Total No. of Printed Pages: 13

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

CPG-EE-2019 (Pharmaceutical Science)-(SET-X)

A		Sr. No. 10337
Time: 11/2 Hours	Total Questions : 100	Max. Marks: 100
Roll No. (in figures)	(in words)	
Candidate's Name ————————————————————————————————————		ate of Birth—
Date of Exam :	/ Tourist of training	
(Signature of the Candidate)		(Signature of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- 1. All questions are *compulsory* and carry equal marks. The candidates are required to attempt all questions.
- 2. The candidate *must return* this question booklet and the 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 capacidate 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 and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hand or through email. 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. Use only black or blue ball point pen of good quality in the OMR Answer-Sheet.
- 7. There will be **negative** marking. Each correct answer will be awarded **one** full mark and each incorrect answer will be negatively marked for which the candidate will get ¼ Mark (0.25 Mark) discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct & complete question booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

1.	Identify the HLB v	alue of O/W emulsif	iers:			
	(1) 4-6	(2) 8-18	(3) 13-15	(4)	7-9	
2.	The granule densi 2.033. Compute the	ty, pg, of sodium b e intraparticle porosi	icarbonate is	1.450 and the	he true density, p	o, is
	(1) 28.6%	(2) 35.4%	(3) 42.7%	(4)	16.3%	
3.	Identify the particle	e size of colloidal dis	persion:			
	(1) Greater than 0.	5 μm	(2) Less tha	n 1 nm		
	(3) 1 nm to 0.5 μm	1	(4) All of th	e above		
4.	Following are inclu	sion/occlusion comp	ounds except	:		
	(1) Channel lattice		(2) Layer ty			
	(3) Clathrates		(4) Polymer	type		
5.	In the Gram stainin	g of bacteria, iodine	is used as:			
		(2) Counter stain		t (4)	Decoloizer	
6.	Z-value is the incre	ase in temperature n	eeded to reduc	e the D-valu	e of an organism	bv:
	(1) 90%	(2) 70%	(3) 50%		10%	
7.	Following are the e	ndotoxin producing	bacteria of inte	erest in imm	unology except:	
	(1) Vibrio cholera		(2) Clostrid			
	(3) Salmonella typi	hi	(4) Bordete	lla pertusis		
8.	Identify the strain u	sed in the Rideal Wa	alker Test:			
	(1) Vibrio cholera		(2) Clostrid	um tetani		
	(3) Salmonella typi	hi	(4) Bordete	lla pertusis		
9.	According to Medurative of Opiu	dicinal and Toilet m" means:	Preparations	(Excise Du	ties) Act 1955,	the
	(1) Medicinal opiu adapt it for med	m, that is, opium w licinal use	hich has unde	ergone the pr	rocesses necessar	y to
	designed to tra	n, that is, any produc nsform opium into a maining after opium	n extract suita			
	(3) Morphine, that	is, the principal al its salts and its deriv	kaloid of opin	um having t	he chemical form	nula

(4) All of the above

10.	According to Patents Act 1970, identify the	ne inventions that are not patentable:
	(1) An invention which is frivolous or well established natural laws	which claims anything obviously contrary to
	(2) A method of agriculture or horticulture	re
	(3) An invention which in effect, is trad or duplication of known property components	itional knowledge or which is an aggregation ies of traditionally known component or
	(4) All of the above	
11.	According to Drugs and Cosmetics Act regulations and requirements for disinfect	, identify the Schedule that contains various tant fluids:
	(1) Schedule P (2) Schedule O	(3) Schedule S (4) Schedule U
12.	According to the Insecticides Act 1968, t is:	he chairman of The Central Insecticides Board
	(1) The Drugs Controller, India	
	(2) The Director General, Indian Counci	
	(3) The Director General of Health Servi	
	(4) The Director General, Indian Council	I of Agricultural Research
13.	The method which calculates the child do	ose based on age is ?
	(1) Clark's rule (2) Young's rule	(3) Fischer rule (4) None of the above
14.	A medicinal pill made of a thick liquid consumed by light chewing and allowing	d that has been solidified and is meant to be g it to dissolve in the mouth is known as:
	(1) Pastille (2) Tablet triturate	(3) Jellie (4) Gel
15.	Identify the equipment used for moist he	at sterilization:
	(1) Hot air oven	(2) Hepafilter
	(3) Autoclave	(4) Microwave sterilizer

(1) Medical Legal Analysis and Review System Online

(2) Medicine Literature Analysis and Review System Online

(3) Medical Literature Analysis and Redressal System Online

(4) Medical Literature Analysis and Retrieval System Online

16. Expand the term MEDLINE:

17.	Following are the natural circulation evaporators except:						
	(1) Evaporating pa		(2) Evaporating st	ills			
	(3) Film evaporate	or	(4) Short tube eva	porator			
18.	Identify the size : Impact and attrition (1) Ball mill	reduction apparatus 1: (2) Roller mill	worked based on a (3) Hammer mill		combined		
10				(4) Cutter min			
19.	(1) It is batch filter, so that there is good deal of "down time"(2) Operation is critical as the frames should be full						
			relatively small floor ries containing less th				
20.	Identify the advanta	age of human dried p	lasma :	ian 570 of sorius			
	(2) If protected fro 20°C	m light it can be sto	red at room tempera	ture provided this	is below		
	(3) It can be given(4) All of the abov	to patients of any blo	ood groups				
21.	Identify the size of	capsule which holds	maximum drug cont	ent?			
	(1) 000	(2) 00	(3) 0	(4) 1			
22.	Separation of table material is known a	et into two or more	layers due to air-e	intrapment in the	granular		
	(1) Chipping	(2) Capping	(3) Lamination	(4) Mottling			
23.	 High solubility High solubility Low solubility 	ies of BCS class III of and high permeability and low permeability and high permeability and Low permeability	ty y y				

24.	Elimination rate constant (Kelim) is defin	ned by the following parameter:
	(1) Rate of absorption	
	(2) Maximum concentration of substance	e in plasma
	(3) Highest single dose	
	(4) Half life	
25.	Identify the preparation which should be	applied with friction?
	(1) Liniment (2) Lotion	(3) Ointment (4) Cream
26.	Citric acid is used in limit test for Iron:	
	(1) To make the medium alkaline	(2) To prevent the precipitation of iron
	(3) To trap hydrogen sulphide gas	(4) None of the above
27.	British anti-Lewisite is chemically:	
	(1) Dimercaptosuccinic acid	(2) Dimercapto-propane sulfonate
	(3) Dimercaprol	(4) Pencillamine
28.	Potash alum obtained by adding a cond solution of an equimolecular proportion	centrated solution of potassium sulfate to a hot of:
	(1) Aluminium chloride	(2) Aluminium oxide
	(3) Zinc sulfate	(4) Aluminium sulfate
29.	Identify the radioisotope used as medica	al radiotracer in PET scans:
	(1) Tritium (³ H) (2) Beryllium-10	
30.	For one mole of gas Cp and Cv relation	s are:
	(1) Cp = Cv + R	(2) Cp = Cv - R
	(3) Cp = Cv	$(4) Cp = Cv \times R$
31.	Which of the following is <i>not</i> true for z	ero order reaction?
	(1) Rate = Rate constant	
	(2) Rate is independent of concentration	ons
	(3) Rate does not change with time	
	(4) Rate increase with increase in conc	entrations

32.	An SN1 reaction	An SN1 reaction results in:				
	(1) Retention	(2) Inversion	(3) Racemisation	1 (4) Elimination		
33.	A chemical reaction used for the ortho-formylation of phenols is known as:					
	(1) Reimer-Tiems		(2) Cannizzaro re			
	(3) Schotten-Bau	mann reaction	(4) Gould-Jacobs			
34.	An organic reaction that forms an ester from a ketone or a lactone from a cyclic keto using peroxyacids or peroxides as the oxidant is known as:					
	(1) Hoffmann rea	ction	(2) Beyer-Villige	er reaction		
	(3) Beckman reac	etion	(4) Perkin reaction	on		
35.	Sodium carbonate can be used for standardization of following aqueous acids except: (1) Hydrochloric acid (2) Nitric acid (3) Acetic acid (4) Sulphuric acid					
36.	Identify the strong acid used in non-aqueous titration of weak bases except: (1) Hydrochloric acid (2) Perchloric acid (3) Lithium methoxide (4) Sulphuric acid					
37.	an indicator is formation of colour.					
	(1) Blue	(2) Red	(3) Green	(4) Orange		
38.	The C=O stretch ra	ange of carbonyl gro	up in the IR spectra	of α , β - unsaturated esters		
	is cm ⁻¹ .					
	(1) 1760-1665	(2) 1730-1715	(3) 1370-1350	(4) 675-600		
39.	The principle of se	paration of column of	chromatography is:			
	(1) Partition	(2) Absorption		(4) Gel filtration		
40.	Identify the coupling	ng constant J value f	or cis compounds in	NMR ·		
	(1) 6-11	(2) 12-18	(3) 0-8	(4) 5-8		
41.	The correlation co analysis using in vi	efficient (r) value reitro data is :	equired to qualify a	QSAR equation by Hansch		
	(1) 0.3	(2) 0.5	(3) 0.7	(4) 0.9		
CPG-E	EE-2019/(Pharmac	eutical Sciences)-(S	ET-X)/(A)	P. T. O		

	*	
42.	The steroidal hydrocarbon with methyl substitution a side chain at C-17 is named	groups at C-10 and C-13 but without carbon :
	(1) Androstane	(2) Gonane
	(3) Estrane	(4) Pregnane
	- Comments	
43.	Identify the IUPAC name of furosemide	
	(1) 4-Chloro-2-[(3-furylethyl)amino]-5-	
	(2) 4-Chloro-2-[(2-furylmethyl)amino]-	
	(3) 4-Chloro-3-[(2-furylmethyl)amino]-	
	(4) 3-Chloro-4-[(2-furylmethyl)amino]-	2-sulfamoylbenzoic acid
44.	Identify the antimalarial drug belongs to	the 8-amino quinoline nucleus:
	(1) Chloroquine (2) Amodiaquine	(3) Mefloquine (4) Primaquine
45.	Identify the highly active erythromycin	
	(1) Erythromycin A	(2) Erythromycin B
	(3) Erythromycin C	(4) Erythromycin D
46.	Identify the synthetic method for the syn	nthesis of quinoline:
	(1) Conrad-Limpach-Knorr Synthesis	(2) Skraup Synthesis
	(3) Friedlander Synthesis	(4) All of the above
47.		ven number of pi bonds under thermal condition
	is:	(2) Antarafacial
	(1) Suprafacial	(4) None of the above
	(3) Disrotary	` '
48.	The process of synthesis of glucose from	m noncarbohydrate sources is termed as:
	(1) Glycolysis	(2) Glcogenesis
	(3) Gluconeogenesis	(4) Glycogenolysis
40	Citrullinemia, the urea cycle disorder is	s due to the deficiency of the enzyme:
49.		(2) Arginase
	(1) Carbomoyl phosphate synthetase	(4) Ornithine transcarbomylase
	(3) Argininosuccinic acid synthase	(T) Officially and office (T)

