SET-"Z"

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

(CPG-EE-2018)

Subject : PHARMACEUTICAL SCIENCE

10297

Code

Time: 1½ Hours

Total Questions: 100

____ (in words)

Roll No. _____ (in figure) ____ Name: _____ Date of Birth: ____

Father's Name: _____ Mother's Name:____

Date of Examination:

(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.
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- 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 book-let itself. Answers MUST NOT be ticked in the Question book-let.
- Use only Black or Blue BALL POINT PEN of good quality in the OMR Answer-Sheet.
- 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 discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

Question No.	Ques	stion	ıs		
1.	Shrinkage of gel by extrusion of liquid is called:				
MEN CALADOST	(1) Syneresis	(2)	Dilatancy		
	(3) Plasticity	(4)	Diaphoresis		
2.	List of diseases that a drug should r	not c	laim to cure is given in Schedule :		
	(1) J	(2)	L		
	(3) C	(4)	H		
3.	Cell wall of gram negative bacteria p	osse	sses the following characteristics:		
	(1) Lacks lipids	(2)	Lacks techoic acid		
	(3) Lacks carbohydrates	(4)	Lacks proteins		
4.	Source of agar is:				
	(1) Gelidium melesi	(2)	Gelidium amansii		
	(3) Gelidium laminari	(4)	Gelidium topicana		
5.	Carr's index is used to determine:				
	(1) Powder flow	(2)	Particle size		
	(3) Elasticity	(4)	Polymorphism		
6.	Sink condition is necessary in the pr	oces	s of absorption because :		
	(1) It increases the disintegration (
	(2) It increases the dissolution procentration gradient	cess	of the drug by maintaining the		
	(3) It increases the process of absorbing across the cell membrane	orpti	on by facilitating the transfer of		
	(4) None of the above				

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Question No.	Questions
7.	The properties of solutions containing surface active agents change sharply over a narrow concentration range and is called as: (1) Critical Micelle concentration (2) Ionic concentration (3) Hydrogen ion concentration (4) Surface tension
8.	Schedule O is related to: (1) Standards for Disinfected fluids (2) Standards for ophthalmic preparations (3) Requirement of factory premises (4) Standards for cosmetics
9.	The most important barrier to drug transport when applied topically to the skin is: (1) Dermis (2) Stratum corneum (3) Sweat glands (4) Hair follicles
10.	The toughness of a material can be reduced by: (1) heating the material (2) treating the material with gas (3) treating the material with liquid nitrogen (4) none of these

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Question No.	Questions
11.	How many grams of a drug are required to prepare 500 ml of a 1:2500 solution?
	(1) 1.25 (2) 0.4
	(3) 0.02 (4) 0.2
12.	The value that shows the time to kill 90% of microorganisms present in a food sample is called:
	(1) Z value (2) M value
	(3) D value (4) E value
13.	Cam tracks are used in tablets for: (1) Feeding the granules (2) Fixing the shape
	(3) Compressing the granules(4) Guiding the movement of punches
14.	Which size of needle has the largest diameter?
The second secon	(1) 18 gauge (2) 16 gauge
	(3) 20 gauge (4) 14 gauge
15.	A rolling cabinet at a hospital which is used to dispense emergency medication is commonly called a:
	(1) EMS Cart (2) Stash Cart
	(3) Crash Cart (4) Blue Cart

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Question No.	Questions
16.	If the dose of a formulation is two teaspoonfuls, how many doses will be
	in 300 ml of liquid preparation?
0	(1) 10 (2) 30
	(3) 20 (4) 3000
17.	Energy required for size reduction is directly proportional to new surface
	area produced is the statement of:
	(1) Kicks Theory (2) Martin Theory
	(3) Rittingers Theory (4) Fitz theory
18.	In nail polish, the polymer used as a film-former is:
	(1) Cellulose acetate phthalate
	(2) Hydroxypropyl methyl cellulose
	(3) Nitrocellulose
	(4) Polylactic acid
19.	Auto-immunity disease are caused by:
	(1) Sequestrated antigen
	(2) Cross reaction in circulating antigen
	(3) Genetic abnormality
	(4) All of these
20.	Mean Residence Time (MRT) is:
	(1) AUMC/Cp (2) AUMC/AUC
	(3) AUC/AUMC (4) 1/AUMC

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Question No.	Que	estion	15		
21.	Softening point of Lipsticks can be determined by:				
	(1) Breaking test method	(2)	Ring and ball method		
	(3) Strain test	(4)	Peroxide value test		
22.	Which one is the suitable method	for po	tent drug mixing?		
	(1) Trituration	(2)	Tumbling		
	(3) Spatulation	(4)	Geometric dilution		
23.	Staphylococcus aureus is used for the IP assay of:				
**	(1) Bleomycin	(2)	Carbenicillin		
	(3) Kanamycin	(4)	Doxycycline		
24.	In gels the term 'magma' is referre	ed to a			
	(1) Single phase gel	(2)	Two phase gel		
to . 20	(3) Jellies	(4)	Gels having low viscosity		
25.	Licenses which are made in Form	24-A	and issued in Form 25-A are :		
e trajectivaje.	(1) Repackaging licenses	(2)	New drug license		
	(3) Loan license	(4)	None of above		
26.	What are known as balsams?	enggelautdoch obgelaukunds übelgela natha			
3-	(1) Resins dissolved in volatile o	il			
	(2) A mixture of volatile oils with sesquiterpenes				
	(3) Resins dissolved in water				
	(4) Polysaccharide mixed with vo	latile	oil		

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Question No.	Questions		
27.	Saponin containing drugs are used as:		
	(1) Laxative (2) Bitter tonic		
	(3) Expectorant (4) Emetic		
28.	The volatile oils consist of a mixture of		
	(1) Oxygen free mono- and diterpenes		
	(2) Aliphatic and cyclic mono - and triterpenes		
	(3) Aliphatic and cyclic mono - and sesquiterpenes and phenyl-propane derivatives		
	(4) Highly oxygenated mono- and diterpenes		
29.	The iridoids are :		
Constitution of the Consti	(1) Constituents of volatile oils		
TO THE WAY TO THE TO TH	(2) Starting unit of the tannin biogenesis		
	(3) Precursor of biosynthesis of saponins		
	(4) Precursors of the biogenesis of certain alkaloids		
30.	Choose the right test for identification of anthraquinones:		
	(1) Marquis test (2) Froehde test		
LC (MCC) Color Col	(3) Liebermann-Burchard test (4) Bornträeger test		
31.	The common base skeleton of physiologically active ergoline alkaloids is:		
	(1) Isolysergic acid (2) Clavorubine		
	(3) Lysergic acid (4) 2-phenylbenzopyrane		

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Question No.	Questions
32.	Which of the following vegetable drugs contains ajoene? (1) Valerianae radix (2) Allii sativi bulbus (3) Agrimoniae herba (4) Echinaceae radix
33.	(3) Agrimoniae herba (4) Echinaceae radix Ginseng saponins are of theSeries: (1) Lupine (2) Ursane (3) Dammarane (4) Abietane
34.	Choose the anthraquinone containing drug: (1) Betulae folium (2) Graminis rhizome (3) Rhei rhizome (4) Herniariae herba
35.	 Acid value is defined as: (1) Number of milligram of potassium hydroxide required to neutralize one gram of fat or oil (2) Number of gram of potassium hydroxide required to neutralize one gram of fat or oil (3) Number of Kilogram of potassium hydroxide required to neutralize one gram of fat or oil (4) Number of ml of potassium hydroxide (5N) required to neutralize one gram of fat or oil
36.	Protoalkaloids are also called as: (1) Amino alkaloid (2) Pseudo alkaloid (3) True alkaloid (4) Extra alkaloid

