupy a negligible volume
- ✓ b) Gas volume is insensitive to changes in pressure
- c) No energy is lost when molecules collide
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✓ 28) Which of the following is NOT true of Raoult's law

- a) Raoult's law applies to miscible solvents in a closed system
- b) The toluene-benzene mixtures obey Raoult's law
- c) A pharmaceutical application of Raoult's law is the formulation of pressurised metered dose inhaler
- ✓ d) The behaviour predicted by Raoult's law is independent of inter-molecular forces

( 2 of 4 )

Gases do NOT have a role in which of the following pharmaceutical operations

- a) Surface area measurement
- b) Lyophilisation
- c) Distillation
- d) Melting

30. For an aerosol inhaled to the lungs, which of the following is NOT true?

- a) Airflow becomes faster and more turbulent the more deeply it penetrates the lungs
- b) Particles of 5  $\mu\text{m}$  and above impact in the proximal airways
- c) Sedimentation is the major mechanism of deposition for particles between 0.5-3  $\mu\text{m}$
- d) Breath-holding will enhance deposition of sub-micron particles by diffusion

31. For pressurised Metered Dose Inhalers (pMDI) which of the following is NOT true?

- a) pMDI emit aerosols at high velocity
- b) pMDI use liquefied gases as propellants
- c) pMDI may be formulated as solutions or suspensions
- d) pMDI cannot be used with spacers

32. Which of the following is NOT true of jet nebulisers?

- a) Jet nebulisers produce mists
- b) Jet nebulisers use high velocity gas flows to generate the Venturi effect to draw solution into the airflow
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- a) Poor
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- a) Die table
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- c) Cam track
- d) Hooper

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(3 of 4)

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42. Tablet thickness varies with changes in \_\_\_\_\_  
a) Die fills  
b) Temperature  
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d) e, b, & c

43. GLP stands for?  
a) Good Manufacturing Practices  
b) Good Clinical Practices  
c) Good Laboratory Practices  
d) All the above

44. cGMP prohibits false therapeutic claims  
a) True  
b) False  
c) Not Sure  
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a) True  
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(4 of 4)



Oriental College of Pharmacy, Sanpada, Navi-Mumbai  
PRE-GPAT EXAM - 2018-19  
Subject: Pharmaceutics (S.K.Kar)

49

Note: Answer all questions. Each Question carries 01 mark. No negative marking

Name: Nivita Talwar Class: Final Year B Pharm, 2018-19 Roll No.: 54

1. Of the following oral liquid formulations which would be considered as an Oropharyngeal formulation?
  - a) Syrup
  - b) Elixir
  - c) Mouthwash ✓
  - d) Linctus
2. Which of the following formulations would not be applicable to ocular administration?
  - a) Solution
  - b) Liniment ✓
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3. A tablet to treat a headache must first be dissolved in water before swallowing. Which one of the following best describes this type of tablet?
  - a) Modified release
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4. Capsules normally fall into two main categories. Which are they?
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(4 of 4)

Oriental College of Pharmacy, Sanpada, Navi-Mumbai

PRE-GPAT EXAM - 2018-19

Subject: Pharmaceutics (S.K.Kar)

Note: Answer all questions. Each Question carries 01 mark. No negative marking

48  
50

Name: ..... Class: Final Year B Pharm, 2018-19 Roll No.: 59

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  - d) 5

- 20) The following steps involved in hard gelatin capsule shell production
- a) Dipping
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- 21) The shells of soft gelatin capsules may be made elastic or plastic - like the addition of:
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27. Under the ideal gas laws, which of the following is NOT a correct assumption?
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Gases do NOT have a role in which of the following pharmaceutical operations

- a) Surface area measurement
- b) Lyophilisation
- c) Distillation
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- a) Airflow becomes faster and more turbulent the more deeply it penetrates the lungs ✓
- b) Particles of 5  $\mu\text{m}$  and above impact in the proximal airways
- c) Sedimentation is the major mechanism of deposition for particles between 0.5-3  $\mu\text{m}$
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33. Which of the following polymer is widely used in film coating of tablets?