50.	Identify the coenzyme derived from Vitamin B1:					
	(1) Thiamine pyrop	phosphate	(2)	(2) Flavin mononucleotide		
	(3) Coenzyme A		(4)	Nicotinamide a	deni	ne dinucleotide
51.	Identify the mediate	or for Type 1 hyperse	ensiti	vity reaction:		
	(1) IgM	(2) IgE	(3)	IgG	(4)	IgF
52.	During acute inflam	nmation, the leukocy	te ch	emotaxis is activ	ated	by:
	(1) Leukotriene B4		(2)	Chemokines		
	(3) Interleukin-1		(4)	All of the above	е	
53.	The airway remode	ling in Asthma is cha	aract	erized by :		
	(1) Inflammation					
	(2) Mucus hypersed	cretion		¥		
	(3) Airway smooth	muscle hypertrophy				
	(4) All of the above	2				
54.	Identify the phase I	I metabolic reaction	:			2 .
	(1) Acetylation			Oxidation		
	(3) Reduction		(4)	Hydrolysis		
55.	The β-adrenorecept	or is an example of v	which	n type of recepto	r ?	
	(1) Tyrosine kinase	receptor				
	(2) G-protein coupl	ed receptor		,		
	(3) Voltage gated io	on channel				
	(4) Ligand gated io	n channel				
56.	When does tachyph	ylaxis occur?				
	(1) When there is a	n increased risk of si	de e	ffects occurring		
	(2) When smaller d	oses cause an increa	sed r	esponse to a dru	g	
		decreased receptor-		ated response to	a dr	ug
	(4) When the drug	causes a faster heart	rate			

- The development of drug addiction is caused by which of the following 57. drug/neurotransmitter interactions?
 - (1) The drug increases the release of GABA
 - (2) The drug increases uptake of dopamine from the synaptic cleft
 - (3) The drug inhibits the release of dopamine into the synaptic cleft
 - (4) The drug inhibits the release of GABA
- **58.** Which of the following is *not* a type of antagonist?
 - (1) Partial competitive

- (2) Reversible competitive
- (3) Irreversible competitive
- (4) Non-competitive
- 59. When two drugs act on the same receptor the resulting drug interaction is said to be which of the following?
 - (1) Predictable
- (2) Unpredictable (3) Additive
- (4) Synergistic
- **60.** Which receptor does the cardiac glycoside digoxin bind to?
- (1) ATP-dependent K⁺ channel (2) Na⁺/K⁺ antiporter (3) ATP-dependent Ca₂⁺ channel (4) Na⁺/Ca₂⁺ antiporter
- **61.** Why do ACE inhibitors cause cough?
 - (1) ACE causes the accumulation of bradykinin.
 - (2) Angiotensin I is a powerful bronchoconstrictor.
 - (3) Angiotensin II is a powerful vasoconstrictor.
 - (4) ACE breaks down bradykinin.
- 62. Why should care be taken when prescribing warfarin and amiodarone in combination?
 - (1) Amiodarone and warfarin both have an anticoagulant effect.
 - (2) Amiodarone may reverse the anticoagulant effect of warfarin.
 - (3) Amiodarone may increase the anticoagulant effect of warfarin.
 - (4) Warfarin may reverse the antiarrhythmic effect of amiodarone.
- **63.** Which of the following describes salbutamol, a β 2-adrenoceptor agonists?
 - (1) Direct acting sympathomimetic.
 - (2) Indirect acting sympathomimetic.
 - (3) Direct acting parasympathomimetic.
 - (4) Indirect acting parasympathomimetic.

64.	The drug latanoprost decreases the intra	ocular tension by:
	(1) α-Adrenergic agnostic activity	
	(2) Carbonic anhydrase inhibition	
	(3) β-Adrenergic blocking activity	
	(4) $PGF_{2\alpha}$ -agonistic activity	
65.	Which of the following is <i>not</i> caused system?	by the activation of the sympathetic nervous
	(1) An increase in blood pressure.	
	(2) A decrease in heart rate.	
	(3) An increase in cardiac output.	
i,	(4) An increase Ca ₂ ⁺ release in cardio n	nyocytes.
66.	Following are the drugs that enhance t except:	he action of sulphonyl urea in diabetic patient
	(1) Phenylbutazone	(2) Cimetidine
	(3) Phenytoin	(4) Chloramphenicol
67.	Identify the aromatase inhibitor:	
	(1) Raloxifene (2) Tibolone	(3) Gestodene (4) Exemestane
68.	Identify the short acting neuromuscular	blocking agent:
	(1) Mivacurium (2) Atracurium	(3) Pancuronium (4) Pipecuronium
69.	Identify the drug which abolishes the peripheral decarboxylation:	therapeutic effect of levodopa by enhancing
	(1) Domperidone	(2) Pyridoxine
	(3) Reserpine	(4) Phenothaizine
70.	Identify the advantage of Nalmafene over	er other opioid antagonists:
	(1) Longer half-life	
	(2) Greater oral bioavailability	
	(3) No observed dose-dependent liver to	exicity
	(4) All of the above	
CPG-E	EE-2019/(Pharmaceutical Sciences)-(SE	T-X)/(A)

71.	Identify the HIV protease inhibitor used	in the treatment of AIDS:				
	(1) Lamivudine (2) Efavirenz	(3) Indinavir (4) Maraviroc				
72.	Jarisch-Herxheimer reaction is an adverse effect of the antibiotic :					
	(1) Penicillin	(2) Streptomycin				
	(3) Chloramphenicol	(4) Amphotericin-B				
73.	Identify the blood test that used to det the blood:	ermine significant levels of methemalbumin in				
	(1) Mantoux test	(2) Schumm test				
	(3) Western blot test	(4) ELISA test				
74.	Identify the causative organism for tube	rculosis:				
	(1) Mycobacterium kansasii	(2) Mycobacterium avium				
	(3) Mycobacterium tuberculosis	(4) All of the above				
75.	Identify the anticancer drug which inhib	oit the synthesis of Thymidylate synthase:				
	(1) Methotrexate (2) Paclitaxel	(3) Etoposide (4) 5-Fluorouracil				
76.	According to morphological classificated category of flower:	tion the identify the crude drug belongs to the				
	(1) Turmeric (2) Ginger	(3) Clove (4) Aconite				
77.	The following are the natural auxins ex	cept:				
	(1) Indole 3-butyric acid	(2) Indole-3-acetonitrile				
	(3) Phenyl acetic acid	(4) 4-Chloroindole 3-acetic acid				
78.	Identify the crude drug which contains	unicellular glandular trichome ?				
	(1) Strophanthus (2) Betel	(3) Lobelia (4) Datura				
79.	Cruciferous stomata is present in:					
	(1) Digitalis (2) Senna	(3) Vasaka (4) Belladona				
80.	Identify the adulterant of isapgol seeds	:				
	(1) Plantago asiatica	(2) Plantago purshii				
	(3) Plantago lanceolata	(4) Plantago Wrightiana				

81.	Kokum butter is the (1) Garcinia indica (3) Pongamia glab		the seeds of: (2) Carthamus tinctorius (4) Galeorhinus zyopetrus			
82.	Devil's dung is the		(2) M1	(A) C 11		
83.	(1) Cannabis The chief chemical	(2) Asafoetida constituent present is		(4) Colocynth		
	(1) D-Limonene	(2) p-Cymene	. .			
84.		rug which give posit	ive result to B	Borntragers test?		
	(1) Squill	(2) Rhubarb	(3) Bitter al	mond (4) Ginseng		
85.	Identify the crude d	rug that contains qui	noline alkaloi	d:		
3.0	(1) Camptotheca	(2) Ergot	(3) Rauwoli	fia (4) Vinca		
86.	6. Identify the plant drug useful in the treatment of congestive heart failure:					
	(1) Ergot	(2) Gokhru	(3) Digitalis	s (4) Rauwolfia		
87.	Identify the mucoly	tic enzyme :				
	(1) Pepsin	(2) Urokinase	(3) Streptok	inase (4) Muramidase		
88.	The ash value of ser	nega is about	%.			
	(1) 4	(2) 8	(3) 12	(4) 16		
89.	Myrobalan consists	of dried ripe and ful	ly matured fru	nits of:		
	(1) Terminalia bele	rica	(2) Terminalia chebula			
	(3) Quercus infecto	ria	(4) Picrasma	a excelsa		
90.	Ayurvedic preparati	on obtained from the	ash of drugs	is known as:		
	(1) Lehya	(2) Taila	(3) Ksharas	(4) Lepa		
91.	Identify the source of	of caraway:				
	(1) Foeniculum vul	gare	(2) Myristic	a fragrans		
	(3) Anethum garve	olans	(4) Carum c	urvi		

92.	Following are the adulterants of nutmeg except:					
	(1) Myristica malab	alabarica (2) Myristica fragrans				
	(3) Myristica beddo	omei	(4)	Myristica attenu	ata	
93.	The following are th	he biosynthetic produ	cts	of the tyrosine exc	cept	:
	(1) Codiene	(2) Thebaine				Morphine
94.	Identify the number	of isoprene units in	sesq	uiterpenes:		
	(1) 3	(2) 4	(3)	6	(4)	8
95.	Identify the cardiov	rascular drug obtained	d fro	m the marine sou	rce	:
	(1) Ara-C	(2) Crassin acetate	(3)	Eptatretin	(4)	Acanthifolicin
96.	Identify the test for	steroids:				
	(1) Biuret test	(2) Murexide test	(3)	Legals test	(4)	Salkowski test
97.	Goldbeater's skin to	est is the identification	n tes	st for:		
	(1) Glycosides	(2) Steroids	(3)	Tannins	(4)	Napthoquinones
98.	Identify the source	of American ginseng	:			
	(1) Panax ginseng		(2)	Panax quinquef	oliu	m
	(3) Panax notogins	seng	.(4)	Panax japonica		
99.	Identify the drug us	sed as antixeropthalm	nic fa	actor:		
	(1) Evening prime	rose oil	(2)	Corn oil		
	(3) Safflower oil		(4)	Shark liver oil		
100.	Cotton consists of species of Gossypi	f the epidermal trich um herbaceurre and G	nome Goss	es or hairs of the	ne se	eeds of the cultivated clongs to the family:
	(1) Malvaceae	(2) Liliaceae) Rubiaceae		Apocynacece

Total No. of Printed Pages: 13

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

G-EE-2019 (Pharmaceutical Science)-(SET-X)

B	Sr. No	9338
Time: 1½ Hours	Total Questions : 100 Max.	Marks : 100
Roll No. (in figures)	(in words)	
Candidate's Name		/
Father's Name		
Date of Exam :		
(Signature of the Candidate)	(Signature of the In	vigilator)
CANDIDATES MUST READ TH	HE FOLLOWING INFORMATION/INSTRUCTIONS BE	FORE

STARTING THE QUESTION PAPER.

