Total No. of Printed Pages: 13

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M.Phil./Ph.D./URS-EE-Nov.-2018

SET-Y

SUBJECT: Pharmaceutical Science

		100093 Sr. No.
Time: 11/4 Hours	Max. Marks : 100	Total Questions : 100
Roll No. (in figures)	(in words)	
Name	Father's Name	
Mother's Name	Date of Examination_	
(Signature of the Candidate)	<u> </u>	(Signature of the Invigilator)
CANDIDATES MUST READ TH	E FOLLOWING INFORMATIO	

STARTING THE QUESTION PAPER.

- 1. All questions are compulsory.
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- 1. Identify the *correct* statement about Brownian motion: (1) Brownian motion arises due to the uneven distribution of the collisions between colloid particle and the solvent molecules. (2) Brownian motion was more rapid for smaller particles. (3) Brownian motion decrease with increase the viscosity of the medium. (4) All of the above 2. Phenomenon wherein a compound is obtained in crystalline forms that differ in the nature or stoichiometry of included solvent molecules is known as: (1) Polymorphism (2) Pseudopolymorphism (3) Enantiotrophism (4) All of the above **3.** The eighth edition of Indian pharmacopoeia is published in : (3) 2016 (4) 2014 (1) 2018 (2) 2017 **4.** Identify the preparation which is to be applied with friction : (4) Linctus (1) Lotion (2) Liniment (3) Ointment 5. The tablet defect due to free rotation of the punches, which have some engraving on the punch faces is known as: (2) Mottling (1) Capping (4) Chipping (3) Double impression **6.** Identify the type of emulsion which conducts electricity: (2) W /O emulsion (1) O/W emulsion
- - (3) O/O emulsion

(4) None of the above

- **7.** Nanocapsules are:
 - (1) Synthetic amphiphilic blocks that are spherical vesicular bodies containing an aqueous solution
 - (2) A lecithin and stearate encapsulated structure with a lipid core where lecithin is sited in the inner part of the capsule
 - (3) Mesoporous nanoparticles with high specificity in terms of pore volume and surface area
 - (4) Amalgamated nanoparticles composed of two subunits Poly L-lactic acid-blockpolyethylene glycol

U	
2	
1	1
-	1

		/
8.	The germ theory of disease is proposed (1) Girolamo Fracastoro (3) Jenner	d by : (2) Robert Koch (4) Louis Pasteur
9.	Autoclaving is an example of(1) Dry heat (2) Radiation	
10.	Identify the diluents for the test disinfe (1) Distilled water (3) Nutrient broth	
11.	Following are the physiochemical factor (1) Drug solubility and dissolution rate (2) Solvates and hydrates (3) Disintegration time (4) Polymorphism	ors affecting drug absorption except :
12.	FDA considers drug products to be criteria: (1) They contain the same active ingred (2) They are of the same dosage form a (3) They are identical in strength or cond (4) All of the above	and route of administration
13.	The process of drug absorption in whicknown as: (1) Active transport (3) Passive diffusion	ich the drug particles are engulfed by a cell is (2) Pinocytosis (4) Facilitated diffusion
14.	Identify the evaporator works based on(1) Rising film evaporator(3) Forced circulation evaporator	
15.	The process of extraction in which the water for a defined time; it is then coole (1) Maceration (2) Percolation	crude drug is boiled in a specified volume of
16.	The viscosity of filtrate is more than the (1) Increase (3) Increase as well decrease	(2) Decrease(4) No effect of filtration rate
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		3
47	Two and the town CATT.	
17.	Expand the term GATT: (1) Clobal Agreement on Tariffs and Trade	
	(1) Global Agreement on Tariffs and Trade	
	(2) Global Agreement on Tax and Trade	
	(3) General Agreement on Tariffs and Trade	
	(4) General Agreement on Tax and Trade	
18.	Identify the function of Central Drug Standard Control Organization (CDSCO):	
	(1) Regulatory control over the import of drugs	
	(2) Approval of new drugs and clinical trials	
	(3) To hold meetings of Drugs Consultative Committee (DCC) and Drugs Technical	L
	Advisory Board (DTAB)	
	(4) All of the above	
19.	According to Drugs and magic Remedies Act 1954, a drug includes:	
	(1) A medicine for the internal or external use of human beings or animals	
	(2) Any substance intended to be used for or in the diagnosis, cure, mitigation	1
	treatment or prevention of disease in human beings or animals	
	(3) any article, other than food, intended to affect or influence in any way the	5
	structure or any organic function of the body of human beings or animals	
	(4) All of the above	
20.	The form of consent according to in sub-section (4) of Section 3 of Medica	1
	termination of Pregnancy Act, 1970 and Rules 1975 is given in:	
	(1) Form A (2) Form B (3) Form C (4) Form D	
21.	According to drugs and cosmetics act, the regulations and standards for surgical	11
۷.	dressing is given in:	
(6)	(1) Schedule F-I (2) Schedule F-II	
	(3) Schedule F-III (4) Schedule E	
22	Following are Phase-II metabolic reactions except:	

(2) Glucuronide conjugation

P. T. O.

(4) Methylation

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(1) Oxidation

(3) Acetylation

. 23	Identify the incompatibility in the following prescription:	
	Rx	
	Strychnine hydrochloride solution 6 ml	
	Aromatic spirit of ammonia 4 ml	
	Water make up to 1000 ml	
	(1) Physical incompatibility (2) C	hemical incompatibility
	(0)	Jone of the above
24.	24. Identify the suppository base belongs to the na	atural category :
	(1) D-1 (1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Vecobee
	(3) Theobroma oil (4) H	lydrogel
25.	25. In Clarks rule the dose of a drug for child is cal	lculated based on :
	(1) D 1	ody surface area
	(2)	one of the above
26.		
	(1) T 1	o prevent the precipitation of arsenic
	(0) 77	develop yellow stain
27.		
	(1) D1	ue Vitriol
	(2) D 77: 1	ll of the above
28.		
	(1) A1 1	eta emitter
	(2) (2)	ositron emitter
29.	(-) 2	
_0.	(1) ADD CI	
	(0) F 1 1	ucuronic acid
30.		ucose 4-carboxylic acid
30.	(1) File 1 1 1	
	(0) 7:6	oniazid
	(1) 1 u	ra amino salicylic acid
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31.	Identify the source of the macrolide antibiotic erythromycin:	
	(1) Streptomyces venezulae (2) Str	reptomyces aureofacians
	(3) Streptomyces notatum (4) Str	reptomyces erythreus
32.	2. Cortisone is chemically :	
	(1) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methoxy-17-6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta	a[a]phenanthrene-3, 11-dione
	(2) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methyl-17-(2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocycloper	
	(3) (8S, 9S, 10R, 13S, 14S, 17R)-17-Hydroxy-17- 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta	
	(4) (8S, 9S, 10R, 13S, 14S, 17R)-17-Carboxy-17- 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta	
33.	3. Celecoxib act by inhibition of:	
	(1) Thymidylate synthase (2) Co	OX-2 enzyme
	(3) Angiotensin converting enzyme (4) Di	ihydrofolate reductase
34.	4. The minimum q^2 value required to qualify the	Hansch model is :
		ess than 0.5
	(3) More than 1 (4) Le	ess than 0.7
35.	5. The following are the primary standards excep	t:
		otassium bromate
	(3) Potassium permanganate (4) St	ulphanilic acid
36.	6. The following are the indicators used in non-action	queous titration of weak bases except :
		hymol blue
	(3) Methyl red (4) O	Pracet blue
37.	7. Identify the titration used to estimate the arom	natic primary amines:
		jeldahl method
	(3) Fajans method (4) D	Diazotization titration
38.	38. The C=O stretch range of carbonyl groups in t	he IR spectra is cm ⁻¹ .
		370-1350 (4) 675-600
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. 39	The principle of separation of Paper Chromatography is:		
	(1) Absorption (2) Adsorption (3) Partition (4) Gel filtration		
40	The coupling constant J value for trans compounds in NMR lies between:		
	(1) 6-11 (2) 12-18 (3) 0-8 (4) 5-8		
41			
, .	(1) D (2) B6 (3) K (4) B1		
42			
	(1) 8.6 (2) 1.7 (2) 4.7		
42	(3) 4.7 (4) 6.2		
43.	Niemann-Pick disease is a lipid metabolism disorder in which accumulates in lysosomes in cells.		
	(1) Sphingomyelin (2) Glucosylceramide		
	(3) Sterols (4) Phytanic acid		
44.	Identify the <i>correct</i> statement related to colligative properties:		
	(1) Colligative properties depend on molecular structure of the solute.		
	(2) Colligative properties depend solute concentration, temperature, and nature the solute particles.		
	(3) Colligative properties depend only on solute concentration and temperature, and are independent of the nature of the solute particles.		
	(4) All of the above		
45.	According to the first law of thermodynamics:		
,	(1) The entropy of any isolated system always increases		
	(2) The entropy of a system approaches a constant value as the temperature approaches absolute zero		
	(3) The entropy of any isolated system always decreases.		
	(4) Energy cannot be created or destroyed in an isolated system.		
46.	The phase rule is:		
M.Phil	(1) $F = C + P + 2$ (2) $F = C - P + 2$ (3) $F = C + P - 2$ (4) $F = C - P - 2$ 1./Ph.D./URS-EE-Nov2018/(Pharmaceutical Sci.)(SET-Y)/(A)		