- a) Acacia
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- a) Separation of a tablet into two or more distinct layers. ✓
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- a) Leaching
- b) Picking ✓
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36. Dissolution test apparatus no. 1 as per IP is

- a) Paddle ✗
- b) Basket ✓
- c) Rotating basket
- d) Rotating cylinder

37. Which filler can NOT be used for the preparation of tablets for amine containing basic drugs to avoid discoloration of the tablets?

- a) Dicalcium phosphate
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- c) Starch
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38. If the Carr's index of a powder is 10% then the type of powder flow is

- a) Poor
- b) Excellent ✓
- c) Very poor
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- a) Die table
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41. The rate of drug bioavailability is most rapid when the drug is formulated as a

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- a) Good Manufacturing Practices
- b) Good Clinical Practices
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- d) All the above

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- a) True
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- d) Maybe

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Oriental College of Pharmacy, Sanpada, Navi-Mumbai  
PRE-GPAT EXAM - 2018-19  
Subject: Pharmaceutics (S.K.Kar)

46/50

Note: Answer all questions. Each Question carries 01 mark. No negative marking

Name: Tejaswini A. Navale Class: Final Year B Pharm, 2018-19 Roll No.: 31

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  - a) Syrup
  - b) Elixir
  - c) Mouthwash
  - d) Linctus
2. Which of the following formulations would not be applicable to ocular administration?
  - a) Solution
  - b) Liniment
  - c) Suspension
  - d) Ointment
3. A tablet to treat a headache must first be dissolved in water before swallowing. Which one of the following best describes this type of tablet?
  - a) Modified release
  - b) Oral disintegrating
  - c) Effervescent
  - d) Buccal
4. Capsules normally fall into two main categories. Which are they?
  - a) Hard gelatin capsules and soft gelatin capsules
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5. Intravenous, intramuscular and subcutaneous are all examples of which routes of administration?
  - Pulmonary administration
  - b) Parenteral administration
  - c) Otic administration
  - d) Ocular administration
6. Where is the site of administration for a dosage form that uses transdermal delivery?
  - a) The eyes
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7. Which of the following dosage forms delivers the API to the GI tract?
  - a) Rectal suppositories
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Oriental College of Pharmacy, Sanpada, Navi-Mumbai  
PRE-GPAT EXAM - 2018-19  
Subject: Pharmaceutics (S.K.Kar)

46  
50

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ORIENTAL EDUCATION SOCIETY'S  
**ORIENTAL COLLEGE OF PHARMACY**  
(Approved by AICTE, PCI, D.T.F., Affiliated to University of Mumbai & Certified by ISO 9001:2008)



Date : 15<sup>th</sup> July 2018

**Minutes of meeting**

Following are the minutes of meeting held on 14 July 2018, 11.30am:

- With the consent of all the members the schedule of GPAT lectures were finalized.
- Syllabus portion were distributed among the entire teacher with their consent.
- In meeting, it was decided that lecture will be conducted on Saturday at afternoon session and test will be taken on Monday of next week.
- At the end of meeting, it was decided that next meeting will be held on 28 November 2018, to review GPAT schedule.

Principal

Dr. (Mrs.) Sudha Rathod

Prepared by

Dr. Ganesh Deshmukh



Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.

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ORIENTAL EDUCATION SOCIETY'S  
**ORIENTAL COLLEGE OF PHARMACY**  
(Approved by AICTE, PCI, D.T.F., Affiliated to University of Mumbai & Certified by ISO 9001:2008)



Date : 15<sup>th</sup> July 2018

**Minutes of meeting**

Following are the minutes of meeting held on 14 July 2018, 11.30am:

- With the consent of all the members, the schedule of GPAT lectures were finalized.
- Syllabus portion were distributed among the entire teacher with their consent.
- In meeting, it was decided that lecture will be conducted on Saturday at afternoon session and test will be taken Monday of next week.
- At the end of meeting, it was decided that next meeting will be held on 24 December 2018, to review GPAT schedule.

Principal

*Sudha*  
Dr. (Mrs.) Sudha Rathod

Prepared by

*Ganesh*  
Dr. Ganesh Deshmukh

*S.Rathod*  
Dr. (Mrs.) Sudha Rathod  
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Date : 13<sup>th</sup> July 2018

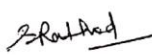
**Notice**

All the GPAT committee members and Teaching staff are hereby informed that there will be meeting on 14 July 2018 at 11.30 am.