1. All questions are compulsory and carry equal/marks. The candidates are required to attempt all questions.

2. The candidate must return this question booklet and the OMR Answer-Sheet to the Invigilator concerned before leaving the Examination Hall, falling 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 and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case will be considered.

5. The candidate must not do any rough work of 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. Use only black or blue ball point pen of good quality in the OMR Answer-Sheet.

- 7. There will be negative marking. Each/correct answer will be awarded one full mark and each incorrect answer will be negatively marked for which the candidate will get 1/4 Mark (0.25 Mark) discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct & complete question booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

1.	According to Drugs and Cosmetics Act regulations and requirements for disinfect		dule that contains various
	(1) Schedule P (2) Schedule O	(3) Schedule S	(4) Schedule U
2.	According to the Insecticides Act 1968, to is: (1) The Drugs Controller, India (2) The Director General, Indian Councit (3) The Director General of Health Servi (4) The Director General, Indian Councit	l of Medical Researc	ch
3.	The method which calculates the child do (1) Clark's rule (2) Young's rule	ose based on age is? (3) Fischer rule	(4) None of the above
4.	A medicinal pill made of a thick liquid consumed by light chewing and allowing (1) Pastille (2) Tablet triturate	g it to dissolve in the	dified and is meant to be mouth is known as: (4) Gel
5.	Identify the equipment used for moist he (1) Hot air oven (3) Autoclave	at sterilization: (2) Hepafilter (4) Microwave ster	rilizer
6.	Expand the term MEDLINE: (1) Medical Legal Analysis and Review (2) Medicine Literature Analysis and Review (3) Medical Literature Analysis and Review (4) Medical Literature Analysis and Review	eview System Onlind dressal System Onlin	ne
7.	Following are the natural circulation eva (1) Evaporating pan (3) Film evaporator	(2) Evaporating st (4) Short tube eva	
8.	Identify the size reduction apparatus Impact and attrition: (1) Ball mill (3) Hammer mill	worked based on (2) Roller mill (4) Cutter mill	the principle of combined
CPG	-EE-2019/(Pharmaceutical Sciences)-(S	ET-X)/(B)	P. T. C

9.	Following are the de	emerits of filter press	except:		
*	(1) It is batch filter,	so that there is good	deal of "down time"	'	
	(2) Operation is critical as the frames should be full				
	(3) It provides a large	ge surface area in a re	elatively small floor	space	
*	(4) The filter press	can be used for slurri	ies containing less th	an 5% of solids	
10.	Identify the advanta	ge of human dried pl	asma:		
	(1) If properly store	ed it keeps well for at	least five years		
	(2) If protected from 20°C	n light it can be stor	red at room temperat	ture provided this is below	
	(3) It can be given to	to patients of any blo	od groups		
	(4) All of the above	;			
11.	Identify the source of	of caraway :			
	(1) Foeniculum vul	gare	(2) Myristica fragr	ans	
	(3) Anethum garve	olans	(4) Carum curvi		
12.	Following are the ac	dulterants of nutmeg	except:		
	(1) Myristica malab	7.0	(2) Myristica fragr	ans	
	(3) Myristica beddo		(4) Myristica atten		
10					
13.		ne biosynthetic produ		-	
	(1) Codiene	(2) Thebaine	(3) Mescaline	(4) Morphine	
14.	Identify the number	of isoprene units in	sesquiterpenes:		
	(1) 3	(2) 4	(3) 6	(4) 8	
15.	Identify the cardiov	ascular drug obtained	d from the marine so	ource :	
	(1) Ara-C	(2) Crassin acetate	(3) Eptatretin	(4) Acanthifolicin	
16.	Identify the test for	steroids:			
	(1) Biuret test	(2) Murexide test	(3) Legals test	(4) Salkowski test	
47					
17.		est is the identification		(A) NI - 1 - 1	
	(1) Glycosides	(2) Steroids	(3) Tannins	(4) Napthoquinones	
CPG-	EE-2019/(Pharmace	eutical Sciences)-(SE	ET-X)/(B)		

18.	Identify the source of American ginseng	:	
10.	(1) Panax ginseng	(2) Panax quinquefolium	
	(3) Panax notoginseng	(4) Panax japonica	
19.	Identify the drug used as antixeropthalm		
	(1) Evening primerose oil	(2) Corn oil	
	(3) Safflower oil	(4) Shark liver oil	
20.	Cotton consists of the epidermal trich species of Gossypium herbaceurre and C	omes or hairs of the seeds Bossypium barbadense belong	of the cultivated gs to the family:
	(1) Malvaceae	(2) Liliaceae	
	(3) Rubiaceae	(4) Apocynacece	
21.	Identify the HIV protease inhibitor used	in the treatment of AIDS:	
21.	(1) Lamivudine (2) Efavirenz		araviroc
	(1)		
22.	Jarisch-Herxheimer reaction is an adver		
	(1) Penicillin	(2) Streptomycin	
	(3) Chloramphenicol	(4) Amphotericin-B	
23.	Identify the blood test that used to det the blood:	ermine significant levels of	methemalbumin in
	(1) Mantoux test	(2) Schumm test	
	(3) Western blot test	(4) ELISA test	
24.	Identify the causative organism for tube	erculosis :	
2-71	(1) Mycobacterium kansasii	(2) Mycobacterium avium	
	(3) Mycobacterium tuberculosis	(4) All of the above	
			lata grinthaga:
25.	•		
	(1) Methotrexate (2) Paclitaxel	(3) Etoposide (4) 5	-Fluorouracil
26.	According to morphological classifications category of flower:	ation the identify the crude	drug belongs to the
	(1) Turmeric (2) Ginger	(3) Clove (4) A	Aconite
CDC	-EE-2019/(Pharmaceutical Sciences)-(S	SET-X)/(B)	P. T. O.
CrG	-1919-2017/(1 Hai maccutical Sciences) (

27. The following are the natural auxins except :						
	(1) Indole 3-butyric	acid	(2)	Indole-3-aceton	itrile	2
	(3) Phenyl acetic ac	eid	(4)	4-Chloroindole	3-ac	etic acid
28.	Identify the crude day (1) Strophanthus	rug which contains u (2) Betel		llular glandular t Lobelia		ome ? Datura
29.	Cruciferous stomata (1) Digitalis	is present in: (2) Senna	(3)	Vasaka	(4)	Belladona
30.	Identify the adulterant of isapgol seeds: (1) Plantago asiatica (2) Plantago purshii (3) Plantago lanceolata (4) Plantago Wrightiana				1	
31.	1. Identify the mediator for Type 1 hypersensitivity reaction:					
	(1) IgM	(2) IgE		IgG	(4)	IgF
32.	During acute inflam	mation, the leukocyt	e ch	emotaxis is activ	ated	by:
	(1) Leukotriene B4		(2)	Chemokines		
	(3) Interleukin-1		(4)	All of the above	>	
33.	The airway remodeling in Asthma is characterized by: (1) Inflammation (2) Mucus hypersecretion (3) Airway smooth muscle hypertrophy (4) All of the above					
34.	Identify the phase II (1) Acetylation	metabolic reaction: (2) Oxidation		Reduction	(4)	Hydrolysis
35.	The β-adrenoreceptor (1) Tyrosine kinase (2) G-protein couple (3) Voltage gated in (4) Ligand gated in	receptor ed receptor on channel	hich	type of receptor	r ?	

36.	36. When does tachyphylaxis occur?							
	(1) When there is an increased risk of side effects occur	(1) When there is an increased risk of side effects occurring						
	(2) When smaller doses cause an increased response to	a drug						
	(3) When there is a decreased receptor-mediated response	(3) When there is a decreased receptor-mediated response to a drug						
	(4) When the drug causes a faster heart rate	(4) When the drug causes a faster heart rate						
37.	drug/neurotransmitter interactions?	by which of the following						
	(1) The drug increases the release of GABA	ε' - 1- Ω						
	(2) The drug increases uptake of dopamine from the s(3) The drug inhibits the release of dopamine into the							
	(4) The drug inhibits the release of GABA	synaptic cicit						
38.		1. competitive						
	(1) 1 1111111	ole competitive						
	(3) Irreversible competitive (4) Non-cor	npenuve						
39.	39. When two drugs act on the same receptor the result which of the following?	ing drug interaction is said to be						
	(1) Predictable (2) Unpredictable (3) Additive	e (4) Synergistic						
40.	40. Which receptor does the cardiac glycoside digoxin bit	nd to ?						
	(1) ATP-dependent K ⁺ channel (2) Na ⁺ /K ⁺	antiporter						
	(3) ATP-dependent Ca ₂ ⁺ channel (4) Na ⁺ /Ca ₂	⁺ antiporter						
41.	41. Which of the following is <i>not</i> true for zero order reac	tion?						
	(1) Rate = Rate constant							
	(2) Rate is independent of concentrations							
	(3) Rate does not change with time							
	(4) Rate increase with increase in concentrations							
42.	42. An SN1 reaction results in :	·						
	(1) Retention (2) Inversion	on						
	(3) Racemisation (4) Elimina	ntion						

43.	A chemical reaction used for the ortho-formylation of phenols is known as:				
*	(1) Reimer-Tieman	n reaction	(2) Cannizzaro rea	ction	
	(3) Schotten-Baum	ann reaction	(4) Gould-Jacobs r	eaction	
44.	_	that forms an ester to or peroxides as the ox		ctone from a cyclic ketone,	
	(1) Hoffmann react	cion	(2) Beyer-Villiger	reaction	
	(3) Beckman reacti	on	(4) Perkin reaction		
45.	Sodium carbonate con (1) Hydrochloric ac (3) Acetic acid		ardization of following (2) Nitric acid (4) Sulphuric acid	ng aqueous acids except :	
46.	Identify the strong at (1) Hydrochloric at (3) Lithium method	cid	eous titration of weal (2) Perchloric acid (4) Sulphuric acid		
47.	_	omplexiometric titra ation of color (2) Red	-	Eriochrome Black T is as (4) Orange	
48.	The C=O stretch ra	nge of carbonyl grou	p in the IR spectra of	f α, $β$ - unsaturated esters	
	is cm ⁻¹ .		1		
		(2) 1730-1715	(3) 1370-1350	(4) 675-600	
49.	The principle of sep (1) Partition	paration of column cl (2) Absorption	hromatography is: (3) Adsorption	(4) Gel filtration	
50.	Identify the coupling (1) 6-11	ng constant J value for (2) 12-18	or cis compounds in 1 (3) 0-8	NMR: (4) 5-8	
51.	Identify the size of	capsule which holds	maximum drug cont	ent?	
	(1) 000	(2) 00	(3) 0	(4) 1	
52.	Separation of table material is known a		layers due to air-e	entrapment in the granular	
	(1) Chipping	(2) Capping	(3) Lamination	(4) Mottling	
CPG-	CPG-EE-2019/(Pharmaceutical Sciences)-(SET-X)/(B)				