4	7.	Chemical reaction whereby treatment alkenes is known as:	of tosylhydrazones with strong base gives
		(1) Bamford Steven reaction	(2) Stobbe condensation
		(3) Willgerodt rearrangement	(4) Huang-Minlong modification
4	8.	bond, where energy differences due t	because of hindered rotation about a single o steric strain or other contributors create a allow for isolation of individual conformers.
		(1) Enatiomers	(2) Diasteromers
	٠	(3) Atropisomers	(4) Mesomers
4	9.	Chemical reaction that involves the enolizable aldehyde is known as:	base-induced disproportionation of a non-
		(1) Cannizzaro reaction	(2) Reimer-Tiemann reaction
		(3) Schotten-Baumann reaction	(4) Perkin reaction
5	0.	Identify the method used for the synthe	sis of quinoline :
		(1) Gould-Jacobs reaction	(2) Combes quinoline synthesis
		(3) Conrad-Limpach synthesis	(4) All of the above
5	1.	Identify the Type 1 receptor:	
9		(1) Ionotropic receptor	(2) Metabotropic receptor
		(3) Enzyme linked receptor	(4) Nuclear receptor
5	2.	Identify the mechanism of the drug neo	stiomine used in Myasthenia gravis
		(1) Inhibition of adrenaline	(2) Acetyl cholinesterase inhibitor
		(3) Stimulation of beta-2 receptor	(4) Stimulation of alpha-1 receptor
5	3.		elongs to the category of tissue plasminogen
		(1) Streptokinase (2) Urokinase	(3) Tenecteplase (4) Clofibrate
5	4.		
	7.	(1) Salbutamol (2) Pirbuterol	ors used in the treatment of asthma except:
			(3) Terbutaline (4) Salmeterol
5	5.	Disulfiram is act by inhibition of:	
		(1) Alcohol dehydrogenase	(2) Acetaldehyde dehydrogenase
		(3) Glutamate dehydrogenase	(4) Pyruvate dehydrogenase
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56.	Identify the anticonvulsant drug which voltage gated sodium channels:	act by inhibiting Voltage-dependent block o
	(1) Phenytoin	(2) Phenobarbitone(4) Amphetamine
57.	One international unit of insulin (1 IU)) is defined as the "biological equivalent" of
,	(1) 25.2 (2) 44.7	(3) 34.7 (4) 18.6
58.	Identify the drug which causes Gray bab	by syndrome:
	(1) Penicillin	(2) Streptomycin
	(3) Ciprofloxacin	(4) Chloramphenicol
59.	Identify the drug which is an H2 receptor	or antagonist:
	(1) Chlorpheramine	(2) Mepyramine
	(3) Cimitidine	(4) Captopril
60.	Identify the teratogenic drug:	
	(1) Enalapril	(2) Isotretinoin
	(3) Diethylstilbestrol	(4) All of the above
61.	Pompe's disease is a glycogen storage d	isease caused due to the deficiency of:
	(1) Acid alpha-glucosidase	
	(2) Glucose-6-phosphatase	10 m
	(3) Liver glycogen phosphorylase	
	(4) Muscle phosphoglycerate mutase	
62.	Identify the chemical mediators of infla	
	(1) Histamine	(2) Bradykinin
	(3) Prostaglandins	(4) All of the above
63		
	(1) Autograft (2) Allograft	(3) Isograft (4) Xenograft
64	. Following are examples of benign canc	er except :
	(1) Adenoma	(2) Osteoma
	(3) Osteosarcoma	(4) Squamous cell papilloma
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65.	The gradual buildup of cholesterol and fibrous tissue in plaques in the wall of the coronary arteries or other arteries, typically over decades, is termed:	
	a de la companya del companya de la companya de la companya del companya de la companya del la companya de la c	Angina
		Cirrhosis
66.	. The causative organism of Syphilis is:	
		Streptococcus syphilus
		Treponema syphili
67.	. Postmarketing surveillance of drug is known	as phase clinical trial.
	(1) I (2) II (3)	(/) TT T
68.	 Bleeding when using the anticoagulant warf reaction. 	arin is an example of adverse
	(1) Type A (2) Type B (3)	Type C (4) Type D
69.	Identify the drug which cannot be administed	ered along with milk:
	(1) Chloramphenicol (2)	Streptomycin
	(3) Tetracycline (4)	Penicillin
70.	O. The anticancer drug 5-flurouracil act by inhi	ibition of:
	(1) Dihydrofolate reductase (2)	Thymidylate synthase
	(3) PRPP amidotransferase (4)	None of the above
71.	1. Identify the entry inhibitor used in the treat	ment of AIDS:
	(1) Lamivudine (2)	Efavirenz
	(3) Indinavir (4)	Maraviroc
72.	2. Identify the type of anaemia caused due to	deficiency of Vit-B12 :
	(1) Sickle cell anaemia (2)	Aplastic anaemia
	(3) Pernicious anaemia (4)	Polycythemia vera
73.	73. During the isovolumic relaxation stage of c	ardiac cycle,
	(1) The AV valves and the seminar valves	are closed
	(2) The AV valves are opened and the sem	inar valves are closed
	(3) The AV valves are closed and the semi	nar valves are opened
	(4) All of the above	
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74.	Identify the name of the Xth cranial nerve:		
	(1) Olfactory nerve	2) Vagus nerve	
	(3) Facial nerve	4) Trochlear nerve	
75.	The Diabetic nephropathy is a kidney d	order characterized by the sym	otom:
	(1) Nocturia	2) Tiredness	` :
	(3) Lack of appetite	4) All of the above	
76.	According to morphological classification category of roots:	n the identify the crude drug b	elongs to the
	(1) Turmeric (2) Ginger	3) Valerian (4) Aconite	
77.	The endogenous plant growth regulator	ibberellic acid is referred as:	
	(1) GA1 (2) GA3	3) GA7 (4) GA9	
78.	Identify the crude drug which contains	gnified trichome:	
	(1) Strophanthus (2) Buchu	3) Pyrethrum (4) Datura	
79.	Paracytic stomata is present in:		
	(1) Digitalis (2) Senna	3) Vasaka (4) Bellado	na
80.	Identify the source of isapgol:		
	(1) Plantago ovata	2) Plantago purshii	W W
	(3) Plantago asiatica	4) Plantago Wrightiana	
81.	Identify the chemical constituents of nec	noil:	
1	(1) Nimbidin (2) Nimbin	3) Nimbinin (4) All of the	ne above
82.	Identify the source of the Java cinnamor		
	(1) Cinnamomum loureirii	2) Cinnamomum burmanii	
	(3) Cinnamomum zeylanicum	4) Cinnamomum verum	
83.	Capsicum consists of dried ripe fruits of		
	(1) Capsicum sativa	2) Capsicum offcinale	
	(3) Capsicum annum	4) Capsicum hexandrum	
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84.	Polygalic acid is a chemical constitue	nt of:
	(1) Senega (2) Liquorice	(3) Bitter almond (4) Ginseng
85.	Following crude drugs contains indo	le alkaloids except :
	(1) Ergot (2) Cinchona	(3) Rauwolfia (4) Vinca
86.	Identify the plant drug useful in the t	reatment of hypertension:
	(1) Ergot (2) Gokhru	(3) Colchicum (4) Rauwolfia
87.	Identify the enzyme which is a fibring	olytic:
	(1) Trypsin	(2) Hyaluronidase
	(3) Urokinase	(4) Papain
88.	Identify the chemical constituent of co	plophony:
	(1) Boswellic acid	(2) Abietic acid
	(3) Shelloic acid	(4) Eugenol
89.	Insect flower is the synonym of the he	rb:
	(1) Pyrethrum (2) Brahmi	(3) Bhilawa (4) Punarnava
90.	Ayurvedic preparation in the form of paste meant for external application is known	
	as:	
	(1) Lehya (2) Taila	(3) Gutika (4) Lepa
91.	Identify the source of fennel:	
	(1) Foeniculum vulgare	(2) Eugenia caryophyllus
	(3) Anethum garveolans	(4) Citrus aurantium
92.	Following are the adulterants of Digitalis leaves except:	
	(1) Verbuscum thapus	(2) Primula vulgaris
	(3) Symphytum officinale	(4) Thevetia neriifolia
93.	The following are the biosynthetic pro-	ducts of the ornithine except:
	(1) Nicotine (2) Emetine	(3) Tropine (4) Scopalmine
94.		
	(1) 3 (2) 4	(3) 6 (4) 8
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95	Identify the anticancer drug obtained from the marine source:
	(1) Ara-C (2) ATX-II (3) Eptatretin (4) Eunicin
96	
	(1) Borntragers test (2) Murexide test (3) Raymonds test (4) Molisch test
97.	(±) Wonsen test
	(1) Glycosides (2) Steroids
98.	Identify the method for producing transgenic animal:
7	(1) DNA microinjection(2) Embryonic stem cell-mediated gene transfer(3) Retrovirus-mediated gene transfer
	(4) All of the above
99.	Identify the water soluble extractive value of Aloe is not less than
100.	Indian squill consists of dried slices of the bulbs of Urginea indica belongs to the
	(1) Solanaceae (2) Liliaceae (3) Rubiaceae (4) Apocynaceae

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В

M.Phil./Ph.D./URS-EE-Nov.-2018

SET-Y

SUBJECT: Pharmaceutical Science

***		Sr. No		
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(Signature of the Candidate)		(Signature of the Invigilator)		
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M.Phil./Ph.D./URS-EE-Nov.-2018/(Pharmaceutical Sci.)(SET-Y)/(B)

1.	Wernicke-Korsakoff syndrome is due to	the deficiency of vi	tanun.	
	(1) D (2) B6	(3) K	(4) B1	
2.	Buoyant density of majority of DNA is	g/cm ³ .		
	(1) 8.6 (2) 1.7	(3) 4.7	(4) 6.2	
3.		sm disorder in who (2) Glucosylceram (4) Phytanic acid		
4.	Identify the <i>correct</i> statement related to o	colligative properti	es:	
	(1) Colligative properties depend on mo	olecular structure o	f the solute.	
	(2) Colligative properties depend solute the solute particles.	te concentration, to	emperature, and nature of	
	(3) Colligative properties depend only are independent of the nature of the		ation and temperature, and	
	(4) All of the above			
5.	According to the first law of thermodyna	amics:		
	(1) The entropy of any isolated system a	always increases		
	(2) The entropy of a system approaches absolute zero	ches a constant	value as the temperature	
	(3) The entropy of any isolated system	always decreases.		
	(4) Energy cannot be created or destroy	red in an isolated sy	ystem.	
6.	The phase rule is: (1) $F = C + P + 2$ (3) $F = C + P - 2$	(2) $F = C - P + 2$ (4) $F = C - P - 2$		
7.	Chemical reaction whereby treatment alkenes is known as:	of tosylhydrazon	es with strong base gives	
	(1) Bamford Steven reaction	(2) Stobbe conde	nsation	
	(3) Willgerodt rearrangement	(4) Huang-Minlo	ng modification	
M.Phil./Ph.D./URS-EE-Nov2018/(Pharmaceutical Sci.)(SET-Y)/(B) P. T. O				

C		
-	I	
F	D	
		4

8.	bond, where energy differences due to	cause of hindered rotation about a single steric strain or other contributors create a llow for isolation of individual conformers.
	(1) Enatiomers (2	2) Diasteromers
	(3) Atropisomers (4)	e) Mesomers
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10.	. Identify the method used for the synthesis	of quinoline:
	(1) Gould-Jacobs reaction (2	2) Combes quinoline synthesis
	(3) Conrad-Limpach synthesis (4)	All of the above
11.	. Identify the entry inhibitor used in the trea	atment of AIDS:
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12.	. Identify the type of anaemia caused due to	deficiency of Vit-B12:
		2) Aplastic anaemia
	(3) Pernicious anaemia (4)	l) Polycythemia vera
13.	During the isovolumic relaxation stage of	cardiac cycle,
	(1) The AV valves and the seminar valves	
	(2) The AV valves are opened and the ser	ninar valves are closed
	(3) The AV valves are closed and the sem	inar valves are opened
	(4) All of the above	
14.	. Identify the name of the X th cranial nerve	
	(4) 016	2) Vagus nerve
		1) Trochlear nerve
15		*
15.		
		2) Tiredness
	(3) Lack of appetite	1) All of the above
DL:	11 /DL D /TIDE EE Nov. 2010//Dlasses	1 C : \(CETE \(\lambda\)/(D)