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uestion No.	Questions
	The ring structure present in strychnine is: (1) Indole (2) Pyrrole (3) Pyridine (4) Piperidine
38.	What kind of type of compounds can be detected by Mayer's reagent? (1) Sesterterpenes (2) Starches (3) Alkaloids (4) Procyanidines
39.	The senna-emodin aglycones and senna-emodin glycosides are derivatives: (1) Tetraterpenes (2) Monoterpenes with labdane structure (3) Pseudoguaianolides (4) Anthraquinones
40	Dragendorffs reagent is composed of: (1) Picric acid (2) Potassium bismuth iodide (3) Alpha naphthol (4) Potassium mercuric iodide
4	Chenopodium oil is used for: (1) Hook worm disease (2) Diarrhoea (3) Cough (4) Malaria

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Question No.	alle de la constante de la con		Question	ıs	
42.	Que	ercetin is a:			
	(1)	Flavone glycoside	(2)	Flavanone glycoside	
	(3)	Flavonol glycoside	(4)	None of these	
43.	Atro	opine can be identified by:			
	(1)	Gerrard reaction	(2)	Vitali Morin reaction	
	(3)	Van- Urk's test	(4)	All of these	
44.	Cap	e aloes are obtained from			
	(1)	Aloe ferox	(2)	Aloe perryi	
	(3)	Aloe vera	(4)	Aloe barbadensis	
45.	Quinoline alkaloids are derived from:				
	(1)	L - tyrosine	(2)	L - tryptophan	
	(3)	L - lysine	(4)	None of these	
46.		Isoquinoline ring syste	m is pres	sent in which of the followin	
	(1)	Nicotine	(2)	Papaverine	
	(3)	Pilocarpine	(4)	Pelleterine	
47.	Agent obtained from rind of citrus fruits is:				
	(1)	Acacia	(2)	Agar	
	(3)	Starch	(4)	Pectin	

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Question No.	Que	estio	
48.	Acrolein test is given by:		
	(1) Cholesterol	(2)	Glycerol
	(3) Sphingol	(4)	Glycosides
49.	Rutin is:	SOMEON AND CONTRACTOR OF THE PARTY OF T	
	(1) Triterpene glycosides	(2)	Lactone glycoside
	(3) Steroidal glycoside	(4)	Flavonoid glycoside
50.	Marmelosin is active constituents	of:	The second secon
	(1) Bael	(2)	Aloe
	(3) Tragacanth	(4)	Rhubarb
51.	Which of the following is a prodrug	Bodischildurchile din contract 7	THE RESIDENCE AND ADDRESS OF THE SHOOT OF THE STATE OF TH
	(1) Hydralazine	(2)	Clonidine
	(3) Captopril	(4)	Enalapril
52.	Atropine is contraindicated in:		AND AND REPORT OF THE PROPERTY
	(1) Pulmonary embolism	(2)	Digitalis toxicity
	(3) Iridocyclitis	(4)	Raised intraocular tension
53.	Noradrenaline is administered by:	META DES SERVICIOS ACCUSADOS ACCUSADOS AS	THE CHAIN THE METER METER AND THE ALL OF THE THE AND
	(1) Subcutaneous injection	(2)	Intramuscular injection
CONTRACTOR OF THE CONTRACTOR O	(3) Slow intravenous infusion	(4)	All of the above

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Question No.	Questions
54.	The following 5-HT receptor is not a G protein coupled receptor:
	(1) 5-HT1 (2) 5-HT2
	(3) 5-HT3 (4) 5-HT4
55.	The following is a selective 5-HT4 agonist:
	(1) Buspirone (2) Sumatriptan
	(3) Clozapine (4) Cisapride
56.	Choose the correct statement about sumatriptan:
	(1) It activates serotonergic neurones in raphe nuclei
	(2) It tends to suppress both pain and vomiting in migraine
	(3) It does not carry risk of precipitating coronary vasospasm
	(4) It is combined with ergotamine for treatment of severe migrain
57.	Which of the following is an irreversible inhibitor of cyclo-oxygenase:
	(1) Aspirin (2) Phenylbutazone
	(3) Indomethacin (4) Piroxicam
58.	Anti-inflammatory dose of aspiring iven to diabetics is prone to cause:
	(1) Hyperglycaemia (2) Hypoglycaemia
	(3) Ketoacidosis (4) Alkalosis

CPG-EE-2018 (Pharmaceutical Sciences) Code-A (11)

uestion No.	Questions			
59.	The NSAIDs aggravate the following diseases except:			
	(1) Hypertension (2) Congestive heart failure			
PERSONAL CONTRACTOR CONTRACTOR AND CONTRACTOR	(3) Peptic ulcer (4) Chronic gout			
60.	Hyperuricaemia is produced by the following drugs except:			
	(1) Ethambutol (2) Pyrazinamide			
	(3) Hydrochlorothiazide (4) Sulfinpyrazone			
61.	Codeine is used clinically as:			
	(1) Analgesic (2) Antitussive			
	(3) Antidiarrhoeal (4) All of the above			
62.	The most prominent and dose related side effect of salbutamol is:			
	(1) Rise in blood pressure			
	(2) Muscle tremor			
	(3) Hyperglycaemia			
	(4) Central nervous system stimulation			
63.	Sodium cromoglycate has a role in the treatment of the following condition			
	except:			
	(1) Chronic bronchial asthma			
	2) Chronic urticaria			
(3) Chronic allergic rhinitis			
(4) Chronic allergic conjunctivitis			

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CPG-EE-2018 (Pharmaceutical Science (8)

Question No.	Questions			
64.	Hydrocortisone exerts the following actions:			
	(1) Increases both K ⁺ and Ca ²⁺ excretion			
	(2) Decreases both K ⁺ and Ca ²⁺ excretion			
	(3) Decreases K ⁺ but increases Ca ²⁺ excretion			
	(4) Increases K ⁺ but decreases Ca ²⁺ excretion			
65.	Which hormone acts through a cytoplasmic receptor:			
	(1) Calcitriol (2) Prolactin			
	(3) Vasopressin (4) None of the above			
66.	Circulating testosterone levels in men are elevated during treatment with:			
	(1) Danazol (2) Finasteride			
	(3) Ketoconazole (4) Flutamide			
67.	Estrogen therapy can worsen the following associated conditions			
	except:			
	(1) Migraine (2) Cholelithiasis			
	(3) Acne vulgaris (4) Endometriosis			
68.	A macrolide antibiotic used as powerful immunosuppressive agents is:			
	(1) Clarithromycin (2) Azithromycin			
	(3) Erythromycin (4) Tacrolimus			

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Question No.	Questions		
69.	Select the correct statement about benzodiazepines (BZDs):		
	(1) All BZDs facilitate GABA mediated CI influx into neurons		
	(2) Different BZDs exert the same degrees of hypnotic, anxiolytic and anticonvulsant actions		
***	(3) The BZD receptor is homogeneous at all neuronal sites		
	(4) The muscle relaxant action of BZDs is not blocked by flumazenil		
70.	Gray baby syndrome is the side effect of:		
	(1) Chloramphenicol (2) Penicillin		
Bernard Annual Control of the Contro	(3) Paracetamol (4) Ibuprofen		
71.	Digoxin is contraindicated in the patients suffering from :		
	(1) Angina pectoris (2) Ventricular tachycardia		
	(3) Hypertension (4) Complete heart block		
72.	The cardiac response to verapamil and nifedipine in human subjects is:		
	(1) Verapamil causes tachycardia while nifedipine causes bradycardia		
	(2) Both cause bradycardia		
April 1	(3) Verapamil causes bradycardia while nifedipine causes tachycardia		
SECTION OF THE PROPERTY OF T	(4) Both cause tachycardia		
73.	A patient of iron deficiency anaemia has been put on iron therapy. What		
	should be the rate of rise in haemoglobin level of blood so that		
	response is considered adequate?		
	(1) 0.05 - 0.1g% per week (2) 0.1 - 0.2 g% per week		
	(3) 0.5 - 1.0g% per week (4) None of the above		