53.	Identify the properties of BCS class III da	rug:					
	(1) High solubility and high permeability	<i>I</i>					
	(2) High solubility and low permeability	€					
	(3) Low solubility and high permeability						
	(4) Low solubility and Low permeability						
54.	Elimination rate constant (Kelim) is defin	ned by the following parameter:					
	(1) Rate of absorption						
	(2) Maximum concentration of substanc	e in plasma					
	(3) Highest single dose						
	(4) Half life						
EE	Identify the automoration which should be	annlied with friction?					
55.	Identify the preparation which should be						
	(1) Liniment (2) Lotion	(3) Ointment (4) Cream					
56.	Citric acid is used in limit test for Iron:						
	(1) To make the medium alkaline	(2) To prevent the precipitation of iron					
	(3) To trap hydrogen sulphide gas	(4) None of the above					
57.	British anti-Lewisite is chemically:						
	(1) Dimercaptosuccinic acid	(2) Dimercapto-propane sulfonate					
	(3) Dimercaprol	(4) Pencillamine					
E0	Dotach alum obtained by adding a conc	entrated solution of potassium sulfate to a hot					
58.	solution of an equimolecular proportion						
	(1) Aluminium chloride	(2) Aluminium oxide					
	(3) Zinc sulfate	(4) Aluminium sulfate					
	×	1 - 1' de la DET accesa					
59.	Identify the radioisotope used as medica						
	(1) Tritium (³ H) (2) Beryllium-10	(3) Fluorine-18 (4) Cobalt-60					

(2) Cp = Cv - R

(4) $Cp = Cv \times R$

60. For one mole of gas Cp and Cv relations are :

(1) Cp = Cv + R

(3) Cp = Cv

61.	The correlation coefficient (r) value required to qualify a QSAR equation by Hansch analysis using in vitro data is :					
	(1) 0.3	(2) 0.5	(3)	0.7	(4) 0.9	
62.	•	ocarbon with methyl chain at C-17 is name		ips at C-10 and	C-13 but without carbon	
	(1) Androstane	(2) Gonane	(3)	Estrane	(4) Pregnane	
63.	(1) 4-Chloro-2-[(3- (2) 4-Chloro-2-[(2- (3) 4-Chloro-3-[(2-	name of furosemide furylethyl)amino]-5-furylmethyl)amino]-furylmethyl)amino]-furylmethyl)amino]-	sulfa 5-sul 2-sul	famoylbenzoic a famoylbenzoic a	acid acid	
64.	Identify the antimal (1) Chloroquine	larial drug belongs to (2) Amodiaquine		524	ne nucleus : (4) Primaquine	
65.	Identify the highly (1) Erythromycin (2) (3) Erythromycin (3)		(2)	Erythromycin B Erythromycin D		
66.		ic method for the syr ch-Knorr Synthesis nthesis	(2)			
67.	The type of cycload is:	ddition process for ev	en n	umber of pi bond	ds under thermal condition	
	(1) Suprafacial	(2) Antarafacial	(3)	Disrotary	(4) None of the above	
68.	The process of synt	thesis of glucose from	n non	carbohydrate so	urces is termed as:	
	(1) Glycolysis		. ,	Glcogenesis		
	(3) Gluconeogenes	sis	(4)	Glycogenolysis		
69.	Citrullinemia, the u	area cycle disorder is	due t	to the deficiency	of the enzyme:	
	(1) Carbomoyl pho	osphate synthetase	(2)	Arginase		
	(3) Argininosuccir	nic acid synthase	(4)	Ornithine transc	carbomylase	

- 70. Identify the coenzyme derived from Vitamin B1:
 - (1) Thiamine pyrophosphate
- (2) Flavin mononucleotide

(3) Coenzyme A

- (4) Nicotinamide adenine dinucleotide
- 71. Why do ACE inhibitors cause cough?
 - (1) ACE causes the accumulation of bradykinin.
 - (2) Angiotensin I is a powerful bronchoconstrictor.
 - (3) Angiotensin II is a powerful vasoconstrictor.
 - (4) ACE breaks down bradykinin.
- 72. Why should care be taken when prescribing warfarin and amiodarone in combination?
 - (1) Amiodarone and warfarin both have an anticoagulant effect.
 - (2) Amiodarone may reverse the anticoagulant effect of warfarin.
 - (3) Amiodarone may increase the anticoagulant effect of warfarin.
 - (4) Warfarin may reverse the antiarrhythmic effect of amiodarone.
- 73. Which of the following describes salbutamol, a β 2-adrenoceptor agonists ?
 - (1) Direct acting sympathomimetic.
 - (2) Indirect acting sympathomimetic.
 - (3) Direct acting parasympathomimetic.
 - (4) Indirect acting parasympathomimetic.
- 74. The drug latanoprost decreases the intra ocular tension by :
 - (1) α-Adrenergic agnostic activity
 - (2) Carbonic anhydrase inhibition
 - (3) β-Adrenergic blocking activity
 - (4) $PGF_{2\alpha}$ -agonistic activity
- **75.** Which of the following is *not* caused by the activation of the sympathetic nervous system?
 - (1) An increase in blood pressure.
 - (2) A decrease in heart rate.
 - (3) An increase in cardiac output.
 - (4) An increase Ca₂⁺ release in cardio myocytes.

76.	Following are the drugs that enhance the action of sulphonyl urea in diabetic paexcept:			yl urea in diabetic patient	
	(1) Phenylbutazone	;	(2)	Cimetidine	
	(3) Phenytoin		(4)	Chloramphenic	ol
77.	Identify the aromata	ase inhibitor:			
	(1) Raloxifene	(2) Tibolone	(3)	Gestodene	(4) Exemestane
78.	Identify the short ac	ting neuromuscular	blocl	king agent:	
	(1) Mivacurium	(2) Atracurium	(3)	Pancuronium	(4) Pipecuronium
79.	Identify the drug v		ther	apeutic effect of	of levodopa by enhancing
	(1) Domperidone		(2)	Pyridoxine	
	(3) Reserpine		(4)	Phenothaizine	
80.	 Identify the advantage of Nalmafene over other opioid antagonists: (1) Longer half-life (2) Greater oral bioavailability (3) No observed dose-dependent liver toxicity (4) All of the above 				
81.	Identify the HLB va	alue of O/W emulsif	iers :		
	(1) 4-6	(2) 8-18	(3)	13-15	(4) 7-9
82.		e intraparticle porosi	ity.	onate is 1.450 42.7%	and the true density, ρ , is
	· /				
83.		e size of colloidal dis			_
	(1) Greater than 0.	•	, ,	Less than 1 nm	
	(3) 1 nm to 0.5 μ m	l	(4)	All of the above	/e
84.	Following are inclu (1) Channel lattice (3) Clathrates	usion/occlusion comp e type	(2)	ds except: Layer type Polymer type	
CPG-	EE-2019/(Pharmac	eutical Sciences)-(S	ET-	X)/(B)	

85.	In the Gram staining of bacteria, iodine is (1) Primary stain (2) Counter stain				
86.		ded to reduce the D-value of an organism by: (3) 50% (4) 10%			
87.		acteria of interest in immunology except: (2) Clostridum tetani (4) Bordetella pertusis			
88.	(-)	ker Test : (2) Clostridum tetani (4) Bordetella pertusis			
89.	"derivative of Opium" means :	Preparations (Excise Duties) Act 1955, the			
	(1) Medicinal opium, that is, opium wh adapt it for medicinal use	ich has undergone the processes necessary to			
	(2) Prepared opium, that is, any product of opium obtained by any series of operations designed to transform opium into an extract suitable for smoking and the dross or other residue remaining after opium is smoked'				
	(3) Morphine, that is, the principal alk $C_{17}H_{19}NO_3$ and its salts and its derivative	aloid of opium having the chemical formula atives			
	(4) All of the above				
90.					
	(1) An invention which is frivolous or well established natural laws	which claims anything obviously contrary to			
	(2) A method of agriculture or horticulture				
	(3) An invention which in effect, is tra- or duplication of known proper components	ditional knowledge or which is an aggregation ties of traditionally known component or			
	(4) All of the above				
91.	Kokum butter is the fat expressed from t	he seeds of:			
	(1) Garcinia indica	(2) Carthamus tinctorius			
	(3) Pongamia glabra	(4) Galeorhinus zyopetrus			
CPG-	CPG-EE-2019/(Pharmaceutical Sciences)-(SET-X)/(B) P. T. O.				

92.	Devil's dung is the s	synonym of:		
	(1) Cannabis	(2) Asafoetida	(3) Myrrh	(4) Colocynth
93.	The chief chemical	constituent present in	n Anethum graveoler	as is:
	(1) D-Limonene	(2) p-Cymene	(3) Coumarin	(4) Carvone
94.	Identify the crude d	rug which give posit	ive result to Borntrag	gers test?
	(1) Squill	(2) Rhubarb	(3) Bitter almond	(4) Ginseng
95.	Identify the crude d	rug that contains qui	noline alkaloid :	
	(1) Camptotheca	(2) Ergot	(3) Rauwolfia	(4) Vinca
96.	Identify the plant dr	rug useful in the treat	tment of congestive l	neart failure:
	(1) Ergot	(2) Gokhru	(3) Digitalis	(4) Rauwolfia
97.	Identify the mucoly	tic enzyme:		
	(1) Pepsin	(2) Urokinase	(3) Streptokinase	(4) Muramidase
98.	The ash value of ser	nega is about	%.	
	(1) 4	(2) 8	(3) 12	(4) 16
99.	Myrobalan consists	of dried ripe and ful	ly matured fruits of:	
	(1) Terminalia bele		(2) Terminalia che	
	(3) Quercus infecto	oria	(4) Picrasma excel	sa
100.	Ayurvedic preparat	ion obtained from the	e ash of drugs is kno	wn as:
	(1) Lehya	(2) Taila	(3) Ksharas	(4) Lepa

Total No. of Printed Pages: 13

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

CPG-EE-2019 (Pharmaceutical Science)-(SET-X)

	/	Sr. No.	10339
Time: 1½ Hours	Total Questions : 100		Max. Marks 100
Roll No. (in figures)	(in words)		
Candidate's Name		- Date of Birth-	
Father's Name	Mother's Nam	e	
Date of Exam :	/		
(Signature of the Candidate)		(Signature	of the Invigilator)

CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- 1. All questions are *compulsory* and carry equal marks. The candidates are required to attempt all questions.
- 2. The candidate *must return* this question booklet and the 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 and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard/to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hand or through email. 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. Use only black or blue ball point pen of good quality in the OMR Answer-Sheet.
- 7. There will be **negative** marking. Each correct answer will be awarded **one** full mark and each incorrect answer will be negatively marked for which the candidate will get ¼ Mark (0.25 Mark) discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 8. Before answering the questions, the bándidates should ensure that they have been supplied correct & complete question booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

1.	The correlation coefficient (r) value required to qualify a QSAR equation by Hansch analysis using in vitro data is :				
	(1) 0.3	(2) 0.5	(3) 0.7	(4) 0.9	
2.	The steroidal hydrosubstitution a side of	ocarbon with methyl chain at C-17 is name	groups at C-10 and:	d C-13 but without carbon	
	(1) Androstane		(2) Gonane		
	(3) Estrane		(4) Pregnane		
3.		name of furosemide -furylethyl)amino]-5-		ncid	
		-furylethyl)amino]-			
		-furylmethyl)amino]			
		-furylmethyl)amino]			
4.		larial drug belongs to			
	(1) Chloroquine	(2) Amodiaquine	(3) Menoquine	(+) Timaqume	
5.	Identify the highly	active erythromycin	:		
	(1) Erythromycin	A	(2) Erythromycir	пВ	
	(3) Erythromycin	С	(4) Erythromycir	ı D	
6.	Identify the synthe	tic method for the sy	nthesis of quinoline	:	
	(1) Conrad-Limpa	ch-Knorr Synthesis	(2) Skraup Synth	nesis	
	(3) Friedlander Sy	nthesis	(4) All of the abo	ove	
7.	The type of cycloa is:	addition process for e	ven number of pi be	onds under thermal condition	
	(1) Suprafacial		(2) Antarafacial		
	(3) Disrotary		(4) None of the	above	
8.	The process of syr	othesis of glucose fro	m noncarbohydrate	sources is termed as:	
J.	(1) Glycolysis		(2) Glcogenesis	A	
	(3) Gluconeogene	esis	(4) Glycogenoly	vsis	
	(3)				

9.	Citrullinemia, the urea cycle disorder is due to the deficiency of the enzyme :					
	(1) Carbomoyl phosphate synthetase	(2) Arginase				
	(3) Argininosuccinic acid synthase	(4) Ornithine transcarbomylase				
10.	Identify the coenzyme derived from Vita	min B1:				
	(1) Thiamine pyrophosphate	(2) Flavin mononucleotide				
	(3) Coenzyme A	(4) Nicotinamide adenine dinucleotide				
11.	Identify the size of capsule which holds	maximum drug content?				
	(1) 000 (2) 00	(3) 0 (4) 1				
12.	Separation of tablet into two or more material is known as:	layers due to air-entrapment in the granular				
	(1) Chipping (2) Capping	(3) Lamination (4) Mottling				
13.	Identify the properties of BCS class III of	rug:				
	(1) High solubility and high permeabilit	у				
	(2) High solubility and low permeability					
	(3) Low solubility and high permeabilit	y				
	(4) Low solubility and Low permeabilit	y				
14.	Elimination rate constant (Kelim) is defi	ned by the following parameter:				
	(1) Rate of absorption					
	(2) Maximum concentration of substance	ee in plasma				
	(3) Highest single dose					
	(4) Half life					
15.	Identify the preparation which should be	e applied with friction?				
	(1) Liniment (2) Lotion	(3) Ointment (4) Cream				
16.	Citric acid is used in limit test for Iron:					
	(1) To make the medium alkaline	(2) To prevent the precipitation of iron				
	(3) To trap hydrogen sulphide gas	(4) None of the above				

17.	British anti-Lewisite is chemically:	ă.		
	(1) Dimercaptosuccinic acid	(2) Dimercapto-propane sulfonate		
	(3) Dimercaprol	(4) Pencillamine		
18.	Potash alum obtained by adding a conc solution of an equimolecular proportion	centrated solution of potassium sulfate to a hot of:		
	(1) Aluminium chloride	(2) Aluminium oxide		
	(3) Zinc sulfate	(4) Aluminium sulfate		
19.	Identify the radioisotope used as medica	al radiotracer in PET scans:		
	(1) Tritium (³ H) (2) Beryllium-10			
20.	For one mole of gas Cp and Cv relations	s are :		
	(1) Cp = Cv + R	(2) Cp = Cv - R		
7	(3) $Cp = Cv$	$(4) Cp = Cv \times R$		
21.	Identify the HLB value of O/W emulsif	ñers:		
	(1) 4-6 (2) 8-18	(3) 13-15 (4) 7-9		
22.	2. The granule density, ρg, of sodium bicarbonate is 1.450 and the true density, 2.033. Compute the intraparticle porosity.			
	(1) 28.6% (2) 35.4%	AND THE RESIDENCE OF THE PARTY		
23.	Identify the particle size of colloidal dis	spersion:		
	(1) Greater than 0.5 μm	(2) Less than 1 nm		
	(3) 1 nm to 0.5 μm	(4) All of the above		
24.	Following are inclusion/occlusion com	pounds except:		
	(1) Channel lattice type	(2) Layer type		
	(3) Clathrates	(4) Polymer type		
25.	,			
	(1) Primary stain (2) Counter stain	(3) Mordant (4) Decoloizer	À	
26.	Z-value is the increase in temperature (1) 90% (2) 70%	needed to reduce the D-value of an organism by (3) 50% (4) 10%	<i>i</i> :	

27.	Fol	lowing are the endotoxin producing b	acteri	a of interest in immunology except:	
₹	(1)	Vibrio cholera	(2)	Clostridum tetani	
	(3)	Salmonella typhi	(4)	Bordetella pertusis	
28.	Ide	ntify the strain used in the Rideal Wa	lker T	est:	
	(1)	Vibrio cholera	(2)	Clostridum tetani	
	(3)	Salmonella typhi	(4)	Bordetella pertusis	
29.		cording to Medicinal and Toilet rivative of Opium" means:	Prepa	rations (Excise Duties) Act 1955, the	
	(1)	Medicinal opium, that is, opium what adapt it for medicinal use	hich l	has undergone the processes necessary to	
	(2)	Prepared opium, that is, any produc designed to transform opium into a other residue remaining after opium	n exti	pium obtained by any series of operations ract suitable for smoking and the dross or loked'	
	(3)	Morphine, that is, the principal all $C_{17}H_{19}NO_3$ and its salts and its derivative of the salts and its derivative of the salts are salts.		d of opium having the chemical formula	
	(4)	All of the above			
30.	Ac	ecording to Patents Act 1970, identify	the in	nventions that are not patentable:	
	(1) An invention which is frivolous or which claims anything obviously contrary to well established natural laws				
	(2) A method of agriculture or horticulture				
	(3) An invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components				
	(4)) All of the above			
31.	Ide	entify the source of caraway:			
) Foeniculum vulgare	(2)	Myristica fragrans	
	(3) Anethum garveolans	(4)	Carum curvi	
32.	Fo	ollowing are the adulterants of nutmeg	g exce	ept:	
	(1) Myristica malabarica	(2)	Myristica fragrans	
	(3) Myristica beddomei	(4)	Myristica attenuata	
CPG-	EE-	-2019/(Pharmaceutical Sciences)-(S	ET-X	()/(C)	

33.	The following are the (1) Codiene	ne biosynthetic produ (2) Thebaine	(3) Mescaline	
34.	Identify the number (1) 3	of isoprene units in (2) 4	sesquiterpenes: (3) 6	(4) 8
35.	Identify the cardiov (1) Ara-C	ascular drug obtained (2) Crassin acetate		urce: (4) Acanthifolicin
36.	Identify the test for (1) Biuret test	steroids : (2) Murexide test	(3) Legals test	(4) Salkowski test
37.	Goldbeater's skin to (1) Glycosides	est is the identification (2) Steroids	n test for: (3) Tannins	(4) Napthoquinones
38.	Identify the source (1) Panax ginseng (3) Panax notogins	of American ginseng	(2) Panax quinque (4) Panax japonica	
39.	Identify the drug us (1) Evening prime (3) Safflower oil	sed as antixeropthalm rose oil	nic factor: (2) Corn oil (4) Shark liver oil	
40.	Cotton consists of species of Gossypi (1) Malvaceae	um herbaceurre and	Gossypium barbaden	the seeds of the cultivated use belongs to the family: (4) Apocynacece
41.	(2) Angiotensin I	e accumulation of br is a powerful bronche is a powerful vasoco	oconstrictor.	
42.	(1) Amiodarone a(2) Amiodarone n(3) Amiodarone n	he taken when prescri and warfarin both have any reverse the anticon any increase the anticon reverse the antiarrhy	e an anticoagulant es coagulant effect of was coagulant effect of was	arfarin. ⁄arfarin.

43.	Which of the following describes salbutan	mol, a β2-adrenoceptor agonists?
*	(1) Direct acting sympathomimetic.	
	(2) Indirect acting sympathomimetic.	
	(3) Direct acting parasympathomimetic.	
	(4) Indirect acting parasympathomimetic)•
44.	The drug latanoprost decreases the intra	ocular tension by:
	(1) α-Adrenergic agnostic activity	
	(2) Carbonic anhydrase inhibition	
	(3) β-Adrenergic blocking activity	
	(4) $PGF_{2\alpha}$ -agonistic activity	
45.	Which of the following is <i>not</i> caused system?	by the activation of the sympathetic nervous
	(1) An increase in blood pressure.	
	(2) A decrease in heart rate.	
	(3) An increase in cardiac output.	
	(4) An increase Ca ₂ ⁺ release in cardio m	yocytes.
46.	Following are the drugs that enhance the except:	ne action of sulphonyl urea in diabetic patient
	(1) Phenylbutazone	(2) Cimetidine
	(3) Phenytoin	(4) Chloramphenicol
47.	Identify the aromatase inhibitor:	
	(1) Raloxifene (2) Tibolone	(3) Gestodene (4) Exemestane
48.	Identify the short acting neuromuscular	blocking agent:
	(1) Mivacurium (2) Atracurium	(3) Pancuronium (4) Pipecuronium
49.	Identify the drug which abolishes the peripheral decarboxylation:	therapeutic effect of levodopa by enhancing
	(1) Domperidone	(2) Pyridoxine
	(3) Reserpine	(4) Phenothaizine
CPG-	EE-2019/(Pharmaceutical Sciences)-(SI	ET-X)/(C)