16.	According to morphological classification t category of roots:	the identify the crude drug belongs to the
		Valerian (4) Aconite
17.	The endogenous plant growth regulator gib	berellic acid is referred as:
	(1) GA1 (2) GA3 (3)	GA7 (4) GA9
18.	Identify the crude drug which contains lign	ified trichome:
	(1) Strophanthus (2) Buchu (3)	Pyrethrum (4) Datura
19.	Paracytic stomata is present in :	
	(1) Digitalis (2) Senna (3)	Vasaka (4) Belladona
20.	. Identify the source of isapgol:	
	(1) Plantago ovata (2)	Plantago purshii
	(3) Plantago asiatica (4)) Plantago Wrightiana
21.	. Identify the source of fennel:	
	(1) Foeniculum vulgare (2)	
	(3) Anethum garveolans (4)) Citrus aurantium
22.		
	(-)) Primula vulgaris
) Thevetia neriifolia
23.		
		Tropine (4) Scopalmine
24.		
		3) 6 (4) 8
25.		
	(1) Ara-C (2) ATX-II (3	3) Eptatretin (4) Eunicin
26.		N. Muravida toot
	(1)	2) Murexide test 4) Molisch test
M.Ph	hil./Ph.D./URS-EE-Nov2018/(Pharmaceutica	
		ž , , ,

,		No.
27.	Libermann-Burchards test is the identif	ication test for:
	(1) Glycosides	(2) Steroids
	(3) Tannins	(4) Napthoquinones
28.	Identify the method for producing tran	sgenic animal :
	(1) DNA microinjection	
	(2) Embryonic stem cell-mediated gen	e transfer
	(3) Retrovirus-mediated gene transfer	
	(4) All of the above	
29.		lue of Aloe is not less than %w/w:
25.	(1) 25 (2) 20	(3) 10 (4) 15
30.	Indian squill consists of dried slices	of the bulbs of Urginea indica belongs to the
	family:	
~	(1) Solanaceae	(2) Liliaceae
	(3) Rubiaceae	(4) Apocynaceae
31.	Identify the <i>correct</i> statement about B	rownian motion:
		ne uneven distribution of the collisions between
	colloid particle and the solvent me (2) Brownian motion was more rapid	
	(2) Brownian motion was more rapid(3) Brownian motion decrease with in	ncrease the viscosity of the medium.
	(4) All of the above	
32.	, ,	s obtained in crystalline forms that differ in the
02.	nature or stoichiometry of included s	olvent molecules is known as:
	(1) Polymorphism	(2) Pseudopolymorphism
	(3) Enantiotrophism	(4) All of the above
33	. The eighth edition of Indian pharmac	copoeia is published in :
	(1) 2018 (2) 2017	(3) 2016 (4) 2014
34	1. Identify the preparation which is to b	be applied with friction:
	(1) Lotion	(2) Liniment
	(3) Ointment	(4) Linctus
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35.	The tablet defect due to free rotation of the the punch faces is known as:	punches, which have some engraving or
	(1) Capping (2)	Mottling
	(3) Double impression (4)	Chipping
36.	. Identify the type of emulsion which conduct	s electricity:
	(1) O/W emulsion (2)	W /O emulsion
	(3) O/O emulsion (4)	None of the above
37.	Nanocapsules are:	
	(1) Synthetic amphiphilic blocks that are aqueous solution	spherical vesicular bodies containing ar
	(2) A lecithin and stearate encapsulated str sited in the inner part of the capsule	ucture with a lipid core where lecithin i
	(3) Mesoporous nanoparticles with high surface area	specificity in terms of pore volume and
	(4) Amalgamated nanoparticles composed polyethylene glycol	of two subunits Poly L-lactic acid-block
38.	3. The germ theory of disease is proposed by:	V
	(1) Girolamo Fracastoro (2)	Robert Koch
9	(3) Jenner (4)	Louis Pasteur
39.	Autoclaving is an example of ste	
	(1) Dry heat (2) Radiation (3)	Moist heat (4) Filtration
40.	. Identify the diluents for the test disinfectant	in case of Chick Martin test:
		Alcohol
	(3) Nutrient broth (4)	Water with yeast suspension or feces
41.	1. Identify the Type 1 receptor:	
	(1) Ionotropic receptor (2)	Metabotropic receptor
	(3) Enzyme linked receptor (4)	Nuclear receptor
42.	2. Identify the mechanism of the drug neostig	mine used in Myasthenia gravis:
	(1) Inhibition of adrenaline (2)	Acetyl cholinesterase inhibitor
	(3) Stimulation of beta-2 receptor (4)	Stimulation of alpha-1 receptor

43.	Identify the fibrinolytic drug which be activator:	long	gs to the category of tissue plasminogen
	(1) Streptokinase (2) Urokinase	(3)	Tenecteplase (4) Clofibrate
44.	Following are short acting bronchodialto	ors u	used in the treatment of asthma except:
	(1) Salbutamol (2) Pirbuterol	(3)	Terbutaline (4) Salmeterol
45.	Disulfiram is act by inhibition of:		
	(1) Alcohol dehydrogenase	` '	Acetaldehyde dehydrogenase
	(3) Glutamate dehydrogenase	(4)	Pyruvate dehydrogenase
46.	Identify the anticonvulsant drug which voltage gated sodium channels:	act	by inhibiting Voltage-dependent block of
	(1) Phenytoin	(2)	
	(3) Haloperidol	(4)	Amphetamine
47.		J) is	s defined as the "biological equivalent" of
	μg pure crystalline insulin.	(2)	(4) 186
	(1) 25.2 (2) 44.7	, ,) 34.7 (4) 18.6
48.	Identify the drug which causes Gray ba		
	(1) Penicillin) Streptomycin
	(3) Ciprofloxacin	(4)) Chloramphenicol
49.	Identify the drug which is an H2 recept	or a	
	(1) Chlorpheramine	(2)	
	(3) Cimitidine	(4)) Captopril
50.	. Identify the teratogenic drug:		
	(1) Enalapril	(2)	y and the second
	(3) Diethylstilbestrol		All of the above
51.	. Pompe's disease is a glycogen storage of	disea	ase caused due to the deficiency of:
	(1) Acid alpha-glucosidase		
	(2) Glucose-6-phosphatase		
*	(3) Liver glycogen phosphorylase		
	(4) Muscle phosphoglycerate mutase		
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52 .	Identify the chemical mediators of infl	ammation:
	(1) Histamine	(2) Bradykinin
	(3) Prostaglandins	(4) All of the above
53.	is tissue that is transplante	ed from one person to another.
	(1) Autograft	(2) Allograft
	(3) Isograft	(4) Xenograft
54.	Following are examples of benign can	cer except :
	(1) Adenoma	(2) Osteoma
	(3) Osteosarcoma	(4) Squamous cell papilloma
55.	The gradual buildup of cholesterol a coronary arteries or other arteries, typ	and fibrous tissue in plaques in the wall of the pically over decades, is termed:
	(1) Atherosclerosis	(2) Angina
	(3) Hypertension	(4) Cirrhosis
56.	The causative organism of Syphilis is	:
	(1) Mycobacterium leprae	(2) Streptococcus syphilus
	(3) Treponema pallidum	(4) Treponema syphili
57.	Postmarketing surveillance of drug is	known as phase clinical trial.
	(1) I (2) II	(3) III (4) IV
58.	Bleeding when using the anticoagula	nt warfarin is an example of adverse
	reaction.	
	(1) Type A	(2) Type B
	(3) Type C	(4) Type D
59.	Identify the drug which cannot be ad	ministered along with milk:
	(1) Chloramphenicol	(2) Streptomycin
	(3) Tetracycline	(4) Penicillin
60.	The anticancer drug 5-flurouracil act	by inhibition of:
	(1) Dihydrofolate reductase	(2) Thymidylate synthase
	(3) PRPP amidotransferase	(4) None of the above
AT IDI-	:1 /Ph D /LIDS EE Nov. 2019//Pharmac	outical Sci)(SET-V)/(R)

61.	According to drugs and cosmetics act dressing is given in:	, the regulations and standards for surgica
	(1) Schedule F-I	(2) Schedule F-II
	(3) Schedule F-III	(4) Schedule E
62.	Following are Phase-II metabolic reaction	ons except:
	(1) Oxidation	(2) Glucuronide conjugation
	(3) Acetylation	(4) Methylation
63.	Identify the incompatibility in the follow	wing prescription:
	Rx Strychnine hydrochloride solution 6 ml	
	Aromatic spirit of ammonia 4 ml Water make up to 1000 ml	
	(1) Physical incompatibility(3) Therapeutic incompatibility	(2) Chemical incompatibility(4) None of the above
64.	Identify the suppository base belongs to	o the natural category:
	(1) Polyethylene glycol	(2) Wecobee
	(3) Theobroma oil	(4) Hydrogel
65.	In Clarks rule the dose of a drug for ch	ild is calculated based on:
	(1) Body weight	(2) Body surface area
	(3) Age	(4) None of the above
66.	Lead acetate cotton wool is used in lim	nit test for Arsenic:
	(1) To produce arsine gas	(2) To prevent the precipitation of arsenic
	(3) To trap hydrogen sulphide gas	(4) To develop yellow stain
67.	Copper sulphate is also known as:	
	(1) Bluestone	(2) Blue Vitriol
	(3) Romon Vitriol	(4) All of the above
68.	The radioisotope chromium (51Cr) is a	· · · · · · · · · · · · · · · · · · ·
	(1) Alpha emitter	(2) Beta emitter
	(3) Gamma emitter	(4) Positron emitter
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69.	Identify the endogenous cofactor for the gluci	uronide conjugation :
	(1) UDP-Glucuronic acid (2) (Glucuronic acid
	(3) Endoglucuronide (4) (Glucose 4-carboxylic acid
70.	. Identify the antimycobacterial drug synthesiz	zed from 4-methylpyridine :
	(1) Ethambutol (2) I	Isoniazid
	(3) Rifampicin (4)	Para amino salicylic acid
71.	 Following are the physiochemical factors affe (1) Drug solubility and dissolution rate (2) Solvates and hydrates (3) Disintegration time (4) Polymorphism 	ecting drug absorption except :
72.	 FDA considers drug products to be pharmoriteria: (1) They contain the same active ingredient(s) (2) They are of the same dosage form and ro (3) They are identical in strength or concentration (4) All of the above 	s) ute of administration
73.	The process of drug absorption in which the known as:	e drug particles are engulfed by a cell is
	(1) Active transport (2)	Pinocytosis
	(3) Passive diffusion (4)	Facilitated diffusion
74.	. Identify the evaporator works based on "ther	mo-siphon" principle :
	(1) Rising film evaporator (2)	Falling film evaporator
	(3) Forced circulation evaporator (4)	None of the above
75.	The process of extraction in which the crud water for a defined time; it is then cooled and	
	(1) Maceration (2)	Percolation
	(3) Decoction (4)	Digestion
76.	6. The viscosity of filtrate is more than the rate	of filtration is tends to:
	(1) Increase (2)	Decrease
	(3) Increase as well decrease (4)	No effect of filtration rate
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77.	Expand the term GATT:
	(1) Global Agreement on Tariffs and Trade
6	(2) Global Agreement on Tax and Trade
	(3) General Agreement on Tariffs and Trade
	(4) General Agreement on Tax and Trade
78.	Identify the function of Central Drug Standard Control Organization (CDSCO):
	(1) Regulatory control over the import of drugs
	(2) Approval of new drugs and clinical trials
	(3) To hold meetings of Drugs Consultative Committee (DCC) and Drugs Technical Advisory Board (DTAB)
	(4) All of the above
79.	According to Drugs and magic Remedies Act 1954, a drug includes :
	(1) A medicine for the internal or external use of human beings or animals
	(2) Any substance intended to be used for or in the diagnosis, cure, mitigation treatment or prevention of disease in human beings or animals
	(3) any article, other than food, intended to affect or influence in any way the structure or any organic function of the body of human beings or animals
	(4) All of the above
80.	The form of consent according to in sub-section (4) of Section 3 of Medica termination of Pregnancy Act, 1970 and Rules 1975 is given in:
	(1) Form A (2) Form B
	(3) Form C (4) Form D
81.	Identify the chemical constituents of neem oil:
	(1) Nimbidin (2) Nimbin
	(3) Nimbinin (4) All of the above