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Question No.	Questions			
74.	Hydroxyethyl starch is a:			
	(1) Plasma expander (2) Haemostatic			
,	(3) Heparin substitute (4) Bile acid sequestrant			
75.	Ethosuximide is:			
	(1) Muscle relaxant (2) Anticonvulsant			
	(3) Antidepressant (4) Hallucinogen			
76.	Which is the chemical structure of piroxicam:			
	(1) OH CONH			
	(2) OH CONH			
	(3) OH COONH			
	(4) COONH—CN			
77.	In a ¹³ C NMR spectrum :			
	(1) a triplet is evidence of a CH ₃ group presence			
	(2) the signals are between 0 and 10 ppm			
	(3) every C atom generates a signal			
	(4) all of the above			

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Question No.	Questions		
78.	Strongest reducing agent in the electrochemical series is:		
	(1) Li	(2)	F
	(3) H ₂	(4)	All of the above
79.	Freezing point depression is measure	ed b	y:
	(1) Beckmann's apparatus	(2)	Land's Berger's apparatus
	(3) Antifreeze apparatus	(4)	None of the above
80.	The head overlap of p-orbitals of two	ato	ms give rise to bond called :
	(1) sigma bond	(2)	pi bond
	(3) ionic bond	(4)	covalent bond
81.	The polarity of a molecule is express	sed	by:
	(1) bond strength	(2)	dipole moment
	(3) bond length	(4)	shape
82.	Standard used for NMR is:		
	(1) Trimethyl Silane	(2)	Tetramethyl Silane
	(3) Tetraethyl Silane	(4)	Triethyl Silane
83.	. A conductance cell is calibrated by using:		
STATE CONTRACT AND ADDRESS OF THE STATE	(1) NaCl	(2)	$\mathrm{Hg_2Cl}_2$
	(3) KCl	(4)	$\mathrm{Hg_2Cl_2}$ $\mathrm{Na_2SO_4}$

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Question No.	Questions
84.	Xenon arc lamp is the source of light in:
	(1) Spectroflourimeter (2) Flame Photometer
	(3) Infrared spectroscopy (4) Colorimetry
85.	Luminescence term applied to:
	(1) Absorbed radiation
	(2) Re-emission of absorbed radiation
	(3) Excited radiation
	(4) Transmitted radiation
86.	Which one of the following indicator is used in complexometric titration:
	(1) Phenolphthalein (2) Methyl orange
	(3) Murexide (4) Methyl Red
87.	The brief duration of action of an ultra short acting barbiturate is the result of:
	(1) slow rate of metabolism in the liver
	(2) high degree of binding to plasma proteins
	(3) low lipid solubility resulting in a minimum concentration in the brain
	(4) rapid rate of redistribution from the brain owing to its high
	liposolubility
88.	Which of the following drug is contraindicated in patients taking nitrates:
	(1) Phenytoin (2) Sildenafil
	(3) Montelukast (4) Clomipramine

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Question No.					
89.	Which one of the following drugs is contraindicated in dengue fever:				
	(1) Aspirin	(2) Paracetamol			
	(3) Both	(4) None			
90.	Dilantin is used as:				
	(1) Skeletal muscle relaxant	(2) Analgesic			
	(3) Anti epileptic	(4) Antidepressant			
91.	Lidocaine is synthesized from:				
	(1) 2,6 Xylidene	(2) 2,4 Xylidene			
	(3) o-Toluidine	(4) p-Toluidine			
92.	One of the following is not an aldo	lose:			
	(1) Glucose	(2) Galactose			
	(3) Mannose	(4) Fructose			
93.	The backbone of nucleic acid stru	ucture is constructed by :			
	(1) Peptide bond	(2) Glycosidic bond			
	(3) Phosphodiester bridges	(4) All of them			
94.	The synthesis of Urea occurs in:				
	(1) Kidney	(2) Liver			
	(3) Muscle	(4) Brain			
	7 9019 (Dhammanatin I G :				

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Question No.	Questions
95.	Ozonolysis of an organic compound gives formaldehyde as one of the products. This confirms the presence of: (1) two ethylenic double bonds (2) a vinyl group (3) an isopropyl group (4) an acetylenic triple bond
96.	Which drug is not having 1-3-diazoles: (1) Clotrimazole (2) Econazole (3) Sulconazole (4) Fluconazole
97.	Calcium levulinate is used as calcium replenisher; chemically it is: (1) calcium-2-oxo pentanoate dehydrate (2) calcium-3-oxo pentanoate dehydrate (3) calcium-4-oxo pentanoate dehydrate (4) calcium-5-oxo pentanoate dehydrate
98.	Which amino acid can form disulphide bonds? (1) Glycine (2) Proline (3) Glutamate (4) Cysteine
99.	The chemical shift value is: (1) Proportional to total number of protons (2) Not proportional to field strength (3) Ratio of number of protons in each group (4) Proportional to field strength

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nestion	Questions
uestion No.	Which of the following strategy will increase the polarity and water solubility
100.	
	of a drug? (1) Removal of polar functional groups
	11 1
	(2) Addition of extra alkyl groups(3) Replacing an aromatic ring with a nitrogen containing heterocyclic
	ring (4) Replacing an alkyl group with a larger alkyl group
	(4) Replacing an alkyl group will as
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(CPG-EE-2018)

Subjec	t: PHARMACE		
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Father's Name :	M	other's Name :	

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Question No.	Questions		
1.	Chenopodium oil is used for:		
	(1) Hook worm disease	(2)	Diarrhoea
	(3) Cough	(4)	Malaria
2.	Quercetin is a:		
	(1) Flavone glycoside	(2)	Flavanone glycoside
	(3) Flavonol glycoside	(4)	None of these
3.	Atropine can be identified by:		
	(1) Gerrard reaction	(2)	Vitali Morin reaction
	(3) Van- Urk's test	(4)	All of these
4.	Cape aloes are obtained from:		
	(1) Aloe ferox	(2)	Aloe perryi
	(3) Aloe vera	(4)	Aloe barbadensis
5.	Quinoline alkaloids are derived from	n :	
	(1) L-tyrosine	(2)	L - tryptophan
	(3) L-lysine	(4)	None of these
6.	The Isoquinoline ring system is alkaloids?	pres	sent in which of the following
	(1) Nicotine	(2)	Papaverine
	(3) Pilocarpine	(4)	Pelleterine

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Question No.	Questions		
7.	Agent obtained from rind of citrus fruits is:		
	(1) Acacia	(2)	Agar
	(3) Starch	(4)	Pectin
8.	Acrolein test is given by:	амыштана бай от нь не	
	(1) Cholesterol	(2)	Glycerol
	(3) Sphingol	(4)	Glycosides
9.	Rutin is:		
	(1) Triterpene glycosides	(2)	Lactone glycoside
	(3) Steroidal glycoside	(4)	Flavonoid glycoside
10.	Marmelosin is active constituents	of:	THE CONTRACT CONTRACT OF THE CONTRACT C
	(1) Bael	(2)	Aloe
	(3) Tragacanth	(4)	Rhubarb
11.	Digoxin is contraindicated in the	patien	ts suffering from :
	(1) Angina pectoris	(2)	Ventricular tachycardia
	(3) Hypertension	(4)	Complete heart block
12.	The cardiac response to verapamil and nifedipine in human subjects is:		
	(1) Verapamil causes tachycard	ia whil	e nifedipine causes bradycardia
EX COMMUNICACION DE LA CALLANCE CALLANC	(2) Both cause bradycardia		
	(3) Verapamil causes bradycard	ia whi	le nifedipine causes tachycardia
	(4) Both cause tachycardia		