50.	Identify the advantage of Nalmafene ov	er other opioid antagonists:
	(1) Longer half-life	
	(2) Greater oral bioavailability	
	(3) No observed dose-dependent liver t	oxicity
	(4) All of the above	
51.	Which of the following is <i>not</i> true for z	ero order reaction?
	(1) Rate = Rate constant	
	(2) Rate is independent of concentration	ons
	(3) Rate does not change with time	
	(4) Rate increase with increase in conc	entrations
52.	An SN1 reaction results in:	
	(1) Retention (2) Inversion	(3) Racemisation (4) Elimination
53.	A chemical reaction used for the ortho-	-formylation of phenols is known as:
	(1) Reimer-Tiemann reaction	(2) Cannizzaro reaction
	(3) Schotten-Baumann reaction	(4) Gould-Jacobs reaction
54.	An organic reaction that forms an este	r from a ketone or a lactone from a cyclic ketone,
	using peroxyacids or peroxides as the	
	(1) Hoffmann reaction	(2) Beyer-Villiger reaction
	(3) Beckman reaction	(4) Perkin reaction
55.	. Sodium carbonate can be used for star	ndardization of following aqueous acids except:
	(1) Hydrochloric acid	(2) Nitric acid
	(3) Acetic acid	(4) Sulphuric acid
56.	. Identify the strong acid used in non-ac	queous titration of weak bases except:
	(1) Hydrochloric acid	(2) Perchloric acid
	(3) Lithium methoxide	(4) Sulphuric acid
57	. The end point of complexiometric ti	tration by EDTA using Eriochrome Black T is as
	an indicator is formation of co	lour.
	(1) Blue (2) Red	(3) Green (4) Orange
CPG	G-EE-2019/(Pharmaceutical Sciences)-	(SET-X)/(C) P. T. O

58.	The C=O stretch range of carbonyl group in the IR spectra of α , β - unsaturated esters is cm ⁻¹ .				
	18 cm . (1) 1760-1665	(2) 1730-1715	(3) 1370-1350	(4) 675-600	
59.	The principle of sep (1) Partition	paration of column cl (2) Absorption	nromatography is: (3) Adsorption	(4) Gel filtration	
60.	Identify the couplin (1) 6-11	g constant J value fo (2) 12-18	r cis compounds in	NMR: (4) 5-8	
61.	Identify the HIV nr.	otease inhibitor used	in the treatment of	'AIDS ·	
	(1) Lamivudine	(2) Efavirenz	(3) Indinavir	(4) Maraviroc	
62.	Jarisch-Herxheimer	reaction is an adver-	se effect of the anti	biotic:	
	(1) Penicillin		(2) Streptomycin		
	(3) Chloramphenic	ol	(4) Amphotericin	n-B	
63.	Identify the blood the blood:	test that used to dete	ermine significant	levels of methemalbumin in	
	(1) Mantoux test		(2) Schumm test		
	(3) Western blot te	st	(4) ELISA test		
64.	Identify the causati	ve organism for tube	rculosis:		
	(1) Mycobacterium		(2) Mycobacteria	um avium	
	(3) Mycobacterium	ı tuberculosis	(4) All of the abo	ove	
65.	Identify the antican	cer drug which inhib	it the synthesis of	Thymidylate synthase:	
	(1) Methotrexate	(2) Paclitaxel	(3) Etoposide	(4) 5-Fluorouracil	
66.	According to morp category of flower	_	ion the identify th	e crude drug belongs to the	
	(1) Turmeric	(2) Ginger	(3) Clove	(4) Aconite	
67.	The following are t	he natural auxins exc	cept:		
	(1) Indole 3-butyri		(2) Indole-3-acet	tonitrile	
	(1) IIIdole 5 Oditill				
	(3) Phenyl acetic a		(4) 4-Chloroindo		

68.	Identify the crude do (1) Strophanthus	rug which contains u (2) Betel	nicellular (3) Lobe		ichome ? (4) Datura	
69.	Cruciferous stomata (1) Digitalis	a is present in: (2) Senna	(3) Vasa	aka	(4) Belladona	
70.	Identify the adultera (1) Plantago asiatio (3) Plantago lanceo		(2) Plan	ntago purshii ntago Wright	iana	
71.	Kokum butter is the	e fat expressed from	the seeds	of:		
	(1) Garcinia indica		` '	thamus tincto		
	(3) Pongamia glab		(4) Gale	eorhinus zyo	petrus	
72.	Devil's dung is the (1) Cannabis	synonym of: (2) Asafoetida	(3) Myr	rrh	(4) Colocynth	
73.	The chief chemical	constituent present	n Anethur	n graveolen:	s is:	
	(1) D-Limonene	(2) p-Cymene	(3) Cou	ımarin	(4) Carvone	
74.	Identify the crude of	drug which give posi				
	(1) Squill	(2) Rhubarb	(3) Bitt	er almond	(4) Ginseng	
75.	Identify the crude of	drug that contains qu			(A) T Y	
	(1) Camptotheca		120 120	uwolfia	(4) Vinca	
76.		lrug useful in the trea			eart failure:	
	(1) Ergot		(2) Gol	knru uwolfia		
	(3) Digitalis		(1) 144			
77.	Identify the mucol (1) Pepsin	ytic enzyme :	(2) Ur	okinase		
	(3) Streptokinase			ıramidase		
78.	The ash value of s	enega is about	. %.			
. ••	(1) 4	(2) 8	(3) 12		(4) 16	

79.	Myrobalan consists of dried ripe and fully matured fruits of:				
	(1) Terminalia belerica		(2) Terminalia chebula		
	(3) Quercus infectoria		(4) Picrasma excel	sa	
80.	Ayurvedic preparati	on obtained from the	e ash of drugs is know	wn as:	
	(1) Lehya	(2) Taila	(3) Ksharas	(4) Lepa	
81.	-	s and Cosmetics Acuirements for disinfect		dule that contains various	
	(1) Schedule P	(2) Schedule O	(3) Schedule S	(4) Schedule U	
82.	According to the Insecticides Act 1968, the chairman of The Central Insecticides Bois:				
	(1) The Drugs Cont	troller, India			
	(2) The Director Ge	eneral, Indian Counc	il of Medical Resear	ch	
(3) The Director General of Health Services					
	(4) The Director Go	eneral, Indian Counc	il of Agricultural Re	search	
83.	The method which	calculates the child d	lose based on age is	?	
	(1) Clark's rule		(3) Fischer rule		
84.	A medicinal pill made of a thick liquid that has been solidified and is meant to consumed by light chewing and allowing it to dissolve in the mouth is known as:				
	(1) Pastille	(2) Tablet triturate	(3) Jellie	(4) Gel	
85.	Identify the equipm	nent used for moist he	eat sterilization:		
	(1) Hot air oven		(2) Hepafilter		
	(3) Autoclave		(4) Microwave ste	rilizer	
86.	Expand the term M	EDLINE:			
	(1) Medical Legal	Analysis and Review	v System Online		
	(2) Medicine Liter	ature Analysis and R	eview System Onlin	e	
	(3) Medical Literat	ture Analysis and Re	dressal System Onli	ne	
	(4) Medical Literar	ture Analysis and Re	etrieval System Onlin	ne	

87.	Following are the natural circulation ev	aporators except:			
	(1) Evaporating pan	(2) Evaporating sti	lls		
	(3) Film evaporator	(4) Short tube evap	porator		
88.	Identify the size reduction apparatus Impact and attrition:	worked based on t	he principle of combined		
	(1) Ball mill (2) Roller mill	(3) Hammer mill	(4) Cutter mill		
89.	Following are the demerits of filter pres	ss except :			
	(1) It is batch filter, so that there is goo	d deal of "down time	"		
	(2) Operation is critical as the frames s	hould be full			
	(3) It provides a large surface area in a	relatively small floor	space		
	(4) The filter press can be used for slur	ries containing less th	nan 5% of solids		
90.	Identify the advantage of human dried	alasma :			
50.	(1) If properly stored it keeps well for a				
			ture provided this is below		
(2) If protected from light it can be stored at room temperature provided this i 20°C					
	(3) It can be given to patients of any bl	ood groups			
	(4) All of the above				
91.	Identify the mediator for Type 1 hypers	ensitivity reaction:			
	(1) IgM (2) IgE	(3) IgG	(4) IgF		
92.	During acute inflammation, the leukocy	rte chemotaxis is acti	vated by :		
	(1) Leukotriene B4	(2) Chemokines	•		
	(3) Interleukin-1	(4) All of the abov	7A		
	(5) InterredKiii-1	(4) All of the abov			
93.	The airway remodeling in Asthma is ch	aracterized by:			
	(1) Inflammation				
	(2) Mucus hypersecretion				
	(3) Airway smooth muscle hypertrophy	y			
	(4) All of the above				

94. Identify the phase II metabolic reaction :

	(1) Acetylation (2	2) Oxidation
	(3) Reduction (4)	1) Hydrolysis
95.	The β -adrenoreceptor is an example of whi	ch type of receptor?
	(1) Tyrosine kinase receptor	
	(2) G-protein coupled receptor	
	(3) Voltage gated ion channel	
	(4) Ligand gated ion channel	
96.	When does tachyphylaxis occur?	
	(1) When there is an increased risk of side	effects occurring
	(2) When smaller doses cause an increased	d response to a drug
	(3) When there is a decreased receptor-me	ediated response to a drug
	(4) When the drug causes a faster heart rat	te
97.	The development of drug addiction drug/neurotransmitter interactions? (1) The drug increases the release of GAB (2) The drug increases uptake of dopamin (3) The drug inhibits the release of dopam (4) The drug inhibits the release of GABA	e from the synaptic cleft into the synaptic cleft
98.		
		2) Reversible competitive
	(3) Irreversible competitive (4) Non-competitive
99.		or the resulting drug interaction is said to be
	which of the following? (1) Predictable (2) Unpredictable ((3) Additive (4) Synergistic
100.	Which receptor does the cardiac glycoside	e digoxin bind to ?
	(1) ATP-dependent K ⁺ channel	(2) Na ⁺ /K ⁺ antiporter
	(3) ATP-dependent Ca ₂ ⁺ channel	(4) Na ⁺ /Ca ₂ ⁺ antiporter
י אמרי	EE 2010//Pharmacoutical Sciences)_(SFT	T X)/(C)

Total No. of Printed Pages: 13 (DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

G-EE-2019 (Pharmaceutical Science)-(SET-X)

D		10340 Sr. No
Time: 1½ Hours	Total Questions : 100	Max. Marks: 100
Roll No. (in figures)	(in words)	
Candidate's Name	Dat	te of Birth—/
Father's Name		
Date of Exam :		
(Signature of the Candidate)		Signature of the Invigilator)
CANDIDATES MUST READ TH	F FOLLOWING INFORMATION/IN	STRUCTIONS BEFORE

STARTING THE QUESTION PAPER.

1. All questions are compulsory and carry equal macks. The candidates are required to attempt al questions.

2. The candidate must return this question booklet and the OMR Answer-Sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / misbehaviour will be registered agains 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 and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hard or through email. 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. Use only black or blue ball point pen of good quality in the OMR Answer-Sheet.