Agenda of Meeting

- Schedule of GPAT classes.
- Syllabus discussion.
- Syllabus distribution


Principal

  
Dr. (Mrs.) Sudha Rathod

GPAT Co-ordinator

  
Dr. Ganesh Deshmukh



  
Dr. (Mrs.) Sudha Rathod  
Principal  
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Wednesday, Dec 06<sup>th</sup>, 2018

**NOTICE**

All Faculty members and Students of B.Pharmacy, Final Year are hereby informed that classes for "GPAT-2018-19" are re-scheduled and will be held on Monday only, @ 2.15 p.m. as per the following schedule written herewith in the table.

S.N.	Date	Teacher's Name	Topic
<b>Department of Pharmaceutical Chemistry</b>			
01	10 <sup>th</sup> December 18	Dr. Nutan Rao	Classification of Drugs and SAR of Important Drugs.
02	17 <sup>th</sup> December 18	Dr. Amjad Ali	Drug Metabolism
<b>Department of Pharmacognosy</b>			
03	24 <sup>th</sup> December 18	Dr. Mohib Khan	Introduction to Alkaloids
04	7 <sup>th</sup> January 19	Dr. Vandana Jain	Lipid, Tanins, Glycosides
<b>Department of Pharmacology</b>			
05	14 <sup>th</sup> January 19	Dr. Vanita Kanase	Urinary System, Immunology
06	21 <sup>st</sup> January 19	Mr. Imtiyaz Ansari	Anatomy of CVS general consideration. Pharmacology of drug acting of ANS

**Note:**

- The date/s may clash with the Academic Calendar for A.Y. 2018-19, please engage the GPAT class.
- Please keep ready the Question Paper (With help of M.Pharm. Students assigned under you) for the exam to be held on immediate Tuesday after your class turn.
- Please don't avail the C.L. on same date mentioned against your name. It will disturb next date/s.

*S. Rathod*  
 Principal 6/12/18



*S. Rathod*  
 Dr. (Mrs.) Sudha Rathod GPAT 18-19 Co-ordinator  
 Principal  
 Oriental College of Pharmacy  
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Monday, July 30<sup>th</sup>, 2018

**NOTICE**

All Faculty members and Students of B.Pharmacy, Final Year are hereby informed that classes for "GPAT-2018-19" will be held on Saturday only, @ 2.30 p.m. as per the following schedule written herewith in the table.

S.N.	Date	Teacher's Name	Topic
<b>Department of Pharmaceutics</b>			
01	4 <sup>th</sup> August 18	Dr.Ganesh Deshmukh	Colligative property, Chemical kinetics, Thermodynamics.
02	11 <sup>th</sup> August 18	Dr.Sudha Rathod	Viscosity and Rheology
03	25 <sup>th</sup> August 18	Mr. S. K. Kar	Dosage forms, Capsule, Tablet, Aerosols GMP
04	1 <sup>st</sup> September 18	Dr.Pradnya Palekar-Shanbagh	Psology- Numericals Biopharmaceutics
05	8 <sup>th</sup> September 18	Mr.Asish Dev	Stability studies and Preformulation.
06	22 <sup>nd</sup> September 18	Mrs. Kanishka Ladhmani	Crystallization
<b>Department of Quality Assurance</b>			
07	29 <sup>th</sup> September 18	Dr. S.LBoddu	UV, IR, Raman,NMR sums, Nephelometry, Turbidimetry.
08	13 <sup>th</sup> October 18	Ms.Darakhshan Shaikh	Biochemistry- Concept, Pathway and disorder.
<b>Department of Pharmacology</b>			
09	20 <sup>th</sup> October 18	Dr.Vanita Kanase	Urinary System, Immunology