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Question No.	n Questions		
13.	A patient of iron deficiency anaemia has been put on iron therapy. What should be the rate of rise in haemoglobin level of blood so that response is considered adequate?		
	(1) 0.05 - 0.1g% per week (2) 0.1 - 0.2 g% per week (3) 0.5 - 1.0g% per week (4) None of the above		
14.	Hydroxyethyl starch is a: (1) Plasma expander (2) Haemostatic (3) Heparin substitute (4) Bile acid sequestrant		
15.	(3) Heparin substitute (4) Bile acid sequestrant Ethosuximide is: (1) Muscle relaxant (2) Anticonvulsant		
	(3) Antidepressant (4) Hallucinogen		
16.	Which is the chemical structure of piroxicam: (1) (2) (3) (4) Which is the chemical structure of piroxicam: (1) (2) (3) (4) (5) (6) (7) (8) (9) (9) (1) (1) (1) (1) (2) (2) (3) (4) (4) (5) (6) (6) (7) (7) (8) (9) (1) (1) (1) (2) (3) (4) (5) (6) (6) (7) (7) (8) (9) (9) (1) (1) (1) (2) (2) (3) (4) (4)		

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Question No.		Que	stion	as
17.	In a ¹³ C NMR spectrum:			
	(1) a triplet is evidence of a CH ₃ group presence			presence
	(2)	the signals are between 0 and	10 pp	m
(3) every C atom generates a sign			al	
	(4)	all of the above		
18.	Stro	ongest reducing agent in the ele	ctroc	hemical series is :
	(1)	Li	(2)	F
	(3)	H_2	(4)	All of the above
19.	Free	ezing point depression is measu	red b	y:
	(1)	Beckmann's apparatus	(2)	Land's Berger's apparatus
	(3)	Antifreeze apparatus	(4)	None of the above
20.	The head overlap of p-orbitals of two atoms give rise to bond called:			ms give rise to bond called :
	(1)	sigma bond	(2)	pi bond
	(3)	ionic bond	(4)	covalent bond
21.	Lido	caine is synthesized from:		
	(1)	2,6 Xylidene	(2)	2,4 Xylidene
	(3)	o-Toluidine	(4)	p-Toluidine
22.	One	of the following is not an aldos	e:	
	(1)	Glucose	(2)	Galactose
	(3)	Mannose	(4)	Fructose

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Question No.	Questions			
23.	The backbone of nucleic acid structure is constructed by:			
	(1) Peptide bond (2) Glycosidic bond			
	(3) Phosphodiester bridges (4) All of them			
24.	The synthesis of Urea occurs in:			
	(1) Kidney (2) Liver			
	(3) Muscle (4) Brain			
25.	Ozonolysis of an organic compound gives formaldehyde as one of the products. This confirms the presence of:			
	(1) two ethylenic double bonds (2) a vinyl group			
	(3) an isopropyl group (4) an acetylenic triple bond			
26.	Which drug is not having 1-3-diazoles:			
	(1) Clotrimazole (2) Econazole			
	(3) Sulconazole (4) Fluconazole			
27.	Calcium levulinate is used as calcium replenisher; chemically it is:			
	(1) calcium-2-oxo pentanoate dehydrate			
	(2) calcium-3-oxo pentanoate dehydrate			
	(3) calcium-4-oxo pentanoate dehydrate			
	(4) calcium-5-oxo pentanoate dehydrate			
28.	Which amino acid can form disulphide bonds?			
	(1) Glycine (2) Proline			
	(3) Glutamate (4) Cysteine			

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Question No.	Questions		
29.	The chemical shift value is:		
	(1) Proportional to total number of protons		
	(2) Not proportional to field strength		
	(3) Ratio of number of protons in each group		
	(4) Proportional to field strength		
30.	Which of the following strategy will increase the polarity and water solubility		
TO STATE OF THE ST	of a drug?		
	(1) Removal of polar functional groups		
The control of the co	(2) Addition of extra alkyl groups		
ATTACA CONTRACTOR AND A STATE OF THE STATE O	(3) Replacing an aromatic ring with a nitrogen containing heterocyclic		
	ring		
	(4) Replacing an alkyl group with a larger alkyl group		
31.	Shrinkage of gel by extrusion of liquid is called:		
	(1) Syneresis (2) Dilatancy		
	(3) Plasticity (4) Diaphoresis		
32.	List of diseases that a drug should not claim to cure is given in Schedule:		
	(1) J (2) L		
	(3) C (4) H		
33.	Cell wall of gram negative bacteria possesses the following characteristics:		
	(1) Lacks lipids (2) Lacks techoic acid		
CLEER MINISTER AND ADDRESS AND	(3) Lacks carbohydrates (4) Lacks proteins		

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Question No.	Questions				
34.	Source of agar is:				
	(1) Gelidium melesi (2) Gelidium amansii				
	(3) Gelidium laminari (4) Gelidium topicana				
35.	Carr's index is used to determine:				
	(1) Powder flow (2) Particle size				
	(3) Elasticity (4) Polymorphism				
36.	Sink condition is necessary in the process of absorption because:				
	(1) It increases the disintegration of the dosage form				
	(2) It increases the dissolution process of the drug by maintaining the				
	concentration gradient				
	(3) It increases the process of absorption by facilitating the transfer of				
	drug across the cell membrane				
	(4) None of the above				
37.	The properties of solutions containing surface active agents change sharply				
	over a narrow concentration range and is called as:				
	(1) Critical Micelle concentration				
	(2) Ionic concentration				
The control of the co	(3) Hydrogen ion concentration				
	(4) Surface tension				

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Question No.	Questions		
38.	Schedule O is related to:		
	(1) Standards for Disinfected fluids		
	(2) Standards for ophthalmic preparations		
	(3) Requirement of factory premises		
	(4) Standards for cosmetics		
39.	The most important barrier to drug transport when applied topically to		
	the skin is:		
	(1) Dermis (2) Stratum corneum		
	(3) Sweat glands (4) Hair follicles		
40.	The toughness of a material can be reduced by:		
	(1) heating the material		
	(2) treating the material with gas		
	(3) treating the material with liquid nitrogen		
	(4) none of these		
41.	Which of the following is a prodrug:		
	(1) Hydralazine (2) Clonidine		
	(3) Captopril (4) Enalapril		
42.	Atropine is contraindicated in:		
	(1) Pulmonary embolism (2) Digitalis toxicity		
	(3) Iridocyclitis (4) Raised intraocular tension		

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Question No.	Questions		
43.	Noradrenaline is administered by: (1) Subcutaneous injection (2) Intramuscular injection (3) Slow intravenous infusion (4) All of the above		
44.	The following 5-HT receptor is not a G protein coupled receptor: (1) 5-HT1 (2) 5-HT2 (3) 5-HT3 (4) 5-HT4		
45.	The following is a selective 5-HT4 agonist: (1) Buspirone (2) Sumatriptan (3) Clozapine (4) Cisapride		
46.	Choose the correct statement about sumatriptan: (1) It activates serotonergic neurones in raphe nuclei (2) It tends to suppress both pain and vomiting in migraine (3) It does not carry risk of precipitating coronary vasospasm (4) It is combined with ergotamine for treatment of severe migrain		
47.	Which of the following is an irreversible inhibitor of cyclo-oxygenase: (1) Aspirin (2) Phenylbutazone (3) Indomethacin (4) Piroxicam		

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Question No.	Questions			
48.	Anti-inflammatory dose of aspirin given	to diabetics is prone to cause:		
	(1) Hyperglycaemia (2)	Hypoglycaemia		
	(3) Ketoacidosis (4)	Alkalosis		
49.	The NSAIDs aggravate the following diseases except:			
	(1) Hypertension (2)	Congestive heart failure		
	(3) Peptic ulcer (4)	Chronic gout		
50.	Hyperuricaemia is produced by the following drugs except:			
	(1) Ethambutol (2)	Pyrazinamide		
	(3) Hydrochlorothiazide (4)	Sulfinpyrazone		
51.	Codeine is used clinically as:			
	(1) Analgesic (2)	Antitussive		
	(3) Antidiarrhoeal (4)	All of the above		
52.	The most prominent and dose related side effect of salbutamol is:			
	(1) Rise in blood pressure			
	(2) Muscle tremor			
	(3) Hyperglycaemia			
	(4) Central nervous system stimulation	n		
Million Strandings ("Malit Strandings Carper, Sound Screen, Strandings Carper, Strandings	F 9018 (Dhomas and al Cai			