- 7. There will be negative marking. Each correct answer will be awarded one full mark and each incorrect answer will be negatively marked for which the candidate will get 1/4 Mark (0.25 Mark) discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct & complete question booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

(2) Plantago purshii

(4) Plantago Wrightiana

(1) Plantago asiatica

(3) Plantago lanceolata

11.	Identify the mediator for Type 1 hypersensitivity reaction:
r	(1) IgM (2) IgE (3) IgG (4) IgF
12.	During acute inflammation, the leukocyte chemotaxis is activated by:
	(1) Leukotriene B4 (2) Chemokines
	(3) Interleukin-1 (4) All of the above
13.	The airway remodeling in Asthma is characterized by:
	(1) Inflammation
	(2) Mucus hypersecretion
	(3) Airway smooth muscle hypertrophy
	(4) All of the above
14.	Identify the phase II metabolic reaction:
	(1) Application (0) 0 11 11
4=	(i) lijulolysis
15.	The β -adrenoreceptor is an example of which type of receptor ?
	(1) Tyrosine kinase receptor
	(2) G-protein coupled receptor
	(3) Voltage gated ion channel
	(4) Ligand gated ion channel
16.	When does tachyphylaxis occur?
	(1) When there is an increased risk of side effects occurring
	(2) When smaller doses cause an increased response to a drug
	(3) When there is a decreased receptor-mediated response to a drug
	(4) When the drug causes a faster heart rate
17.	The development of drug addiction is caused by which of the following drug/neurotransmitter interactions?
	(1) The drug increases the release of GABA
	(2) The drug increases uptake of dopamine from the synaptic cleft
	(3) The drug inhibits the release of dopamine into the synaptic cleft
	(4) The drug inhibits the release of GABA

18.	Which of the following is not a type of antagonist? (1) Partial competitive (2) Reversible competitive						
	(3) Irreversible competitive	(4) Non-competitive					
19.	which of the following?	otor the resulting drug interaction is said to be (3) Additive (4) Synergistic					
20.	Which receptor does the cardiac glycosic (1) ATP-dependent K ⁺ channel (3) ATP-dependent Ca ₂ ⁺ channel	(2) Na ⁺ /K ⁺ antiporter					
21.	 Rate = Rate constant Rate is independent of concentration Rate does not change with time 	Rate is independent of concentrations					
22.	An SN1 reaction results in : (1) Retention (2) Inversion	(3) Racemisation (4) Elimination					
23.	A chemical reaction used for the ortho-f	formylation of phenols is known as:					
	(1) Reimer-Tiemann reaction	(2) Cannizzaro reaction					
	(3) Schotten-Baumann reaction	(4) Gould-Jacobs reaction					
24.	An organic reaction that forms an ester from a ketone or a lactone from a cyclic ketone, using peroxyacids or peroxides as the oxidant is known as:						
	(1) Hoffmann reaction	(2) Beyer-Villiger reaction					
	(3) Beckman reaction	(4) Perkin reaction					
25.	Sodium carbonate can be used for standardization of following aqueous acids except:						
	(1) Hydrochloric acid	(2) Nitric acid					
	(3) Acetic acid	(4) Sulphuric acid					
26.	Identify the strong acid used in non-aqu	neous titration of weak bases except:					
	(1) Hydrochloric acid	(2) Perchloric acid					
	(3) Lithium methoxide	(4) Sulphuric acid					
PC-	P. T. O.						

27.	The end point of complexiometric titration by EDTA using Eriochrome Black T is as an indicator is formation of colour.				
ť	(1) Blue	(2) Red	(3) Green	(4) Orange	
28.		nge of carbonyl gro	up in the IR spectra o	of α , β - unsaturated esters	
	is cm ⁻¹ . (1) 1760-1665	(2) 1730-1715	(3) 1370-1350	(4) 675-600	
29.	The principle of ser (1) Partition	paration of column (2) Absorption		(4) Gel filtration	
30.	Identify the coupling (1) 6-11	ng constant J value f (2) 12-18	For cis compounds in (3) 0-8	NMR: (4) 5-8	
31.	According to Drug regulations and req	gs and Cosmetics A uirements for disinf	fectant fluids:	nedule that contains various	
	(1) Schedule P	(2) Schedule O	(3) Schedule S	(4) Schedule U	
32.		nsecticides Act 1968	3, the chairman of Th	ne Central Insecticides Board	
	is: (1) The Drugs Cor				
	` '	General, Indian Cour General of Health Se	ncil of Medical Rese	earch	
			ncil of Agricultural I	Research	
33.	The method which	calculates the child	l dose based on age i	s?	
	(1) Clark's rule		(2) Young's rule		
	(3) Fischer rule		(4) None of the	above	
34.	A medicinal pill a consumed by light	made of a thick lic chewing and allow	quid that has been sing it to dissolve in t	solidified and is meant to be the mouth is known as:	
	(1) Pastille		(2) Tablet tritura	ate	
	(3) Jellie		(4) Gel		
35.	(1) Hot air oven	ment used for moist	(2) Hepafilter	atanilizan	
	(3) Autoclave	. 10	(4) Microwave	Sterritzer	
CPG	CPG-EE-2019/(Pharmaceutical Sciences)-(SET-X)/(D)				

36.	 6. Expand the term MEDLINE: (1) Medical Legal Analysis and Review Syst (2) Medicine Literature Analysis and Review (3) Medical Literature Analysis and Redressa (4) Medical Literature Analysis and Retrieval 	System Online 1 System Online
37.	7. Following are the natural circulation evaporat	ors except:
	(1) Evaporating pan (2)	Evaporating stills
	(3) Film evaporator (4)	Short tube evaporator
38.	8. Identify the size reduction apparatus work Impact and attrition:	ed based on the principle of combined
	(1) Ball mill (2) Roller mill (3)	Hammer mill (4) Cutter mill
39.	9. Following are the demerits of filter press exce(1) It is batch filter, so that there is good deal(2) Operation is critical as the frames should(3) It provides a large surface area in a relative	of "down time" be full
	(4) The filter press can be used for slurries co	
40.		
40.	(1) If properly stored it keeps well for at leas	
	(2) If protected from light it can be stored at 20°C	
	(3) It can be given to patients of any blood g	roups
	(4) All of the above	
41.	11. Identify the source of caraway:	
	(1) Foeniculum vulgare (2)	Myristica fragrans
	(3) Anethum garveolans (4)	Carum curvi
42.	12. Following are the adulterants of nutmeg exce	ept:
		Myristica fragrans
	(3) Myristica beddomei (4)	Myristica attenuata

43.	The following are the (1) Codiene	ne biosynthetic produ (2) Thebaine	icts of the tyrosine (3) Mescaline	except: (4) Morphine
44.	Identify the number (1) 3	of isoprene units in s (2) 4	sesquiterpenes: (3) 6	(4) 8
45.	Identify the cardiov (1) Ara-C	ascular drug obtained (2) Crassin acetate		source: (4) Acanthifolicin
46.	Identify the test for (1) Biuret test	steroids: (2) Murexide test	(3) Legals test	(4) Salkowski test
47.	Goldbeater's skin te (1) Glycosides	est is the identification (2) Steroids	n test for: (3) Tannins	(4) Napthoquinones
48.	Identify the source (1) Panax ginseng (3) Panax notogins	uefolium ica		
49.	Identify the drug us (1) Evening primer (3) Safflower oil	sed as antixeropthalm rose oil	nic factor: (2) Corn oil (4) Shark liver of	oil
50.	Cotton consists of species of Gossypit (1) Malvaceae	the epidermal trick um herbaceurre and ((2) Liliaceae	Gossypium barbad	f the seeds of the cultivated ense belongs to the family: (4) Apocynacece
51.	(1) ACE causes the(2) Angiotensin I i	oitors cause cough? e accumulation of brais a powerful broncho is a powerful vasoco own bradykinin.	oconstrictor.	
52.	 (1) Amiodarone and (2) Amiodarone m (3) Amiodarone m 	e taken when prescri nd warfarin both have nay reverse the antico nay increase the antic reverse the antiarrhy	e an anticoagulant pagulant effect of v coagulant effect of	warfarin. warfarin.

	(2) Indirect acting sympathomimetic.	
	(3) Direct acting parasympathomimetic.	
	(4) Indirect acting parasympathomimetic	с.
54.	The drug latanoprost decreases the intra	ocular tension by:
	(1) α-Adrenergic agnostic activity	
	(2) Carbonic anhydrase inhibition	
	(3) β-Adrenergic blocking activity	
	(4) $PGF_{2\alpha}$ -agonistic activity	*
55.	Which of the following is not caused system?	by the activation of the sympathetic nervous
	(1) An increase in blood pressure.	
	(2) A decrease in heart rate.	
	(3) An increase in cardiac output.	
	(4) An increase Ca ₂ ⁺ release in cardio n	nyocytes.
56.	Following are the drugs that enhance texcept:	he action of sulphonyl urea in diabetic patient
	(1) Phenylbutazone	(2) Cimetidine
	(3) Phenytoin	(4) Chloramphenicol
57.	Identify the aromatase inhibitor:	
	(1) Raloxifene (2) Tibolone	(3) Gestodene (4) Exemestane
58.	Identify the short acting neuromuscular	blocking agent:
	(1) Mivacurium (2) Atracurium	(3) Pancuronium (4) Pipecuronium
59.	Identify the drug which abolishes the peripheral decarboxylation:	e therapeutic effect of levodopa by enhancing
	(1) Domperidone	(2) Pyridoxine
	(3) Reserpine	(4) Phenothaizine
CPG-	EE-2019/(Pharmaceutical Sciences)-(S	ET-X)/(D) P. T. O

53. Which of the following describes salbutamol, a β 2-adrenoceptor agonists ?

(1) Direct acting sympathomimetic.