82. Identify the source of the Java cinnamon:

(1) Cinnamomum loureirii

(2) Cinnamomum burmanii

(3) Cinnamomum zeylanicum

(4) Cinnamomum verum

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83.	Capsicum consists of dried ripe fruits of	of:
	(1) Capsicum sativa	(2) Capsicum offcinale
	(3) Capsicum annum	(4) Capsicum hexandrum
84.	Polygalic acid is a chemical constituent	t of:
	(1) Senega	(2) Liquorice
	(3) Bitter almond	(4) Ginseng
85.	Following crude drugs contains indole	e alkaloids except :
	(1) Ergot	(2) Cinchona
	(3) Rauwolfia	(4) Vinca
86.	Identify the plant drug useful in the tr	eatment of hypertension:
. v	(1) Ergot	(2) Gokhru
	(3) Colchicum	(4) Rauwolfia
87.	Identify the enzyme which is a fibrino	lytic:
07.	(1) Trypsin	(2) Hyaluronidase
	(3) Urokinase	(4) Papain
88.	Identify the chemical constituent of co	olophony:
00.	(1) Boswellic acid	(2) Abietic acid
	(3) Shelloic acid	(4) Eugenol
90	- CII-1	erb:
89.	(1) Pyrethrum	(2) Brahmi
	(3) Bhilawa	(4) Punarnava
	N. 7	of paste meant for external application is known
90.	as:	of paste meant for external appreciation is
	(1) Lehya (2) Taila	(3) Gutika (4) Lepa
91		antibiotic erythromycin:
ופ	(1) Streptomyces venezulae	(2) Streptomyces aureofacians
	(3) Streptomyces notatum	(4) Streptomyces erythreus
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92.	Cortisone is chemically:
	(1) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methoxy-17-(2-hydroxyacetyl)-10, 12-dimethyl-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
	(2) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methyl-17-(2-hydroxymethyl)-10, 13-dimethoxy-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
	(3) (8S, 9S, 10R, 13S, 14S, 17R)-17-Hydroxy-17-(2-hydroxyacetyl)-10, 13-dimethyl-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
	(4) (8S, 9S, 10R, 13S, 14S, 17R)-17-Carboxy-17-(2-hydroxypropyl)-10, 13-diacetyl-1, 2 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
93.	Celecoxib act by inhibition of: (1) Thymidylate synthase (2) COX-2 enzyme (3) Angiotensin converting enzyme (4) Dihydrofolate reductase
94.	The minimum q ² value required to qualify the Hansch model is: (1) More than 0.5 (2) Less than 0.5 (3) More than 1 (4) Less than 0.7
95.	The following are the primary standards except: (1) Potassium hydrogen phthalate (2) Potassium bromate (3) Potassium permanganate (4) Sulphanilic acid
96.	The following are the indicators used in non-aqueous titration of weak bases except: (1) Crystal violet (2) Thymol blue (3) Methyl red (4) Oracet blue
97.	Identify the titration used to estimate the aromatic primary amines: (1) Karl Fischer titration (2) Kjeldahl method (3) Fajans method (4) Diazotization titration
98.	The C=O stretch range of carbonyl groups in the IR spectra is
99.	The principle of separation of Paper Chromatography is: (1) Absorption (2) Adsorption (3) Partition (4) Gel filtration
100	The coupling constant J value for trans compounds in NMR lies between: (1) 6-11 (2) 12-18 (3) 0-8 (4) 5-8
M.Pł	nil./Ph.D./URS-EE-Nov2018/(Pharmaceutical Sci.)(SET-Y)/(B)

Total No. of Printed Pages: 13

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M.Phil./Ph.D./URS-EE-Nov.-2018

SET-Y

100095

SUBJECT: Pharmaceutical Science

		*	Sr. No.
Time: 11/4 Hours	Ма	x. Marks : 100	Total Questions: 100
Roll No. (in figures)	(in \	words)	
Name		_ Father's Name	
Mother's Name	SS AMERICAN AND THE STATE OF TH	_ Date of Examination	
(Signature of the Candidate)			(Signature of the Invigilator)

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- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- **4.** Question Booklet along with answer key of all the A, B, C & D code will be got uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examination in writing/through E.Mail within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.
- 5. The candidate *must not* do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question booklet itself. Answers *must not* be ticked in the question booklet.
- 6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
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- 8. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

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1.	According to drugs and cosmetics act, dressing is given in:	t, the regulations and standards for surgical
	(1) Schedule F-I	(2) Schedule F-II
	(3) Schedule F-III	(4) Schedule E
2.	Following are Phase-II metabolic reaction	ons except :
	(1) Oxidation	(2) Glucuronide conjugation
	(3) Acetylation	(4) Methylation
3.	Identify the incompatibility in the follow	wing prescription:
	Rx	
	Strychnine hydrochloride solution 6 ml	
	Aromatic spirit of ammonia 4 ml	
	Water make up to 1000 ml	
	(1) Physical incompatibility	(2) Chemical incompatibility
	(3) Therapeutic incompatibility	(4) None of the above
4.	Identify the suppository base belongs to	o the natural category :
	(1) Polyethylene glycol	(2) Wecobee
	(3) Theobroma oil	(4) Hydrogel
5.	In Clarks rule the dose of a drug for chil	ild is calculated based on:
	(1) Body weight	(2) Body surface area
	(3) Age	(4) None of the above
6.	Lead acetate cotton wool is used in limit	it test for Arsenic:
	(1) To produce arsine gas	(2) To prevent the precipitation of arsenic
	(3) To trap hydrogen sulphide gas	(4) To develop yellow stain
7.	Copper sulphate is also known as:	
	(1) Bluestone	(2) Blue Vitriol
	(3) Romon Vitriol	(4) All of the above
8.	The radioisotope chromium (51Cr) is a:	• 10
	(1) Alpha emitter	(2) Beta emitter
	(3) Gamma emitter	(4) Positron emitter
/ DL	il /Ph D /LIRS-FF-Nov -2018/(Pharmaceu	utical Sci)(SET-V)/(C) P.T.(

9.	Identify the endogenous cofactor for the g	gluo	curonide conjugation :
	(1) UDP-Glucuronic acid (2)	Glucuronic acid
	(3) Endoglucuronide ((4)	Glucose 4-carboxylic acid
10.	Identify the antimycobacterial drug synth	resi	zed from 4-methylpyridine:
	(1) Ethambutol ((2)	Isoniazid
	(3) Rifampicin	(4)	Para amino salicylic acid
11.	Identify the Type 1 receptor:		
	(1) Ionotropic receptor	(2)	Metabotropic receptor
	(3) Enzyme linked receptor	(4)	Nuclear receptor
12.	Identify the mechanism of the drug neost	tigr	nine used in Myasthenia gravis :
	(1) Inhibition of adrenaline	(2)	Acetyl cholinesterase inhibitor
	(3) Stimulation of beta-2 receptor	(4)	Stimulation of alpha-1 receptor
13.	Identify the fibrinolytic drug which bel activator:	lon	gs to the category of tissue plasminogen
	(1) Streptokinase	(2)	Urokinase
	A .	(4)	Clofibrate
14.	Following are short acting bronchodialto	ors 1	used in the treatment of asthma except:
	(1) Salbutamol	(2)	Pirbuterol
	(3) Terbutaline	(4)	Salmeterol
15.	. Disulfiram is act by inhibition of:		
	(1) Alcohol dehydrogenase	(2)	Acetaldehyde dehydrogenase
		(4)	Pyruvate dehydrogenase
16.	. Identify the anticonvulsant drug which voltage gated sodium channels:	act	by inhibiting Voltage-dependent block of
	(1) Phenytoin	(2)	Phenobarbitone
	(3) Haloperidol	(4)	Amphetamine
17.	'. One international unit of insulin (1 IU μg pure crystalline insulin.) is	s defined as the "biological equivalent" of
	(1) 25.2 (2) 44.7	(3)	34.7 (4) 18.6

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18.	Identify the drug which causes Gray baby syndrome:		
	(1) Penicillin	(2) Streptomycin	
	(3) Ciprofloxacin	(4) Chloramphenicol	
19.	Identify the drug which is an H2 recepto	r antagonist :	
	(1) Chlorpheramine	(2) Mepyramine	
	(3) Cimitidine	(4) Captopril	
20.	Identify the teratogenic drug:		
	(1) Enalapril	(2) Isotretinoin	
	(3) Diethylstilbestrol	(4) All of the above	
21.	Identify the chemical constituents of nee	m oil:	
	(1) Nimbidin	(2) Nimbin	
	(3) Nimbinin	(4) All of the above	
22.	Identify the source of the Java cinnamor	ι:	
	(1) Cinnamomum loureirii	(2) Cinnamomum burmanii	
	(3) Cinnamomum zeylanicum	(4) Cinnamomum verum	
23.	Capsicum consists of dried ripe fruits of		
20.	(1) Capsicum sativa	(2) Capsicum offcinale	
	(3) Capsicum annum	(4) Capsicum hexandrum	
0.4		\circ f \cdot	
24.		(3) Bitter almond (4) Ginseng	
25.			
	(1) Ergot (2) Cinchona	(3) Rauwolfia (4) Vinca	
26.	. Identify the plant drug useful in the tre	atment of hypertension:	
	(1) Ergot (2) Gokhru	(3) Colchicum (4) Rauwolfia	
27.	. Identify the enzyme which is a fibrinoly	ytic:	
	(1) Trypsin	(2) Hyaluronidase	
	(3) Urokinase	(4) Papain	