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10	27 <sup>th</sup> October 18	Mr. Imtiyaz Ansari	Anatomy of CVS general consideration, Pharmacology of drug acting of ANS
<b>Department of Pharm. Chemistry</b>			
11	3 <sup>rd</sup> November 18	Dr. Nutan Rao	Classification of Drugs and SAR of Important Drugs.
12	24 <sup>th</sup> November 18	Mr. Amey Deshpande	Acidity/Basicity, pH, pKa with application in Medicinal Chemistry.
13	1 <sup>st</sup> December 18	Dr. Amjad Ali	Drug Metabolism
14	8 <sup>th</sup> December 18	Mrs. Ashwini Kulkarni	Stereochemistry
<b>Department of Pharmacognosy</b>			
15	15 <sup>th</sup> December 18	Dr. Mohib Khan	Introduction to Alkaloids
16	22 <sup>nd</sup> December 18	Dr. Vandana Jain	Lipid, Tanins, Glycosides

**Note:**

The date/s may clash with the Academic Calendar for A.Y. 2018-19, please engage the GPAT class Please keep ready the Question Paper (With help of M.Pharm. Students assigned under you) for the exam to be held on immediate Monday after your class turn. Please don't avail the C.L. on same date mentioned against your name. It will disturb next date/s.

*S. Rathod*

Principal

Monday, July 30<sup>th</sup>, 2018

*G. H. Mule*  
GPAT 18-19 Co-ordinator



*S. Rathod*  
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**GUIDANCE FOR  
CARRIER  
COUNSELLING  
2018-19**



## ORIENTAL EDUCATION SOCIETY'S

**Oriental College of Pharmacy  
Placement Cell  
Is organizing**



**“Connect with work “**

**Communication and Employability Skills Training Programme for  
final year B.Pharm and M.Pharm Students**

**From 8<sup>th</sup> to 12<sup>th</sup> October 2018**

**NGO Partner  
Tomorrow's Foundation**



**Training Partner  
Rubicon skill  
development Pvt. Ltd.**







Date: 24<sup>th</sup> September 2018

### Notice

This is to inform all the students of Final year B.Pharm and Final year M.Pharm that placement cell is organizing workshop on “**Communication and Employability Skills Training Program**” from 8<sup>th</sup> – 12<sup>th</sup> October 2018 from 9:30-4:30 pm.

The training programme is based on Barclays “life skill” programme in collaboration with Rubicon and Tomorrow’s foundation.

Attendance is compulsory for all the students.

Principal

Dr. Sudha Rathod

Placement Cell Coordinator

Mr. S.K. Kar

**ORIENTAL COLLEGE OF PHARMACY, SANPADA  
AND  
Rubicon Soft Skill Development Pvt.Ltd.Pune,  
PERSONALITY & EMPLOYABILITY SKILLS DEVELOPMENT**