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Question No.	Questions		
53.	Sodium cromoglycate has a role in the treatment of the following conditions		
	except:		
	(1) Chronic bronchial asthma		
	(2) Chronic urticaria		
	(3) Chronic allergic rhinitis		
	(4) Chronic allergic conjunctivitis		
54.	Hydrocortisone exerts the following actions:		
	(1) Increases both K ⁺ and Ca ²⁺ excretion		
	(2) Decreases both K ⁺ and Ca ²⁺ excretion		
	(3) Decreases K ⁺ but increases Ca ²⁺ excretion		
	(4) Increases K ⁺ but decreases Ca ²⁺ excretion		
55.	Which hormone acts through a cytoplasmic receptor:		
	(1) Calcitriol (2) Prolactin		
	(3) Vasopressin (4) None of the above		
56.	Circulating testosterone levels in men are elevated during treatment		
	with:		
	(1) Danazol (2) Finasteride		
	(3) Ketoconazole (4) Flutamide		

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stion	Questions		
57.	Estrogen therapy can worsen the following associated conditions		
	except: (1) Migraine (2) Cholelithiasis (3) Acne vulgaris (4) Endometriosis		
58.	A macrolide antibiotic used as powerful immunosuppressive agents is: (1) Clarithromycin (2) Azithromycin (3) Erythromycin (4) Tacrolimus		
59.	Select the correct statement about benzodiazepines (BZDs): (1) All BZDs facilitate GABA mediated CI influx into neurons (2) Different BZDs exert the same degrees of hypnotic, anxiolytic a anticonvulsant actions (3) The BZD receptor is homogeneous at all neuronal sites (4) The muscle relaxant action of BZDs is not blocked by flumazenil		
60	(1) Chloramphenicol (2) Penicillin (3) Paracetamol (4) Ibuprofen		
6	Softening point of Lipsticks can be determined by: (1) Breaking test method (2) Ring and ball method (3) Strain test (4) Peroxide value test (5) CRE 2018 (Pharmaceutical Sciences) Code-B		

CPG-EE-2018 (Pharmaceutical Sciences) Code-B (12)

uestion No.	Questions				
62.	Which one is the suitable method for potent drug mixing?				
	(1) Trituration	(2)	Tumbling		
	(3) Spatulation	(4)	Geometric dilution		
63.	Staphylococcus aureus is used for th	Staphylococcus aureus is used for the IP assay of:			
	(1) Bleomycin	(2)	Carbenicillin		
	(3) Kanamycin	(4)	Doxycycline		
64.	In gels the term 'magma' is referred to a:				
	(1) Single phase gel	(2)	Two phase gel		
	(3) Jellies	(4)	Gels having low viscosity		
65.	Licenses which are made in Form 24-A and issued in Form 25-A are:				
	(1) Repackaging licenses	(2)	New drug license		
	(3) Loan license	(4)	None of above		
66.	What are known as balsams?		(.		
	(1) Resins dissolved in volatile oil				
	(2) A mixture of volatile oils with sesquiterpenes				
	(3) Resins dissolved in water				
	(4) Polysaccharide mixed with volatile oil				
67.	Saponin containing drugs are used as:				
	(1) Laxative	(2)	Bitter tonic		
	(3) Expectorant	(4)	Emetic		

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Question No.	Questions			
68.	The volatile oils consist of a mixture of			
	(1) Oxygen free mono- and diterpenes			
	(2) Aliphatic and cyclic mono - and triterpenes			
	(3) Aliphatic and cyclic mono - and sesquiterpenes and phenyl-propane derivatives			
	(4) Highly oxygenated mono- and diterpenes			
69.	The iridoids are:			
	(1) Constituents of volatile oils			
	(2) Starting unit of the tannin biogenesis			
	(3) Precursor of biosynthesis of saponins			
	(4) Precursors of the biogenesis of certain alkaloids			
70.	Choose the right test for identification of anthraquinones:			
	(1) Marquis test (2) Froehde test			
	(3) Liebermann-Burchard test (4) Bornträeger test			
71.	How many grams of a drug are required to prepare 500 ml of a 1:2500 solution?			
	(1) 1.25 (2) 0.4			
	(3) 0.02 (4) 0.2			
72.	The value that shows the time to kill 90% of microorganisms present in a			
	food sample is called:			
	(1) Z value (2) M value			
	(3) D value (4) E value			

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Question No.	Questions
73.	Cam tracks are used in tablets for:
	(1) Feeding the granules
	(2) Fixing the shape
	(3) Compressing the granules
	(4) Guiding the movement of punches
74.	Which size of needle has the largest diameter?
	(1) 18 gauge (2) 16 gauge
	(3) 20 gauge (4) 14 gauge
75.	A rolling cabinet at a hospital which is used to dispense emergency
	medication is commonly called a:
	(1) EMS Cart (2) Stash Cart
	(3) Crash Cart (4) Blue Cart
76.	If the dose of a formulation is two teaspoonfuls, how many doses will be
	in 300 ml of liquid preparation?
	(1) 10 (2) 30
	(3) 20 (4) 3000
77.	Energy required for size reduction is directly proportional to new surface
	area produced is the statement of:
	(1) Kicks Theory (2) Martin Theory
	(3) Rittingers Theory (4) Fitz theory

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	In n (1) (2)	ail polish, the polymer us	sed as a film	0	
		Cellulose acetate phthal	In nail polish, the polymer used as a film-former is:		
	(2)		ate		
		Hydroxypropyl methyl ce	ellulose		
	(3)	Nitrocellulose			
	(4)	Polylactic acid			
79.	Aut	o-immunity disease are ca	used by:		
	(1)	Sequestrated antigen			
	(2)	Cross reaction in circulat	ing antiger	1	
	(3)	Genetic abnormality			
	(4)	All of these			
80.	Mea	an Residence Time (MRT)	is:		
	(1)	AUMC/Cp	(2)	AUMC/AUC	
	(3)	AUC/AUMC	(4)	1/AUMC	
81.	The	e polarity of a molecule is	expressed	by:	
	(1)	bond strength	(2)	dipole moment	
	(3)	bond length	(4)	shape	
82.	Sta	ndard used for NMR is :			
	(1)	Trimethyl Silane	(2)	Tetramethyl Silane	
	(3)	Tetraethyl Silane	(4)	Triethyl Silane	

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Question No.	Questions		
83.	A conductance cell is calibrated by using:		
	(1) NaCl (2) Hg_2Cl_2		
	(3) KCl (4) Na ₂ SO ₄		
84.	Xenon arc lamp is the source of light in:		
	(1) Spectroflourimeter (2) Flame Photometer		
	(3) Infrared spectroscopy (4) Colorimetry		
85.	Luminescence term applied to:		
	(1) Absorbed radiation		
	(2) Re-emission of absorbed radiation		
	(3) Excited radiation		
	(4) Transmitted radiation		
86.	Which one of the following indicator is used in complexometric titration:		
	(1) Phenolphthalein (2) Methyl orange		
	(3) Murexide (4) Methyl Red		
87.	The brief duration of action of an ultra short acting barbiturate is the		
	result of:		
	(1) slow rate of metabolism in the liver		
	(2) high degree of binding to plasma proteins		
	(3) low lipid solubility resulting in a minimum concentration in the brain		
	(4) rapid rate of redistribution from the brain owing to its high		
	liposolubility		