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28.	Identify the chemical constituent of colophony:	
	(1) Boswellic acid (2)	Abietic acid
	(3) Shelloic acid (4)	Eugenol
29.	Insect flower is the synonym of the herb:	
		Bhilawa (4) Punarnava
30.	Ayurvedic preparation in the form of passas:	e meant for external application is known
	(1) Lehya (2) Taila (3)	Gutika (4) Lepa
31.	Identify the entry inhibitor used in the trea	ment of AIDS:
	(1) Lamivudine (2	Efavirenz
	(3) Indinavir (4	Maraviroc
32.	Identify the type of anaemia caused due to	deficiency of Vit-B12 :
	(1) Sickle cell anaemia (2	Aplastic anaemia
	(3) Pernicious anaemia (4	Polycythemia vera
33.	During the isovolumic relaxation stage of	ardiac cycle,
	(1) The AV valves and the seminar valves	are closed
	(2) The AV valves are opened and the sen	inar valves are closed
	(3) The AV valves are closed and the semi	nar valves are opened
	(4) All of the above	
34.	Identify the name of the Xth cranial nerve :	
	(1) Olfactory nerve (2) Vagus nerve
	(3) Facial nerve (4) Trochlear nerve
35.	. The Diabetic nephropathy is a kidney disc	rder characterized by the symptom:
	(1) Nocturia (2) Tiredness
	(3) Lack of appetite (4)) All of the above
36.	 According to morphological classification category of roots: 	the identify the crude drug belongs to the
	(1) Turmeric (2) Ginger (3)) Valerian (4) Aconite
M.Phi	nil./Ph.D./URS-EE-Nov2018/(Pharmaceutic	al Sci.)(SET-Y)/(C)

37.	The endogenous plant growth regulator gibberellic acid is referred as:
	(1) GA1 (2) GA3 (3) GA7 (4) GA9
38.	Identify the crude drug which contains lignified trichome: (1) Strophanthus (2) Buchu (3) Pyrethrum (4) Datura
39.	Paracytic stomata is present in : (1) Digitalis (2) Senna (3) Vasaka (4) Belladona
40.	Identify the source of isapgol: (1) Plantago ovata (2) Plantago purshii (3) Plantago asiatica (4) Plantago Wrightiana
41.	 Identify the <i>correct</i> statement about Brownian motion: (1) Brownian motion arises due to the uneven distribution of the collisions between colloid particle and the solvent molecules. (2) Brownian motion was more rapid for smaller particles. (3) Brownian motion decrease with increase the viscositý of the medium. (4) All of the above
42.	Phenomenon wherein a compound is obtained in crystalline forms that differ in the nature or stoichiometry of included solvent molecules is known as: (1) Polymorphism (2) Pseudopolymorphism (3) Enantiotrophism (4) All of the above
43.	The eighth edition of Indian pharmacopoeia is published in : (1) 2018 (2) 2017 (3) 2016 (4) 2014
44.	Identify the preparation which is to be applied with friction: (1) Lotion (2) Liniment (3) Ointment (4) Linctus
45	The tablet defect due to free rotation of the punches, which have some engraving on the punch faces is known as: (1) Capping (2) Mottling (3) Double impression (4) Chipping nil./Ph.D./URS-EE-Nov2018/(Pharmaceutical Sci.)(SET-Y)/(C) P. T. O.
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C

46.	Identify the type of emulsion which conducts electricity:	
	(1) O/W emulsion (2) W /O emulsion
	(3) O/O emulsion	4) None of the above
47.	Nanocapsules are :	
	(1) Synthetic amphiphilic blocks that a aqueous solution	re spherical vesicular bodies containing an
	(2) A lecithin and stearate encapsulated sited in the inner part of the capsule	structure with a lipid core where lecithin is
	(3) Mesoporous nanoparticles with hig surface area	h specificity in terms of pore volume and
	(4) Amalgamated nanoparticles compos polyethylene glycol	ed of two subunits Poly L-lactic acid-block-
48.	. The germ theory of disease is proposed b	v:
		2) Robert Koch
	(3) Jenner	4) Louis Pasteur
49.	Autoclaving is an example of sterilization.	
	(1) Dry heat (2) Radiation (3) Moist heat (4) Filtration
50.	. Identify the diluents for the test disinfects	ant in case of Chick Martin test:
	(1) Distilled water	2) Alcohol
	(3) Nutrient broth	(4) Water with yeast suspension or feces
51.	. Identify the source of the macrolide antib	iotic erythromycin:
	(1) Streptomyces venezulae	2) Streptomyces aureofacians
	(3) Streptomyces notatum	4) Streptomyces erythreus
52.	. Cortisone is chemically:	
	(1) (8S, 9S, 10R, 13S, 14S, 17R)-17-Method 6, 7, 8, 9, 12, 14, 15, 16-decahydrocycle	xy-17-(2-hydroxyacetyl)-10, 12-dimethyl-1, 2, openta[a]phenanthrene-3, 11-dione
	(2) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methy 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocy	vl-17-(2-hydroxymethyl)-10, 13-dimethoxy-1, clopenta[a]phenanthrene-3, 11-dione
	(3) (8S, 9S, 10R, 13S, 14S, 17R)-17-Hydro 6, 7, 8, 9, 12, 14, 15, 16-decahydrocycle	xy-17-(2-hydroxyacetyl)-10, 13-dimethyl-1, 2, openta[a]phenanthrene-3, 11-dione
		xy-17-(2-hydroxypropyl)-10, 13-diacetyl-1, 2,

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53.	'Celecoxib act by inhibition of:	
	(1) Thymidylate synthase	(2) COX-2 enzyme
	(3) Angiotensin converting enzyme	(4) Dihydrofolate reductase
54.	The minimum q ² value required to qual	ify the Hansch model is :
	(1) More than 0.5	(2) Less than 0.5
	(3) More than 1	(4) Less than 0.7
55.	The following are the primary standard	s except :
	(1) Potassium hydrogen phthalate	(2) Potassium bromate
	(3) Potassium permanganate	(4) Sulphanilic acid
56.	The following are the indicators used in	non-aqueous titration of weak bases except:
	(1) Crystal violet	(2) Thymol blue
	(3) Methyl red	(4) Oracet blue
57.	Identify the titration used to estimate th	e aromatic primary amines :
	(1) Karl Fischer titration	(2) Kjeldahl method
	(3) Fajans method	(4) Diazotization titration
58.	The C=O stretch range of carbonyl grou	ps in the IR spectra iscm ⁻¹ .
i.	(1) 1760-1665	(2) 3100-3000
	(3) 1370-1350	(4) 675-600
59.	The principle of separation of Paper Chr	omatography is:
	(1) Absorption	(2) Adsorption
	(3) Partition	(4) Gel filtration
60.	The coupling constant J value for trans c	ompounds in NMR lies between :
	(1) 6-11 (2) 12-18	(3) 0-8 (4) 5-8
61.	Following are the physiochemical factor	s affecting drug absorption except:
	(1) Drug solubility and dissolution rate	
	(2) Solvates and hydrates	
	(3) Disintegration time	
	(4) Polymorphism	
		. *

criteria:

(4) All of the above

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	(1) They contain the same active ingredient(
	(2) They are of the same dosage form and ro	
	(3) They are identical in strength or concent	ration
	(4) All of the above	
63.	The process of drug absorption in which th known as:	e drug particles are engulfed by a cell is
	(-)	Pinocytosis
	(3) Passive diffusion (4)	Facilitated diffusion
64.	1. Identify the evaporator works based on "the	rmo-siphon" principle :
	(1) Rising film evaporator (2)	Falling film evaporator
,	(3) Forced circulation evaporator (4)	None of the above
65.	The process of extraction in which the crud water for a defined time; it is then cooled an	le drug is boiled in a specified volume of distrained or filtered is termed as:
		Percolation
is.		Digestion
66.	6. The viscosity of filtrate is more than the rate	of filtration is tends to:
		Decrease
	(3) Increase as well decrease (4)	No effect of filtration rate
67.	7. Expand the term GATT:	
	(1) Global Agreement on Tariffs and Trade	
	(2) Global Agreement on Tax and Trade	
	(3) General Agreement on Tariffs and Trad	e
	(4) General Agreement on Tax and Trade	
68.	88. Identify the function of Central Drug Stand	ard Control Organization (CDSCO):
	(1) Regulatory control over the import of d	rugs
	(2) Approval of new drugs and clinical tria	ıls
	(3) To hold meetings of Drugs Consultative	ve Committee (DCC) and Drugs Technica
	Advisory Board (DTAB)	

62. FDA considers drug products to be pharmaceutical equivalents if they meet the

00	A	1	••			
69.	 (1) A medicine for the internal or external use of human beings or animals (2) Any substance intended to be used for or in the diagnosis, cure, mitigation, treatment or prevention of disease in human beings or animals (3) any article, other than food, intended to affect or influence in any way the structure or any organic function of the body of human beings or animals 					
	(4) All of the abov	(4) All of the above				
70.	The form of consent according to in sub-section (4) of Section 3 of Medicatermination of Pregnancy Act, 1970 and Rules 1975 is given in:					
	(1) Form A	(2) Form B	(3) Form C	(4) Form D		
71.	Wernicke-Korsako	v of vitamin :				
	(1) D	(2) B6	(3) K	(4) B1		
72.	Buoyant density of majority of DNA is g/cm ³ .					
	(1) 8.6	(2) 1.7	(3) 4.7	(4) 6.2		
73.	Niemann-Pick disease is a lipid metabolism disorder in which accumulates in lysosomes in cells.					
	(1) Sphingomyelir),	(2) Glucosyl	ceramide		
	(3) Sterols		(4) Phytanic			
74.	Identify the <i>correct</i> statement related to colligative properties:					
	(1) Colligative properties depend on molecular structure of the solute.					
		operties depend s		ion, temperature, and	nature of	
	(3) Colligative pro	perties depend o	nly on solute con	centration and temper	ature, and	
	are independent of the nature of the solute particles.					
	(4) All of the abov	e				
75.	According to the first law of thermodynamics:					
	(1) The entropy of any isolated system always increases					
	(2) The entropy of a system approaches a constant value as the temperature approaches absolute zero					
	(3) The entropy of any isolated system always decreases.					
		be created or des	,			
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76.	(1) $F = C + P + Z$	(2) $F = C - P + 2$ (4) $F = C - P - 2$
77.	Chemical reaction whereby treatment alkenes is known as: (1) Bamford Steven reaction (2) Willgroad rearrangement	of tosylhydrazones with strong base gives (2) Stobbe condensation (4) Huang-Minlong modification
78.	bond, where energy differences due to barrier to rotation that is high enough to (1) Enatiomers	because of hindered rotation about a single o steric strain or other contributors create a callow for isolation of individual conformers. (2) Diasteromers (4) Mesomers
79	enolizable aldehyde is known as: (1) Cannizzaro reaction (3) Schotten-Baumann reaction	base-induced disproportionation of a non- (2) Reimer-Tiemann reaction (4) Perkin reaction
80	 Identify the method used for the synth Gould-Jacobs reaction Conrad-Limpach synthesis 	(2) Combes quinoline synthesis (4) All of the above
8	(1) Identify the source of fennel:(1) Foeniculum vulgare(3) Anethum garveolans	(2) Eugenia caryophyllus(4) Citrus aurantium
	Following are the adulterants of Digi(1) Verbuscum thapus(3) Symphytum officinale	(2) Primula Vulgaris (4) Thevetia neriifolia
	83. The following are the biosynthetic properties:(1) Nicotine (2) Emetine	(3) Tropine (4) Scopulition
	84. Identify the number of isoprene unit (1) 3 (2) 4	(3) 6
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85.	. Identify the anticancer drug obtained fr	om	the marine source:
	(1) Ara-C	(2)	ATX-II
	(3) Eptatretin	(4)	Eunicin
86.	Identify the test for cardiac glycosides:		
	(1) Borntragers test	(2)	Murexide test
	(3) Raymonds test	(4)	Molisch test
87.	Libermann-Burchards test is the identif	icati	ion test for:
	(1) Glycosides	(2)) Steroids
	(3) Tannins	(4)) Napthoquinones
88.	Identify the method for producing tran	sgen	nic animal :
	(1) DNA microinjection		
	(2) Embryonic stem cell-mediated gen	e tra	nsfer
	(3) Retrovirus-mediated gene transfer		
	(4) All of the above		
89.	Identify the water soluble extractive va	lue c	of Aloe is not less than%w/w:
	(1) 25 (2) 20	(3)) 10 (4) 15
90.	Indian squill consists of dried slices	of th	ne bulbs of Urginea indica belongs to the
	family:		
	(1) Solanaceae	(2)) Liliaceae
	(3) Rubiaceae	(4)) Apocynaceae
91.	Pompe's disease is a glycogen storage of	disea	ase caused due to the deficiency of:
	(1) Acid alpha-glucosidase		
	(2) Glucose-6-phosphatase		
	(3) Liver glycogen phosphorylase		
	(4) Muscle phosphoglycerate mutase		
92.	Identify the chemical mediators of infla	amm	nation:
	(1) Histamine	(2)	2) Bradykinin
	(3) Prostaglandins	(4)	All of the above
c Di.:	1 /Ph D /IJRS_FF_Nov -2018/(Pharmace)	itica	J Sci)(SET V)/(C) P T C