60.	Identify the advantage of Nalmafene over other opioid antagonists:			S:			
	(1) Longer half-life						
	(2) Greater oral bioavailability						
	(3) No observed do	se-dependent liver to	oxici	ty			
	(4) All of the above	e					
						8	
61.		fat expressed from t					
	(1) Garcinia indica		(2)	Carthamus tinct	oriu	S	
	(3) Pongamia glabr	ra	(4)	Galeorhinus zyo	opetr	rus	
62.	Devil's dung is the s	synanym of					
UZ.	(1) Cannabis	(2) Asafoetida	(3)	Myrrh	(4)	Colocynth	
	(1) Camiaois	(2) Asaloelida	(3)	iviyiiii	(+)	Colocynui	
63.	The chief chemical	constituent present in	n An	ethum graveolen	s is	:	
	(1) D-Limonene	(2) p-Cymene	(3)	Coumarin	(4)	Carvone	
C A	Identification and ad			agult to Dometro	roma t	east 2	
64.		rug which give posit					
	(1) Squill	(2) Rhubarb	(3)	Bitter almond	(4)	Gliseng	
65.	Identify the crude d	rug that contains qui	nolii	ne alkaloid:			
	(1) Camptotheca	(2) Ergot	(3)	Rauwolfia	(4)	Vinca	
66.	Identify the plant di	rug useful in the trea	tmen	t of congestive h	eart	failure:	
	(1) Ergot	(2) Gokhru		Digitalis		Rauwolfia	
	, , ,		(-)	8	()		
67.	Identify the mucoly						
	(1) Pepsin	(2) Urokinase	(3)	Streptokinase	(4)	Muramidase	
68.	The ash value of se	nega is about	%.				
	(1) 4	(2) 8	(3)	12	(4)	16	
60	Marabalan agaista	of dried rine and fu	11x	natured fruits of		÷,	
69.		s of dried ripe and ful		Terminalia che			
	(1) Terminalia bele		` '				
	(3) Quercus infecto	oria	(4)	Picrasma excel	sa		

70.	Ayurvedic preparat	ion obtained from the	e ash	of drugs is know	wn as:	
	(1) Lehya	(2) Taila	(3)	Ksharas	(4) Lepa	
71.	The correlation coe analysis using in vi		quired	I to qualify a (SAR equation by Hansch	
	(1) 0.3	(2) 0.5	(3)	0.7	(4) 0.9	
72.	The steroidal hydrosubstitution a side of	ocarbon with methyl chain at C-17 is name	l grou ed:	ips at C-10 and	d C-13 but without carbon	
	(1) Androstane		(2)	Gonane		
	(3) Estrane		(4)	Pregnane		
73.	Identify the IUPAC	name of furosemide	e:			
		-furylethyl)amino]-5		moylbenzoic a	cid	
	(2) 4-Chloro-2-[(2	-furylmethyl)amino]	-5-sul	famoylbenzoic	acid	
	(3) 4-Chloro-3-[(2-furylmethyl)amino]-2-sulfamoylbenzoic acid					
		-furylmethyl)amino]				
74.	Identify the antima	larial drug belongs t	o the	8-amino quinol	ine nucleus :	
	(1) Chloroquine			Amodiaquine		
	(3) Mefloquine		(4)	Primaquine		
75.	Identify the highly	active erythromycin	:			
	(1) Erythromycin	A	(2)	Erythromycin	В	
	(3) Erythromycin	С	(4)	Erythromycin	D	
76.	Identify the synthe	etic method for the sy	nthes	is of quinoline	:	
	(1) Conrad-Limpa	ach-Knorr Synthesis	(2)	Skraup Synthe	esis	
	(3) Friedlander Sy	ynthesis	(4)	All of the abo	ve	
77.	The type of cyclor is:	addition process for e	even r	number of pi bo	onds under thermal condition	
	(1) Suprafacial		(2)	Antarafacial		
	(3) Disrotary		(4)	None of the a	bove	

D

78.	The process of synthesis of glucose from	noncarbohydrate sources is termed as:
	(1) Glycolysis	(2) Glcogenesis
	(3) Gluconeogenesis	(4) Glycogenolysis
79.	Citrullinemia, the urea cycle disorder is	due to the deficiency of the enzyme:
	(1) Carbomoyl phosphate synthetase	
	(3) Argininosuccinic acid synthase	(4) Ornithine transcarbomylase
80.	Identify the coenzyme derived from Vita	nmin B1:
	(1) Thiamine pyrophosphate	(2) Flavin mononucleotide
	(3) Coenzyme A	(4) Nicotinamide adenine dinucleotide
81.	Identify the size of capsule which holds	maximum drug content ?
	(1) 000 (2) 00	(3) 0 (4) 1
82.	Separation of tablet into two or more material is known as:	layers due to air-entrapment in the granular
	(1) Chipping	(2) Capping
	(3) Lamination	(4) Mottling
83.	Identify the properties of BCS class III	drug:
	(1) High solubility and high permeability	ty
	(2) High solubility and low permeability	y
	(3) Low solubility and high permeabili	У
	(4) Low solubility and Low permeability	ty
84.	Elimination rate constant (Kelim) is de	ined by the following parameter:
	(1) Rate of absorption	
	(2) Maximum concentration of substar	ce in plasma
	(3) Highest single dose	
	(4) Half life	
85.	Identify the preparation which should b	e applied with friction?
	(1) Liniment (2) Lotion	(3) Ointment (4) Cream

P. T. O.

				1
86.	Citric acid is used	in limit test for Iro	n:	
	(1) To make the n	nedium alkaline	(2) To prevent	the precipitation of iron
	(3) To trap hydrog	gen sulphide gas	(4) None of the	e above
87.	British anti-Lewis	ite is chemically:		
	(1) Dimercaptosu	ccinic acid	(2) Dimercapto	p-propane sulfonate
	(3) Dimercaprol		(4) Pencillamin	
88.	Potash alum obtained by adding a concentrated solution of potassium sulfate to a hot solution of an equimolecular proportion of:			
	(1) Aluminium ch	loride	(2) Aluminium	oxide
	(3) Zinc sulfate		(4) Aluminium	sulfate
89.	Identify the radiois	sotope used as med	ical radiotracer in P	ET scans:
	(1) Tritium (³ H)		(2) Beryllium-1	
	(3) Fluorine-18		(4) Cobalt-60	
90.	For one mole of ga	s Cp and Cv relation	ons are :	9
	(1) Cp = Cv + R	• 10 000 10 000000000000000000000000000	(2) Cp = Cv - I	2
	(3) $Cp = Cv$		$(4) Cp = Cv \times I$	
91.	Identify the HLB v	alue of O/W emuls	ifiers ·	
	(1) 4-6	(2) 8-18	(3) 13-15	(4) 7-9
92.	The granule densition 2.033. Compute the	ty, pg, of sodium e intraparticle porc	bicarbonate is 1.45	50 and the true density, ρ , is
	(1) 28.6%	(2) 35.4%	(3) 42.7%	(4) 16.3%
93.	Identify the particle	size of colloidal d	ispersion:	
	(1) Greater than 0.		(2) Less than 1	nm
	(3) 1 nm to 0.5 μm	i.	(4) All of the ab	oove
94.	Following are inclu	sion/occlusion con	npounds except:	
	(1) Channel lattice		(2) Layer type	•
	(3) Clathrates		(4) Polymer typ	e

95.	In the Gram staining of bacteria, iodine is used as:			
		(2) Counter stain		(4) Decoloizer
96.	Z-value is the incre (1) 90%	ase in temperature n (2) 70%	eeded to reduce the (3) 50%	D-value of an organism by: (4) 10%
97.	Following are the e	ndotoxin producing	bacteria of interest (2) Clostridum te	in immunology except :
	(3) Salmonella typ	hi	(4) Bordetella pe	
98.	Identify the strain used in the Rideal Walker Test:			
	(1) Vibrio cholera		(2) Clostridum to	etani
	(3) Salmonella typ	hi	(4) Bordetella pe	ertusis
99.	According to Medicinal and Toilet Preparations (Excise Duties) Act 1955, the "derivative of Opium" means:			
	adapt it for me	dicinal use		ne the processes necessary to
	designed to tra	m, that is, any produ ansform opium into emaining after opiur	an extract suitable	ed by any series of operations for smoking and the dross or
	(3) Morphine, that C ₁₇ H ₁₉ NO ₃ an	t is, the principal a d its salts and its der	lkaloid of opium livatives	having the chemical formula
	(4) All of the above	ve		
100.				at are not patentable:
	(1) An invention well established	which is frivolous ed natural laws	or which claims ar	nything obviously contrary to
	(2) A method of a	griculture or horticu	lture	
	(3) An invention	which in effect, is to	raditional knowled	ge or which is an aggregation nally known component or

components
(4) All of the above

Answer key of Question No.	A	В	С	D
1	В	В	D	C-
2	A	С	A	A /
3	С	В	В	B/
4	D	A	D	C-
5	C	C		D/
6	A	D	A D	C'
7	В	С		
8	C		В	A′ B′
9	D	A C	C	D_
10	D			
11 .	В	D	Α	C /
12	С	D	Α	B /
13		В	С	D/
14	В	С	В	D -
15	A	A	D	Α-
16	С	С	A	B /
17	D	D	В	C ′
	С	С	С	D-
18	A	В	D	Α/
19	С	D	С	C /
20	D	Α	Α	В ′
21	Α	С	В	В -
22	С	Α	Α	C -
23	В	В	С	A /
24	D	С	D	В -
25	А	D	С	C /
26	В	С	Α	B /
.7	С	Α	В	A /
.8	D	В	С	B /
.9	С	D	D	C_
0	Α	С	D	A -
1	· B	В	D	B /
2	С	D	В	C -
3	Α	D	С	B /
4	В	А	А	A -
5	С	В	С	C -
6	В	С	D	D_
7	А	D ·	С	C-
8	В	А	В	A-
9	С	С	D	A- C -
0	А	В	Α	D'
1	D	В	D	D/
2	А	С	С	
3	В	А	A	B - C - A ^
4	D	В	D	Δ ′
5	А	С	В	C -
5	D	В	С	C - D -
7	В	A	D	C -
3	С	В	A	B -
9	С	С	В	D ~

Answer key of Question No.	A	В	С	D
50	A	A	D	A/
51	В	A	В	D-
52	D	C	С	C -
53	D	В	A	A -
54	A	D	В	
55	В	A	С	D/
56	С	В		B - C -
57	D	С	В	
58	A		A	D-
59	C	D C	В	Α-
60				B -
61	В	A	A	D/
62	D C	D	С	Α /
		A	Α	B /
53 54	A	В	В	D-
64	D	D	С	B /
55	В	Α	D	Α-
56	С	D	С	C /
57	D	В	A	D-
58	Α	С	В	Α-
59	В	С	D	B -
70	D	А	С	c ′
71	С	D	А	D/
72	A	С	В	Α ′
73	В	Α	D	B <
74	С	D	В	D/
75	D	В	А	A/
76	С	С	С	D/
77	Α	D	D	B-
78	В	Α	А	c′
9	D	В	В	C-
30	С	D	С	Α′
31	А	В	В	A /
32	В	А	С	C /
33	D	С	В	B /
34	В	D	A	D/
15	А	С	С	A -
6	С	Α	D	B /
7	D	В	C	C/
8	А	С	A	D/
9	В	D	C	C /
0	С	D	D	A /
1	D	A	В	B /
2	В	В	D	16
3	С	D	D	A 6
4	A	В		
5	C		A	D /
6		Α	В	C-
7	D	С	С	Α-
	С	D	D	B -
8	В	Α	А	C -
9	D	В	С	D-
00	А	С	В	D /

Page 2 of 2

[12]

[13]

[14]

[15]

[16]

[17]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]

[18]