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Question No.			
88.	Which of the following drug is contraindicated in patients takinitrates:		
	(1) Phenytoin (2) Sildenafil (3) Montelukast (4) Clomipramine		
89.	Which one of the following drugs is contraindicated in dengue fever:		
	(1) Aspirin (2) Paracetamol		
	(3) Both (4) None		
90.	Dilantin is used as: (1) Skeletal muscle relaxant (2) Analgesic (3) Anti epileptic (4) Antidepressant		
91.	(3) Anti epileptic (4) Antidepressers The common base skeleton of physiologically active ergoline alkaloid is:		
	(1) Isolysergic acid (2) Clavorubine		
	(3) Lysergic acid (4) 2-phenylbenzopyrane		
92.	Which of the following vegetable drugs contains ajoene?		
	(1) Valerianae radix (2) Allii sativi bulbus		
	(3) Agrimoniae herba (4) Echinaceae radix		
93.	Ginseng saponins are of the Series:		
	(1) Lupine (2) Ursane		
	(3) Dammarane (4) Abietane		
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Question No.	Questions		
94.	Choose the anthraquinone containing drug:		
	(1) Betulae folium (2) Graminis rhizome		
	(3) Rhei rhizome (4) Herniariae herba		
95.	Acid value is defined as:		
	(1) Number of milligram of potassium hydroxide required to neutralize one gram of fat or oil		
	(2) Number of gram of potassium hydroxide required to neutralize one gram of fat or oil		
	(3) Number of Kilogram of potassium hydroxide required to neutralize one gram of fat or oil		
	(4) Number of ml of potassium hydroxide (5N) required to neutralize one gram of fat or oil		
96.	Protoalkaloids are also called as:		
	(1) Amino alkaloid (2) Pseudo alkaloid		
	(3) True alkaloid (4) Extra alkaloid		
97.	The ring structure present in strychnine is:		
	(1) Indole (2) Pyrrole		
	(3) Pyridine (4) Piperidine		
98.	What kind of type of compounds can be detected by Mayer's reagent?		
	(1) Sesterterpenes (2) Starches		
	(3) Alkaloids (4) Procyanidines		
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Question	Questions
99.	The senna-emodin aglycones and senna-emodin glycosides are
100.	Dragendorffs reagent is composed of: (1) Picric acid (2) Potassium bismuth iodide (3) Alpha naphthol (4) Potassium mercuric iodide
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SET-"Z"

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

(CPG-EE-2018)

Subject	: PHARM	ACEUTICAL SCIE	ENCE
Code	se.	of for Tunber	3. Sr. No
Time: 11/2 Hours	Total Qu	estions: 100	Max. Marks: 100
Roll No	_ (in figure)		(in words)
Name :		Date of Birth:	(211 WOLUS)
Father's Name :		Mother's Name :	
Date of Examination			· ·

(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 candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour 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. In case there is any discrepancy in any question(s) in the Question Booklet, the same may be brought to the notice of the Controller of Examinations in writing within two hours after the test is over. No such complaint(s) will be entertained thereafter.
- 4. 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 book-let itself. Answers MUST NOT be ticked in the Question book-let.
- 5. Use only Black or Blue <u>BALL POINT PEN</u> of good quality in the OMR Answer-Sheet.
- 6. 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 discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 7. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

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Question No.	Questions		
1.	Softening point of Lipsticks can be determined by:		
	(1) Breaking test method (2) Rin	g and ball method	
	(3) Strain test (4) Per	oxide value test	
2.	Which one is the suitable method for potent	drug mixing?	
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3.	Staphylococcus aureus is used for the IP assay of:		
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	(3) Kanamycin (4) Dox	cycycline	
4.	In gels the term 'magma' is referred to a:		
	(1) Single phase gel (2) Two	phase gel	
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5.	Licenses which are made in Form 24-A and issued in Form 25-A are :		
	(1) Repackaging licenses (2) Nev	v drug license	
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6.	What are known as balsams?		
	(1) Resins dissolved in volatile oil		
	(2) A mixture of volatile oils with sesquiter	penes	
	(3) Resins dissolved in water		
	(4) Polysaccharide mixed with volatile oil		

CPG-EE-2018 (Pharmaceutical Sciences) Code-C

I	o. Questions
,	Saponin containing drugs are used as: (1) Laxative (2) Bitter tonic (3) Expectorant (4) Emetic
8	The volatile oils consist of a mixture of (1) Oxygen free mono- and diterpenes (2) Aliphatic and cyclic mono - and triterpenes (3) Aliphatic and cyclic mono - and sesquiterpenes and phenyl-proparderivatives (4) Highly oxygenated mono- and diterpenes
9.	The iridoids are: (1) Constituents of volatile oils (2) Starting unit of the tannin biogenesis (3) Precursor of biosynthesis of saponins (4) Precursors of the biogenesis of certain alkaloids
10.	Choose the right test for identification of anthraquinones: (1) Marquis test (2) Froehde test (3) Liebermann-Burchard test (4) Bornträeger test
1.	Which of the following is a prodrug: (1) Hydralazine (2) Clonidine (3) Captopril (4) Enalapril

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Question No.	Questions		
12.	Atropine is contraindicated in:		
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	(3) Iridocyclitis (4) Raised intraocular tension		
13.	Noradrenaline is administered by :		
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Statistical contract of the state of the sta	(3) Slow intravenous infusion (4) All of the above		
14.	The following 5-HT receptor is not a G protein coupled receptor:		
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	(3) 5-HT3 (4) 5-HT4		
15.	The following is a selective 5-HT4 agonist:		
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16.	Choose the correct statement about sumatriptan:		
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	(2) It tends to suppress both pain and vomiting in migraine		
	(3) It does not carry risk of precipitating coronary vasospasm		
	(4) It is combined with ergotamine for treatment of severe migrain		

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(3)

Questio No.	Questions
17.	Which of the following is an irreversible inhibitor of cyclo-oxygenase:
	(1) Aspirin (2) Phenylbutazone
	(3) Indomethacin (4) Piroxicam
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	(1) Hypertension (2) Congestive heart failure
	(3) Peptic ulcer (4) Chronic gout
20.	Hyperuricaemia is produced by the following drugs except:
	(1) Ethambutol (2) Pyrazinamide
	(3) Hydrochlorothiazide (4) Sulfinpyrazone
21.	The polarity of a molecule is expressed by:
	(1) bond strength (2) dipole moment
	(3) bond length (4) shape
22.	Standard used for NMR is :
	(1) Trimethyl Silane (2) Tetramethyl Silane
	3) Tetraethyl Silane (4) Triethyl Silane

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Question No.	Questions		
23.	A conductance cell is calibrated by using:		
	(1) NaCl (2) $\mathrm{Hg_2Cl_2}$		
	(3) KCl (4) Na ₂ SO ₄		
24.	Xenon arc lamp is the source of light in:		
	(1) Spectroflourimeter (2) Flame Photometer		
	(3) Infrared spectroscopy (4) Colorimetry		
25.	Luminescence term applied to:		
	(1) Absorbed radiation		
	(2) Re-emission of absorbed radiation		
	(3) Excited radiation		
	(4) Transmitted radiation		
26.	Which one of the following indicator is used in complexometric titration:		
	(1) Phenolphthalein (2) Methyl orange		
	(3) Murexide (4) Methyl Red		
27.	The brief duration of action of an ultra short acting barbiturate is the		
	result of:		
	(1) slow rate of metabolism in the liver		
	(2) high degree of binding to plasma proteins		
	(3) low lipid solubility resulting in a minimum concentration in the brain		
	(4) rapid rate of redistribution from the brain owing to its high liposolubility		

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(5)