93.	33 is tissue that is transplanted from one person to another.	
	(1) Autograft	(2) Allograft
	(3) Isograft	(4) Xenograft
94.	Following are examples of benign cance	r except :
	(1) Adenoma	(2) Osteoma
	(3) Osteosarcoma	(4) Squamous cell papilloma
95.	The gradual buildup of cholesterol and coronary arteries or other arteries, typical	d fibrous tissue in plaques in the wall of the ally over decades, is termed:
	(1) Atherosclerosis	(2) Angina
	(3) Hypertension	(4) Cirrhosis
96.	The causative organism of Syphilis is:	
	(1) Mycobacterium leprae	(2) Streptococcus syphilus
	(3) Treponema pallidum	(4) Treponema syphili
97.	Postmarketing surveillance of drug is ki	nown as phase clinical trial.
	(1) I (2) II	(3) III (4) IV
98.	Bleeding when using the anticoagulant reaction.	warfarin is an example of adverse
	(1) Type A (2) Type B	(3) Type C (4) Type D
99.	Identify the drug which cannot be admi	nistered along with milk:
	(1) Chloramphenicol	(2) Streptomycin
	(3) Tetracycline	(4) Penicillin
100.	The anticancer drug 5-flurouracil act by	inhibition of:
	(1) Dihydrofolate reductase	(2) Thymidylate synthase
	(3) PRPP amidotransferase	(4) None of the above

Total No. of Printed Pages: 13

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M.Phil./Ph.D./URS-EE-Nov.-2018

SET-Y

SUBJECT: Pharmaceutical Science

100092

		Sr. No
Time : 11/4 Hours	Max. Marks : 100	Total Questions: 100
Roll No. (in figures)	(in words)	
Name	Father's Name	
Mother's Name	Date of Examination_	
(Signature of the Candidate)		(Signature of the Invigilator)
CANDIDATES MUST READ THE	FOLLOWING INFORMATION	ON/INSTRUCTIONS BEFORE

STARTING THE QUESTION PAPER.

- 1. All questions are compulsory.
- 2. The candidates must return the question booklet as well as OMR Answer-Sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfairmeans / misbehaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- 4. Question Booklet along with answer key of all the A, B, C & D code will be got uploaded on the university website after the conduct of Entrance Examination. In case there is any discrepancy in the Question Booklet/Answer Key, the same may be brought to the notice of the Controller of Examination in writing/through E.Mail within 24 hours of uploading the same on the University Website. Thereafter, no complaint in any case, will be considered.
- 5. The candidate *must not* do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question booklet itself. Answers must not be ticked in the question booklet.
- 6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 7. Use only Black or Blue Ball Point Pen of good quality in the OMR Answer-Sheet.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

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	1.	Identify the source of fennel:		
		(1) Foeniculum vulgare	(2) Eugenia caryophyllus	
		(3) Anethum garveolans	(4) Citrus aurantium	
	2.	Following are the adulterants of Digitali	is leaves except :	
		(1) Verbuscum thapus	(2) Primula vulgaris	
		(3) Symphytum officinale	(4) Thevetia neriifolia	
	3.	The following are the biosynthetic produ	ucts of the ornithine except	
		(1) Nicotine	(2) Emetine	
		(3) Tropine	(4) Scopalmine	
	4.	Identify the number of isoprene units in	carotenoids:	
		(1) 3 (2) 4	(3) 6 (4) 8	
	5.	Identify the anticancer drug obtained from	om the marine source :	
		(1) Ara-C	(2) ATX-II	
		(3) Eptatretin	(4) Eunicin	
	6.	Identify the test for cardiac glycosides:		
		(1) Borntragers test	(2) Murexide test	
		(3) Raymonds test	(4) Molisch test	
	7.	Libermann-Burchards test is the identific	cation test for :	
		(1) Glycosides	(2) Steroids	
		(3) Tannins	(4) Napthoquinones	
	8.	Identify the method for producing trans	genic animal :	
		(1) DNA microinjection		
		(2) Embryonic stem cell-mediated gene	transfer	
		(3) Retrovirus-mediated gene transfer		
		(4) All of the above		
	9.	Identify the water soluble extractive valu	ue of Aloe is not less than %w/w	:
		(1) 05	(3) 10 (4) 15	
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	10.	Indian squill consists of dried slices of the bulbs of Urginea indica belongs to the family:
		(1) Solanaceae (2) Liliaceae (3) Rubiaceae (4) Apocynaceae
	11.	Identify the source of the macrolide antibiotic erythromycin:
		(1) Streptomyces venezulae (2) Streptomyces aureofacians
		(3) Streptomyces notatum (4) Streptomyces erythreus
	12.	Cortisone is chemically:
		(1) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methoxy-17-(2-hydroxyacetyl)-10, 12-dimethyl-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
		(2) (8S, 9S, 10R, 13S, 14S, 17R)-17-Methyl-17-(2-hydroxymethyl)-10, 13-dimethoxy-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
	*	(3) (8S, 9S, 10R, 13S, 14S, 17R)-17-Hydroxy-17-(2-hydroxyacetyl)-10, 13-dimethyl-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
		(4) (8S, 9S, 10R, 13S, 14S, 17R)-17-Carboxy-17-(2-hydroxypropyl)-10, 13-diacetyl-1, 2, 6, 7, 8, 9, 12, 14, 15, 16-decahydrocyclopenta[a]phenanthrene-3, 11-dione
	13.	Celecoxib act by inhibition of:
		(1) Thymidylate synthase (2) COX-2 enzyme
		(3) Angiotensin converting enzyme (4) Dihydrofolate reductase
	14.	The minimum q ² value required to qualify the Hansch model is:
		(1) More than 0.5 (2) Less than 0.5
		(3) More than 1 (4) Less than 0.7
	15.	The following are the primary standards except:
		(1) Potassium hydrogen phthalate (2) Potassium bromate
		(3) Potassium permanganate (4) Sulphanilic acid
	16.	The following are the indicators used in non-aqueous titration of weak bases except:
*		(1) Crystal violet (2) Thymol blue
		(3) Methyl red (4) Oracet blue
	17.	Identify the titration used to estimate the aromatic primary amines:
		(1) Karl Fischer titration (2) Kjeldahl method
		(3) Fajans method (4) Diazotization titration
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18.	(1) 1760-1665 (3) 1370-1350	(2) (4)	3100-3000 675-600
19.	The principle of separation of Paper Chr (1) Absorption (3) Partition	(2)	Adsorption Gel filtration
20.	The coupling constant J value for trans c (1) 6-11 (2) 12-18		pounds in NMR lies between: 0-8 (4) 5-8
21.	Identify the entry inhibitor used in the to (1) Lamivudine (3) Indinavir	reat (2)	
22.	Identify the type of anaemia caused due (1) Sickle cell anaemia (3) Pernicious anaemia	(2)	deficiency of Vit-B12 : Aplastic anaemia Polycythemia vera
23.	During the isovolumic relaxation stage of (1) The AV valves and the seminar valve (2) The AV valves are opened and the seminar valve (3) The AV valves are closed and the seminar valve (4) All of the above	zes a semi	nar valves are closed
24.	Identify the name of the X th cranial nerv (1) Olfactory nerve (3) Facial nerve	(2)	Vagus nerve Trochlear nerve
25.	The Diabetic nephropathy is a kidney di (1) Nocturia (3) Lack of appetite	(2)	der characterized by the symptom : Tiredness All of the above
26.	category of roots:		he identify the crude drug belongs to the
1.Phil	(1) Turmeric (2) Ginger l./Ph.D./URS-EE-Nov2018/(Pharmaceut		Valerian (4) Aconite Sci.)(SET-Y)/(D) P. T. O.