**Final Year B.Pharmacy A.Y.- 2018-19**

**Students Attendance**

**Date: 8<sup>th</sup> - 12<sup>th</sup> Oct.2018**

Roll No	Name	Sign.	Roll No.	Name	Sign.
1	Agarwal Niket Rajesh	Niket	35	Pathak Paritosh Mahesh	Paritosh
2	Attar Tahsin Khansaheb	Tahsin	36	Patil Pushkara Prakash	P. Patil
3	Bangar Pravin Shankar	Pravin	37	Poojary Harshita Krishna	Harshita
4	Bodade Sarika Gajanan	S. Bodade	38	Rajpurohit Aruna V	Aruna
5	Chauhan Anjali Laldhar	Anjali	39	Renudevi Ramyash	Ramyash
6	Choudhary Jitendra	Jitendra	40	Salunke Deepali Vilas	Deepali
7	Choudhary Mohd. Qasim	Qasim	41	Sankpal Kajal Ashok	Kajal
8	Dhanawade Varsha Suresh	V. Dhanawade	42	Sapkal Pradnya Balu	Pradnya
9	Dhumal Payal Suresh	Payal	43	Saraj Ravindra Rajesh	Ravindra
10	D'Souza Jovita Francis	J. D'Souza	44	Sarvagod Shilpa Shashikant	Shilpa
11	Ghogale Riddhesh Vishvajit	Riddhesh	45	Sawant Shruti Navneet	Shruti
12	Goud Romy Bhagwandas	Romy	46	Sawant Vanita Vijay	Vanita
13	Gupta Akanksha Rajesh	Akanksha	47	Sawant Viraj Eknath	Viraj
14	Gupta Nilesh Laxmi Prasad	Nilesh	48	Shaikh Abu Sayam J	Shaikh A
15	Gupta Nitesh Shambhu	Nitesh	49	Shelar Nikita Ashoka	Nikita
16	Jain Jayesh Hirachand	Jayesh	50	Shinde Sujata Shahaji	Sujata
17	Jain Ronak Barcha Rajmal	Ronak	51	Singh Aditya Ajit	Aditya
18	Jaiswal Archana Munnalal	Archana	52	Singh Anurag Narendra	Anurag
19	Johal Jasmitkaur Dalijitsingh	Johal	53	Solanki Govindkumar	Solanki
20	Kalave Sana Asgarali	Sana	54	Talwar Nikita Suresh	Nikita
21	Kazi Nabila Rashid	Nabila	55	Thakare Priyanka Sanjay	Priyanka
22	Khan Abdullah Karam Husain	Abdullah	56	Thakare Tanvi Ravindra	Tanvi
23	Khan Hamid Wajhul Qamar	Hamid	57	Thakare Trupti Ravindra	Trupti
24	Khan Humera Mohd Subhan	Humera	58	Tiwari Narayandutt Rakesh	Narayandutt
25	Khan Mohd. Bilal Mohd Ashraf	Bilal	59	Valladares Olohv Ricky	Olohv
26	Khan Rukshar Riyaz	Rukshar	60	Varma Shivam Ramendra	Shivam
27	Khan Salman Ahmad Mohd.	Salman	61	Yadav Abhaykumar	Abhaykumar
28	Mhatre Diksha Anant	Diksha	62	Yadav Laxmi Vijay Chand	Laxmi
29	Mohammed Anjada Hassan	Anjada	63	Yadav Shubham Ramjeet	Shubham
30	Mukadam Ayesha Imtiyaz	Ayesha	64	Khan Javeed	Javeed
31	Navale Tejaswini Arvind	Tejaswini	65	Khan Shakeel	Shakeel
32	Pal Namitadevi Bhulai	Namitadevi	66	Yadav Pooja	Pooja
33	Pal Priya Rajdhari	Priya	67	Deshmukh Areej	Areej
34	Patel Smith Jitendra	Patel			

*Sudha Rathod*  
Principal  
Dr.(Mrs.) Sudha Rathod



**ORIENTAL COLLEGE OF PHARMACY, SANPADA**  
**AND**  
**Rubicon Soft Skill Development Pvt.Ltd.Pune,**  
**PERSONALITY & EMPLOYABILITY SKILLS DEVELOPMENT**  
**Second Year M.Pharmacy A.Y.- 2018-19**  
**Date: 8<sup>th</sup> -12<sup>th</sup> Oct.2018**

Sr. No	Name of the Student	Date	Sign
1	Aidar Suprya		<i>Aidar</i>
2	Bhabad Snehal		<i>S. Bhabad</i>
3	Pradnya Choudhary		<i>P. Choudhary</i>
4	Chouhan Virendra		<i>V. Chouhan</i>
5	Deshmukh Mansi		<i>M. Deshmukh</i>
6	Garje Manisha		<i>M. Garje</i>
7	Gazala Parveen		<i>G. Parveen</i>
8	Kapdekar Tejas		<i>T. Kapdekar</i>
9	Shirsat Swati		<i>S. Shirsat</i>
10	Yadav Shraavan Kumar		<i>Y. Shraavan</i>
11	Yadav Shrish kumar		<i>S. Yadav</i>
12	Kshirsagar Rishikesh		<i>R. Kshirsagar</i>
13	Rode Devyani		<i>R. Rode</i>
14	Vaidya Shivani		<i>S. Shivani</i>
15	Kabir Inayat Isak		<i>I. Kabir</i>
16	Khan Farha		<i>F. Khan</i>
17	Khooshbu Pasha		<i>P. Khooshbu</i>
18	Mane Deepali		<i>D. Mane</i>
19	Shaikh Sana		<i>S. Shaikh</i>
20	Singh Jyoti		<i>J. Singh</i>
21	Singh Sushmita		<i>S. Singh</i>
22	Vishvakarma Sunita		<i>S. Vishvakarma</i>

*S. Rathod*  
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**Glimpse of Seminar on "Communication and Employability Skills Training Program"**