No	Questions
28.	Which of the following drug is contraindicated in patients taking nitrates:
	(1) Phenytoin (2) Sildenafil (3) Montelukast (4) Clomipramine
29.	Which one of the following drugs is contraindicated in dengue fever: (1) Aspirin (2) Paracetamol (3) Both (4) None
30.	Dilantin is used as: (1) Skeletal muscle relaxant (2) Analgesic (3) Anti epileptic (4) Antidepressant
	Digoxin is contraindicated in the patients suffering from: (1) Angina pectoris (2) Ventricular tachycardia (3) Hypertension (4) Complete heart block
32. 7 (2 (3	The cardiac response to verapamil and nifedipine in human subjects is: 1) Verapamil causes tachycardia while nifedipine causes bradycardia 2) Both cause bradycardia

CPG-EE-2018 (Pharmaceutical Sciences) Code-C
(6)

Question					
No.	Questions				
33.	A patient of iron deficiency anaemia has been put on iron therapy. What should be the rate of rise in haemoglobin level of blood so that response is considered adequate?				
	(1) 0.05 - 0.1g% per week (2) 0.1 - 0.2 g% per week				
	(3) 0.5 - 1.0g% per week (4) None of the above				
34.	Hydroxyethyl starch is a:				
	(1) Plasma expander (2) Haemostatic				
	(3) Heparin substitute (4) Bile acid sequestrant				
35.	Ethosuximide is:				
	(1) Muscle relaxant (2) Anticonvulsant				
	(3) Antidepressant (4) Hallucinogen				
36.	Which is the chemical structure of piroxicam: (1) OH CONH CONH CONH CONH CONH CONH CONH C				
	(3) OH COONH—COONH				

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(7)

Questic No.	Questions
37.	In a ¹³ C NMR spectrum: (1) a triplet is evidence of a CH ₃ group presence (2) the signals are between 0 and 10 ppm (3) every C atom generates a signal (4) all of the above
38.	Strongest reducing agent in the electrochemical series is: (1) Li (2) F (3) H ₂ (4) All of the above
	Freezing point depression is measured by: (1) Beckmann's apparatus (2) Land's Berger's apparatus (3) Antifreeze apparatus (4) None of the above
(3	The head overlap of p-orbitals of two atoms give rise to bond called: 1) sigma bond (2) pi bond (3) ionic bond (4) covalent bond
11. S (1 (3	(2) Dilatanas
(3)	st of diseases that a drug should not claim to cure is given in Schedule:

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Question No.	Questions		
43.	Cell wall of gram negative bacteria possesses the following characteristics:		
	(1) Lacks lipids (2) Lacks techoic acid		
	(3) Lacks carbohydrates (4) Lacks proteins		
44.	Source of agar is:		
	(1) Gelidium melesi (2) Gelidium amansii		
	(3) Gelidium laminari (4) Gelidium topicana		
45.	Carr's index is used to determine:		
	(1) Powder flow (2) Particle size		
	(3) Elasticity (4) Polymorphism		
46.	Sink condition is necessary in the process of absorption because:		
	(1) It increases the disintegration of the dosage form		
	(2) It increases the dissolution process of the drug by maintaining the		
	concentration gradient		
	(3) It increases the process of absorption by facilitating the transfer of		
	drug across the cell membrane (4) None of the above		
	(4) None of the above		
47.	The properties of solutions containing surface active agents change		
	sharply over a narrow concentration range and is called as:		
V	(1) Critical Micelle concentration		
	(2) Ionic concentration		
	(3) Hydrogen ion concentration		
	(4) Surface tension		

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(9)

Quest No	
48	Schedule O is related to: (1) Standards for Disinfected fluids (2) Standards for ophthalmic preparations (3) Requirement of factory premises (4) Standards for cosmetics
49.	The most important barrier to drug transport when applied topically the skin is: (1) Dermis (2) Stratum corneum (3) Sweat glands (4) Hair follicles
50.	The toughness of a material can be reduced by: (1) heating the material (2) treating the material with gas (3) treating the material with liquid nitrogen (4) none of these
	The common base skeleton of physiologically active ergoline alkaloids is: (1) Isolysergic acid (2) Clavorubine (3) Lysergic acid (4) 2-phenylbenzopyrane
(1)	(2) Allii sotivi 1. 11

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Question No.	Questions			
53.	Ginseng saponins are of the Series : (1) Lupine (2) Ursane (3) Dammarane (4) Abietane			
54.	Choose the anthraquinone containing drug:			
	(1) Betulae folium (2) Graminis rhizome			
	(3) Rhei rhizome (4) Herniariae herba			
55.	Acid value is defined as:			
	(1) Number of milligram of potassium hydroxide required to neutralize one gram of fat or oil			
2	(2) Number of gram of potassium hydroxide required to neutralize one gram of fat or oil			
	(3) Number of Kilogram of potassium hydroxide required to neutralize one gram of fat or oil			
	(4) Number of ml of potassium hydroxide (5N) required to neutralize one gram of fat or oil			
56.	Protoalkaloids are also called as :			
	(1) Amino alkaloid (2) Pseudo alkaloid			
	(3) True alkaloid (4) Extra alkaloid			
57.	The ring structure present in strychnine is:			
	(1) Indole (2) Pyrrole			
	(3) Pyridine (4) Piperidine			

CPG-EE-2018 (Pharmaceutical Sciences) Code-C
(11)

Question No.	Questions			
53.	Ginseng saponins are of theSeries:			
	(1) Lupine (2) Ursane			
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	(1) Indole (2) Pyrrole			
	(3) Pyridine (4) Piperidine			

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(11)

Questio No.	Questions
58.	What kind of type of compounds can be detected by Mayer's reagent? (1) Sesterterpenes (2) Starches (3) Alkaloids (4) Procyanidines
59.	The senna-emodin aglycones and senna-emodin glycosides and derivatives: (1) Tetraterpenes (2) Monoterpenes with labdane structure (3) Pseudoguaianolides (4) Anthraquinones
60.	Dragendorffs reagent is composed of: (1) Picric acid (2) Potassium bismuth iodide (3) Alpha naphthol (4) Potassium mercuric iodide
61.	How many grams of a drug are required to prepare 500 ml of a 1:2500 solution?
	(1) 1.25 (2) 0.4 (3) 0.02 (4) 0.2
62. T	The value that shows the time to kill 90% of microorganisms present in food sample is called:
(3	(2) M value

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(12)

Question No.	Questions				
63.	Cam tracks are used in tablets for :				
	(1) Feeding the granules				
	(2) Fixing the shape				
	(3) Compressing the granules				
	(4) Guiding the movement of punches				
64.	Which size of needle has the largest diameter?				
	(1) 18 gauge (2) 16 gauge				
	(3) 20 gauge (4) 14 gauge				
65.	A rolling cabinet at a hospital which is used to dispense emergency				
	medication is commonly called a:				
	(1) EMS Cart (2) Stash Cart				
	(3) Crash Cart (4) Blue Cart				
66.	If the dose of a formulation is two teaspoonfuls, how many doses will be				
	in 300 ml of liquid preparation?				
	(1) 10 (2) 30				
	(3) 20 (4) 3000				
67.	Energy required for size reduction is directly proportional to new surface				
	area produced is the statement of:				
	(1) Kicks Theory (2) Martin Theory				
	(3) Rittingers Theory (4) Fitz theory				

CPG-EE-2018 (Pharmaceutical Sciences) Code-C (13)

Question No.	Questions		
68.	In nail polish, the polymer used as a film-former is: (1) Cellulose acetate phthalate (2) Hydroxypropyl methyl cellulose (3) Nitrocellulose (4) Polylactic acid		
69.	Auto-immunity disease are caused by: (1) Sequestrated antigen (2) Cross reaction in circulating antigen (3) Genetic abnormality (4) All of these		
70.	Mean Residence Time (MRT) is: (1) AUMC/Cp (2) AUMC/AUC (3) AUC/AUMC (4) 1/AUMC		
	Chenopodium oil is used for: (1) Hook worm disease (2) Diarrhoea (3) Cough (4) Malaria		
	Quercetin is a : (1) Flavone glycoside (2) Flavanone glycoside (3) Flavonol glycoside (4) None of these		