The endogenous pl	ant growth regul	lator gib	berellic acid	is referred as:	
(1) GA1	(2) GA3	(3)	GA7	(4) GA9	
Identify the crude of	drug which conta	ains ligni	fied trichon	ne:	
(1) Strophanthus		(2)	Buchu		
(3) Pyrethrum		(4)	Datura		
Paracytic stomata i	s present in :				
(1) Digitalis		. (2)	Senna		
(3) Vasaka		(4)	Belladona		
Identify the source	of isapgol:				
(1) Plantago ovata		(2)	Plantago p	urshii	
(3) Plantago asiati	ca	(4)	Plantago V	Vrightiana	
According to drug	gs and cosmetics	s act, th	e regulation	ns and standard	s for surgica
(1) Schedule F-I		(2)	Schedule F	-II	
(3) Schedule F-III		(4)	Schedule E		
Following are Phas	e-II metabolic re	actions e	except:		*
(1) Oxidation		(2)	Glucuronio	de conjugation	
(3) Acetylation		(4)	Methylatic	n	
Identify the incomp	patibility in the fo	ollowing	prescriptio	n :	
Rx					
Strychnine hydrocl	nloride solution (6 ml			E 15
Aromatic spirit of a	ammonia 4 ml				
Water make up to	1000 ml				
(1) Physical incom	patibility	(2)	Chemical i	ncompatibility	
(3) Therapeutic in	compatibility	(4)	None of th	e above	
Identify the support	sitory base belon	gs to the	natural cat	egory:	
(1) Polyethylene g	lycol	(2)	Wecobee		
(3) Theobroma oil		(4)	Hydrogel		
l./Ph.D./URS-EE-No	ov2018/(Pharma	ceutical	Sci.)(SET-Y	()/(D)	
	(1) GA1 Identify the crude of (1) Strophanthus (3) Pyrethrum Paracytic stomata is (1) Digitalis (3) Vasaka Identify the source (1) Plantago ovata (3) Plantago asiation According to drug dressing is given in (1) Schedule F-III (3) Schedule F-III Following are Phase (1) Oxidation (3) Acetylation Identify the incompany Rx Strychnine hydroch Aromatic spirit of a Water make up to (1) Physical incompany (3) Therapeutic incompany (3) Therapeutic incompany (3) Theobroma oil (3) Theobroma oil	(1) GA1 (2) GA3 Identify the crude drug which contact (1) Strophanthus (3) Pyrethrum Paracytic stomata is present in: (1) Digitalis (3) Vasaka Identify the source of isapgol: (1) Plantago ovata (3) Plantago asiatica According to drugs and cosmeticates dressing is given in: (1) Schedule F-I (3) Schedule F-III Following are Phase-II metabolic received (1) Oxidation (3) Acetylation Identify the incompatibility in the form of the second of the	(1) GA1 (2) GA3 (3) Identify the crude drug which contains light (1) Strophanthus (2) (3) Pyrethrum (4) Paracytic stomata is present in: (1) Digitalis (2) (3) Vasaka (4) Identify the source of isapgol: (1) Plantago ovata (2) (3) Plantago asiatica (4) According to drugs and cosmetics act, the dressing is given in: (1) Schedule F-I (2) (3) Schedule F-III (4) Following are Phase-II metabolic reactions of the incompatibility in the following Rx Strychnine hydrochloride solution 6 ml Aromatic spirit of ammonia 4 ml Water make up to 1000 ml (1) Physical incompatibility (2) (3) Therapeutic incompatibility (4) Identify the suppository base belongs to the content of the supp	Identify the crude drug which contains lignified trichom (1) Strophanthus (2) Buchu (3) Pyrethrum (4) Datura Paracytic stomata is present in: (1) Digitalis (2) Senna (4) Belladona Identify the source of isapgol: (1) Plantago ovata (2) Plantago p (3) Plantago asiatica (4) Plantago Wassing is given in: (1) Schedule F-I (2) Schedule F-II (3) Schedule F-III (4) Schedule E-III (5) Schedule F-III (6) Schedule F-III (7) Schedule F-III (8) Schedule F-III (9) Schedule F-III (1) Oxidation (1) Oxidation (2) Glucuronic (3) Acetylation (4) Methylation Identify the incompatibility in the following prescription Rx Strychnine hydrochloride solution 6 ml Aromatic spirit of ammonia 4 ml Water make up to 1000 ml (1) Physical incompatibility (2) Chemical in (3) Therapeutic incompatibility (4) None of the Identify the suppository base belongs to the natural cate (1) Polyethylene glycol (2) Wecobee (3) Theobroma oil (4) Hydrogel	Identify the crude drug which contains lignified trichome: (1) Strophanthus (2) Buchu (3) Pyrethrum (4) Datura Paracytic stomata is present in: (1) Digitalis (2) Senna (3) Vasaka (4) Belladona Identify the source of isapgol: (1) Plantago ovata (2) Plantago purshii (3) Plantago asiatica (4) Plantago Wrightiana According to drugs and cosmetics act, the regulations and standard dressing is given in: (1) Schedule F-I (2) Schedule F-II (3) Schedule F-III (4) Schedule E Following are Phase-II metabolic reactions except: (1) Oxidation (2) Glucuronide conjugation (3) Acetylation (4) Methylation Identify the incompatibility in the following prescription: Rx Strychnine hydrochloride solution 6 ml Aromatic spirit of ammonia 4 ml Water make up to 1000 ml (1) Physical incompatibility (2) Chemical incompatibility (3) Therapeutic incompatibility (4) None of the above Identify the suppository base belongs to the natural category: (1) Polyethylene glycol (2) Wecobee

35.	In Clarks rule the dose of a drug for chil	d is calculated based on:
	(1) Body weight	(2) Body surface area
	(3) Age	(4) None of the above
36.	Lead acetate cotton wool is used in limit	test for Arsenic:
	(1) To produce arsine gas	(2) To prevent the precipitation of arsenic
	(3) To trap hydrogen sulphide gas	(4) To develop yellow stain
37.	Copper sulphate is also known as:	
	(1) Bluestone	(2) Blue Vitriol
	(3) Romon Vitriol	(4) All of the above
38.	The radioisotope chromium (51Cr) is a:	
	(1) Alpha emitter	(2) Beta emitter
	(3) Gamma emitter	(4) Positron emitter
39.	Identify the endogenous cofactor for the	glucuronide conjugation :
	(1) UDP-Glucuronic acid	(2) Glucuronic acid
	(3) Endoglucuronide	(4) Glucose 4-carboxylic acid
40.	Identify the antimycobacterial drug syn	thesized from 4-methylpyridine:
	(1) Ethambutol	(2) Isoniazid
	(3) Rifampicin	(4) Para amino salicylic acid
41.	Pompe's disease is a glycogen storage d	isease caused due to the deficiency of:
	(1) Acid alpha-glucosidase	
	(2) Glucose-6-phosphatase	
	(3) Liver glycogen phosphorylase	
	(4) Muscle phosphoglycerate mutase	
42.	Identify the chemical mediators of inflat	mmation:
	(1) Histamine	(2) Bradykinin
	(3) Prostaglandins	(4) All of the above
43.	is tissue that is transplanted	from one person to another.
	(1) Autograft (2) Allograft	(3) Isograft (4) Xenograft
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44.	Following are examples of benign cancer	er except :
	(1) Adenoma	(2) Osteoma
	(3) Osteosarcoma	(4) Squamous cell papilloma
45.	The gradual buildup of cholesterol and coronary arteries or other arteries, typic	d fibrous tissue in plaques in the wall of the ally over decades, is termed:
	(1) Atherosclerosis	(2) Angina
	(3) Hypertension	(4) Cirrhosis
46.	The causative organism of Syphilis is:	
	(1) Mycobacterium leprae	(2) Streptococcus syphilus
	(3) Treponema pallidum	(4) Treponema syphili
47.	Postmarketing surveillance of drug is ki	nown as phase clinical trial.
	(1) I (2) II	(3) III (4) IV
48.	Bleeding when using the anticoagulant reaction.	warfarin is an example of advers
	(1) Type A (2) Type B	(3) Type C (4) Type D
49.	Identify the drug which cannot be admi	nistered along with milk:
	(1) Chloramphenicol	(2) Streptomycin
	(3) Tetracycline	(4) Penicillin
50.	The anticancer drug 5-flurouracil act by	inhibition of:
*	(1) Dihydrofolate reductase	(2) Thymidylate synthase
	(3) PRPP amidotransferase	(4) None of the above
51.	Identify the chemical constituents of nee	em oil:
	(1) Nimbidin	(2) Nimbin
	(3) Nimbinin	(4) All of the above
52.	Identify the source of the Java cinnamor	n:
	(1) Cinnamomum loureirii	(2) Cinnamomum burmanii
	(3) Cinnamomum zeylanicum	(4) Cinnamomum verum

53.	Capsicum consists of dried ripe fruits of:
	(1) Capsicum sativa (2) Capsicum offcinale
	(3) Capsicum annum (4) Capsicum hexandrum
54.	Polygalic acid is a chemical constituent of: (1) Senega (2) Liquorice (3) Bitter almond (4) Ginseng
55.	Following crude drugs contains indole alkaloids except: (1) Ergot (2) Cinchona (3) Rauwolfia (4) Vinca
56.	Identify the plant drug useful in the treatment of hypertension: (1) Ergot (2) Gokhru (3) Colchicum (4) Rauwolfia
57.	Identify the enzyme which is a fibrinolytic:
	(1) Trypsin (2) Hyaluronidase
	(3) Urokinase (4) Papain
58.	Identify the chemical constituent of colophony:
	(1) Boswellic acid (2) Abietic acid
	(3) Shelloic acid (4) Eugenol
59.	Insect flower is the synonym of the herb:
	(1) Pyrethrum (2) Brahmi
	(3) Bhilawa (4) Punarnava
60.	Ayurvedic preparation in the form of paste meant for external application is known as:
	(1) Lehya (2) Taila (3) Gutika (4) Lepa
61.	Wernicke-Korsakoff syndrome is due to the deficiency of vitamin:
	(1) D (2) B6 (3) K (4) B1
62.	Buoyant density of majority of DNA is g/cm ³ .
	(1) 8.6 (2) 1.7 (3) 4.7 (4) 6.2
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			D
			accumulates
63.	Niemann-Pick disease is a lipid metal	polism disorder in Which	
	in lysosomes in cells.	*	
	(1) Sphingomyelin		
	(3) Sterols		
6/1	Identify the <i>correct</i> statement related	to colligative properties:	
04.	(1) C. Ilizativo properties depend or	molecular structure of the solute.	
	(2) Colligative properties depend s	solute concentration, temperature, as	nd nature of
	11 - aluta particles		
	(3) Colligative properties depend o	nly on solute concentration and temp	perature, and
	are independent of the nature of	f the solute particles.	
		odynamics:	
65	at a stany isolated sys	tem always increases	
	(1) The entropy of a system ar	proaches a constant value as the	temperature
	approaches absolute zero		
	(2) The entropy of any isolated sys	stem always decreases.	
	(4) Energy cannot be created or de	estroyed in an isolated system.	* ::
	A)		
6		(2) $F = C - P + 2$	
	(2) $E - C + P - 2$	(4) $F = C - P - 2$	
	(5) 1 = C + 2 wherehy trea	tment of tosylhydrazones with stro	ong base gives
6	alkenes is known as:		
			Li ma
	(2) Willgerodt rearrangement		
		rising because of hindered rotation	about a single
,	bond, where energy differences	due to steric strain or other confi	ual conformers.
	64.	 in lysosomes in cells. (1) Sphingomyelin (3) Sterols 64. Identify the <i>correct</i> statement related. (1) Colligative properties depend or the solute particles. (2) Colligative properties depend of are independent of the nature of are independent of the nature of the nature of the above. 65. According to the first law of thermore. (1) The entropy of any isolated system apapproaches absolute zero. (3) The entropy of any isolated system apapproaches absolute zero. (4) Energy cannot be created or december of the phase rule is: (1) F = C + P + 2 (3) F = C + P - 2 67. Chemical reaction whereby treatalkenes is known as: (1) Bamford Steven reaction. (3) Willgerodt rearrangement. 68	 in lysosomes in cells. (1) Sphingomyelin (2) Glucosylceramide (3) Sterols (4) Phytanic acid 64. Identify the <i>correct</i> statement related to colligative properties: (1) Colligative properties depend on molecular structure of the solute. (2) Colligative properties depend solute concentration, temperature, at the solute particles. (3) Colligative properties depend only on solute concentration and tempare independent of the nature of the solute particles. (4) All of the above 65. According to the first law of thermodynamics: (1) The entropy of any isolated system always increases (2) The entropy of any isolated system always decreases. (3) The entropy of any isolated system always decreases. (4) Energy cannot be created or destroyed in an isolated system. 66. The phase rule is: (1) F = C + P + 2 (2) F = C - P + 2 (4) F = C - P - 2 67. Chemical reaction whereby treatment of tosylhydrazones with structure alkenes is known as: (1) Bamford Steven reaction (2) Stobbe condensation (3) Willgerodt rearrangement (4) Huang-Minlong modification

barrier to rotation that is high enough to allow for isolation of individual conformers.

(2) Diasteromers

(4) Mesomers

(3) Atropisomers M.Phil./Ph.D./URS-EE-Nov.-2018/(Pharmaceutical Sci.)(SET-Y)/(D)

(1) Enatiomers

69.	Chemical reaction that involves the enolizable aldehyde is known as:	base-induced disproportionation of a non-
	(1) Cannizzaro reaction	(2) Reimer-Tiemann reaction
	(3) Schotten-Baumann reaction	(4) Perkin reaction
70.	Identify the method used for the synthe	sis of quinoline:
	(1) Gould-Jacobs reaction	(2) Combes quinoline synthesis
	(3) Conrad-Limpach synthesis	(4) All of the above
71.	Identify the Type 1 receptor:	
	(1) Ionotropic receptor	(2) Metabotropic receptor
	(3) Enzyme linked receptor	(4) Nuclear receptor
72.	Identify the mechanism of the drug neo	stigmine used in Myasthenia gravis:
	(1) Inhibition of adrenaline	(2) Acetyl cholinesterase inhibitor
	(3) Stimulation of beta-2 receptor	(4) Stimulation of alpha-1 receptor
73.	Identify the fibrinolytic drug which be activator:	elongs to the category of tissue plasminogen
	(1) Streptokinase	(2) Urokinase
	(3) Tenecteplase	(4) Clofibrate
74.	Following are short acting bronchodialt	ors used in the treatment of asthma except:
	(1) Salbutamol	(2) Pirbuterol
	(3) Terbutaline	(4) Salmeterol
75.	Disulfiram is act by inhibition of:	
	(1) Alcohol dehydrogenase	(2) Acetaldehyde dehydrogenase
	(3) Glutamate dehydrogenase	(4) Pyruvate dehydrogenase
76.	Identify the anticonvulsant drug which voltage gated sodium channels:	act by inhibiting Voltage-dependent block of
	(1) Phenytoin	(2) Phenobarbitone
	(3) Haloperidol	(4) Amphetamine
77.	One international unit of insulin (1 IU	J) is defined as the "biological equivalent" of
	(1) 25.2 (2) 44.7	(3) 34.7 (4) 18.6
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78.	(1) Penicillin (2)	Streptomycin
	(3) Ciprofloxacin (4) Chloramphenicol
79.	Identify the drug which is an H2 receptor a	intagonist:
	(1) Chlorpheramine (2) Mepyramine
	(3) Cimitidine (4) Captopril
80.	Identify the teratogenic drug:	
00.	(1) Enalapril (2) Isotretinoin
	(1) Eliampin) All of the above
	(6)	
81.		
		neven distribution of the collisions between
	colloid particle and the solvent molecu	
	(2) Brownian motion was more rapid for	
	(3) Brownian motion decrease with increase	ise the viscosity of the medium.
	(4) All of the above	
82.	. Phenomenon wherein a compound is obtained or stoichiometry of included solver	rained in crystalline forms that differ in the
ş.		2) Pseudopolymorphism
	(1) 1 0 1 1 1 1 1	4) All of the above
	(3) Enantiotrophism (4)	All of the above
83.	. The eighth edition of Indian pharmacopoe	eia is published in :
	(1) 2018 (2) 2017	3) 2016 (4) 2014
84.	. Identify the preparation which is to be ap	plied with friction:
0	(1) Lotion (2) Liniment (
85.	The tablet defect due to free rotation of the punch faces is known as:	he punches, which have some engraving or
	1	2) Mottling
	(1) 5477-6	4) Chipping
	(5)	
86.	3	
	(1) 0/ // списион	(2) W /O emulsion
	(6) 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	(4) None of the above
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- 87. Nanocapsules are:
 - (1) Synthetic amphiphilic blocks that are spherical vesicular bodies containing an aqueous solution
 - (2) A lecithin and stearate encapsulated structure with a lipid core where lecithin is sited in the inner part of the capsule
 - (3) Mesoporous nanoparticles with high specificity in terms of pore volume and surface area
 - (4) Amalgamated nanoparticles composed of two subunits Poly L-lactic acid-block-polyethylene glycol
- **88.** The germ theory of disease is proposed by:
 - (1) Girolamo Fracastoro

(2) Robert Koch

(3) Jenner

- (4) Louis Pasteur
- **89.** Autoclaving is an example of sterilization.
 - (1) Dry heat
- (2) Radiation
- (3) Moist heat
- (4) Filtration
- **90.** Identify the diluents for the test disinfectant in case of Chick Martin test:
 - (1) Distilled water

(2) Alcohol

(3) Nutrient broth

- (4) Water with yeast suspension or feces
- **91.** Following are the physiochemical factors affecting drug absorption except:
 - (1) Drug solubility and dissolution rate
 - (2) Solvates and hydrates
 - (3) Disintegration time
 - (4) Polymorphism
- **92.** FDA considers drug products to be pharmaceutical equivalents if they meet the criteria :
 - (1) They contain the same active ingredient(s)
 - (2) They are of the same dosage form and route of administration
 - (3) They are identical in strength or concentration
 - (4) All of the above
- **93.** The process of drug absorption in which the drug particles are engulfed by a cell is known as:
 - (1) Active transport

(2) Pinocytosis

(3) Passive diffusion

(4) Facilitated diffusion

94.	Identify the evaporator works based on "thermo-siphon" principle:
	(1) Rising film evaporator (2) Falling film evaporator
	(3) Forced circulation evaporator (4) None of the above
95.	The process of extraction in which the crude drug is boiled in a specified volume of water for a defined time; it is then cooled and strained or filtered is termed as: (1) Maceration (2) Percolation (3) Decoction (4) Digestion
96.	The viscosity of filtrate is more than the rate of filtration is tends to: (1) Increase (2) Decrease (3) Increase as well decrease (4) No effect of filtration rate
97.	Expand the term GATT: (1) Global Agreement on Tariffs and Trade (2) Global Agreement on Tax and Trade (3) General Agreement on Tariffs and Trade (4) General Agreement on Tax and Trade
98.	Identify the function of Central Drug Standard Control Organization (CDSCO):
	(1) Regulatory control over the import of drugs
	(2) Approval of new drugs and clinical trials
	(3) To hold meetings of Drugs Consultative Committee (DCC) and Drugs Technical Advisory Board (DTAB)
	(4) All of the above
99.	According to Drugs and magic Remedies Act 1954, a drug includes:
	(1) A medicine for the internal or external use of human beings or animals
	(2) Any substance intended to be used for or in the diagnosis, cure, mitigation treatment or prevention of disease in human beings or animals
	(3) any article, other than food, intended to affect or influence in any way the structure or any organic function of the body of human beings or animals
	(4) All of the above
100	. The form of consent according to in sub-section (4) of Section 3 of Medica termination of Pregnancy Act, 1970 and Rules 1975 is given in: (1) Form A (2) Form B (3) Form C (4) Form D

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Ph.D/URS/M.Phil 2018 Pharmaceutical Science Entrance Test Answer Key

S.No	Set-A	Set-B	Set-C	Set-D
1	4	4/	2	1
2	2	2 🗸	1	4
3	1	1 🗸	2	2
4	2	3 🗸	3	4
5	3	4 🗸	1	1
6	1	2 🗸	3	3
7	2	1 🗸	4	2
8	1	3 V	3	4
9	3	1 🗸	1	1
10	4	4 🗸	2	2
11	3	4 🗸	1	4
12	4	3 \	2	3
13	2	1 /	3	2
14	1	2 🗸	4	1
15	3	4 🗸	2	3
16		/	1	2
17	3	2	3	4
18	4	1 /	4	1
	4	2 🗸	3	3
19		1 🗸	4	2
20	3		4	4
21	2	1 V		3
22	1	4 V	3	1
23	2	2 🗸		
24	3	4	1	
25	1	1	2	4
26	3	3 🗸	4	4
27	4	2 🗸	3 *	2
28	3	4 1	2	1
29	1	1 /	1	2
30	2	2 /	4	1
31	4	4 🗸	4	2
32	3	2 🗸	3	1
33	2	1 🗸	1	2
34	1	2 🗸	2	3
35	3	3 √	4	1
36	2	1 🗸	4	3
37	4	2 🗸	2	4
38	1	1 🗸	1	3
39	3	3 🗸	2	1
40	2	4 🗸	1	2
41	4	1 /	4	1
42	2	2 /	2	4
43	1	3 V	1	2
44	3	4 🗸	2	3
45	4	2 🗸	3	1
46	2	1 /	1	3
47	1	3 🗸	2	4
48	3	4 V	1	1
49	1	3 🗸	3	3
50	4	4 🗸	4	2

Ng. Religions

Many 8

17/11/18

51	1	1 🗸	4	4
52	2	4 🗸	3	2
53	3	2 🗸	2	3
54	4	2 🗸	1	1
55	2	1 1/	3	2
56	1	3 \/	2	4
57	3	4. 1	4	3
58	4	3 \(\square \) 1 \(\square \) 3 \(\square \) 4 \(\square \) 1 \(\square \) 2 \(\square \) 2 \(\square \)	1	2
59	3	3./	3	1
60	4	2 .//	2	4
61	1	2 1/	3	4
62	4	1 🗸	4	2
63	2	2 🗸		
	3	3 🗸	1	3
64	1	1 🗸	3	4
	3	3 🗸	2	2
66		4 🗸	3	1
67	4	3	4	
68	1	3 0		. 3
69	3	1 1	4	1
70	2	2 V 3 V 4 V 2 V	3	4
71	4	3 V	4	1
72	3	4 V	2	2
73	1	2 V	1	3
74	2	1 V	3	4
75	4	3 🗸	4	2
76	4	2 🗸	2	1
77	2	3 🗸	11	3
78	1	4 🗸	3	4
79	2	4 V	1	3
80	1	3 🗸	4	4
81	4	3 1	1	4
82	2	2 /	4	2
83	3	3	2	1
84	1	1 V	4	2
85	2	2 🗸	1	3
86	4	4 /	3	1
87	3	3 🗸	2	2
88	2	2 🗸	4	1
89	1	1 🗸	1	3
90	4	4 1	2	4
91	1	4 🗸	1	3
92	4	3 🗸	4	4
93	2	2 🗸	2	2
94	4	1 🗸	3	1
95	1	3 🗸	1	3
96	3	2 🗸	3	2
97	2	4 V	4	3
98	4	1 🗸	1	4
99	1	3 V	3	4
100	2	2 🗸	2	3

Mr. Rectified Handing

@ 58 17/11/18