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(14)

Question No.	Questions Atropine can be identified by:			
73.				
	(1) Gerrard reaction	(2)	Vitali Morin reaction	
	(3) Van- Urk's test	(4)	All of these	
74.	Cape aloes are obtained from:			
	(1) Aloe ferox	(2)	Aloe perryi	
	(3) Aloe vera	(4)	Aloe barbadensis	
75.	75. Quinoline alkaloids are derived from:			
	(1) L-tyrosine	(2)	L - tryptophan	
	(3) L-lysine	(4)	None of these	
76.	The Isoquinoline ring system is present in which of the following			
	alkaloids?			
	(1) Nicotine	(2)	Papaverine	
	(3) Pilocarpine	(4)	Pelleterine	
77.	Agent obtained from rind of citrus fruits is:			
	(1) Acacia	(2)	Agar	
	(3) Starch	(4)	Pectin	
78.	Acrolein test is given by:			
	(1) Cholesterol	(2)	Glycerol	
	(3) Sphingol	(4)	Glycosides	

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(15)

Question No.	Ques	tion	S
79.	Rutin is:		
	(1) Triterpene glycosides	(2)	Lactone glycoside
	(3) Steroidal glycoside	(4)	Flavonoid glycoside
80.	Marmelosin is active constituents of		
	(1) Bael	(2)	Aloe
	(3) Tragacanth	(4)	Rhubarb
81.	Lidocaine is synthesized from:		
	(1) 2,6 Xylidene	(2)	2,4 Xylidene
	(3) o-Toluidine	(4)	p-Toluidine
82.	One of the following is not an aldos	e:	
	(1) Glucose	(2)	Galactose
	(3) Mannose	(4)	Fructose
83.	The backbone of nucleic acid struc	ture	is constructed by :
	(1) Peptide bond	(2)	Glycosidic bond
	(3) Phosphodiester bridges	(4)	All of them
84.	The synthesis of Urea occurs in:		
	(1) Kidney	(2)	Liver
The state of the s	(3) Muscle	(4)	Brain

CPG-EE-2018 (Pharmaceutical Sciences) Code-C
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Question No.	Questions		
85.	Ozonolysis of an organic compound gives formaldehyde as one of the products. This confirms the presence of: (1) two ethylenic double bonds (2) a vinyl group (3) an isopropyl group (4) an acetylenic triple bond		
86.	Which drug is not having 1-3-diazoles: (1) Clotrimazole (2) Econazole (3) Sulconazole (4) Fluconazole		
87.	Calcium levulinate is used as calcium replenisher; chemically it is: (1) calcium-2-oxo pentanoate dehydrate (2) calcium-3-oxo pentanoate dehydrate (3) calcium-4-oxo pentanoate dehydrate (4) calcium-5-oxo pentanoate dehydrate		
88.	Which amino acid can form disulphide bonds? (1) Glycine (2) Proline (3) Glutamate (4) Cysteine		
89.	The chemical shift value is: (1) Proportional to total number of protons (2) Not proportional to field strength (3) Ratio of number of protons in each group (4) Proportional to field strength		

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(17)

Question No.	Questions		
90.	Which of the following strategy will increase the polarity and water solubility of a drug?		
	(1) Removal of polar functional groups(2) Addition of extra alkyl groups		
	(3) Replacing an aromatic ring with a nitrogen containing heterocyclic ring		
	(4) Replacing an alkyl group with a larger alkyl group		
91.	Codeine is used clinically as:		
	(1) Analgesic (2) Antitussive		
	(3) Antidiarrhoeal (4) All of the above		
92.	The most prominent and dose related side effect of salbutamol is:		
	(1) Rise in blood pressure		
	(2) Muscle tremor		
	(3) Hyperglycaemia		
	(4) Central nervous system stimulation		
93.	Sodium cromoglycate has a role in the treatment of the following conditions		
	except:		
	(1) Chronic bronchial asthma		
BECOM CONTRACTOR OF THE CONTRACTOR OF T	(2) Chronic urticaria		
STORE TO COORNING THE	(3) Chronic allergic rhinitis		
	(4) Chronic allergic conjunctivitis		

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(18)

Question No.	Questions		
94.	Hydrocortisone exerts the following actions:		
	(1) Increases both K ⁺ and Ca ²⁺ excretion		
	(2) Decreases both K ⁺ and Ca ²⁺ excretion		
	(3) Decreases K ⁺ but increases Ca ²⁺ excretion		
	(4) Increases K ⁺ but decreases Ca ²⁺ excretion		
95.	Which hormone acts through a cytoplasmic receptor:		
	(1) Calcitriol (2) Prolactin		
	(3) Vasopressin (4) None of the above		
96.	Circulating testosterone levels in men are elevated during treatment with:		
	(1) Danazol (2) Finasteride		
	(3) Ketoconazole (4) Flutamide		
97.	Estrogen therapy can worsen the following associated conditions		
	except:		
	(1) Migraine (2) Cholelithiasis		
	(3) Acne vulgaris (4) Endometriosis		
98.	A macrolide antibiotic used as powerful immunosuppressive agents is:		
	(1) Clarithromycin (2) Azithromycin		
	(3) Erythromycin (4) Tacrolimus		

CPG-EE-2018 (Pharmaceutical Sciences) Code-C (19)

Question No.	Questions			
99.	Select the correct statement about benzodiazepines (BZDs):			
	(1) All BZDs facilitate GABA mediated CI influx into neurons			
	(2) Different BZDs exert the same degrees of hypnotic, anxiolytic and			
The state of the s	anticonvulsant actions			
The state of the s	(3) The BZD receptor is homogeneous at all neuronal sites			
	(4) The muscle relaxant action of BZDs is not blocked by flumazenil			
100.	Gray baby syndrome is the side effect of:			
	(1) Chloramphenicol (2) Penicillin			
	(3) Paracetamol (4) Ibuprofen			

SET-"Z"

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

(CPG-EE-2018)

Subject: PHARMACEUTICAL SCIENCE

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veer ficaling Sr. No. Max. Marks: 100 **Total Questions: 100** (in words) Roll No. _____ (in figure) Name: _____ Date of Birth: _____

Father's Name: _____ Mother's Name:____ Date of Examination:

(Signature of the candidate)

Code

Time: 1½ Hours

(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.

- The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour 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.
- In case there is any discrepancy in any question(s) in the Question Booklet, the same may be brought to the notice of the Controller of Examinations in writing within two hours after the test is over. No such complaint(s) will be entertained thereafter.
- 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 book-let itself. Answers MUST NOT be ticked in the Question book-let.

5. Use only Black or Blue BALL POINT PEN of good quality in the OMR Answer-Sheet.

- 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 discredit. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

Question No.	Questions			
1.	Lidocaine is synthesized from:			
	(1) 2,6 Xylidene	(2)	2,4 Xylidene	
	(3) o-Toluidine	(4)	p-Toluidine	
2.	One of the following is not an aldose:			
	(1) Glucose	(2)	Galactose	
	(3) Mannose	(4)	Fructose	
3.	3. The backbone of nucleic acid structure is constructed by:			
	(1) Peptide bond	(2)	Glycosidic bond	
	(3) Phosphodiester bridges	(4)	All of them	
4.	The synthesis of Urea occurs in:			
	(1) Kidney	(2)	Liver	
	(3) Muscle	(4)	Brain	
5.	5. Ozonolysis of an organic compound gives formaldehyde a products. This confirms the presence of:			
	(1) two ethylenic double bonds	(2)	a vinyl group	
	(3) an isopropyl group	(4)	an acetylenic triple bond	
6.	Which drug is not having 1-3-diazoles:			
	(1) Clotrimazole	(2)	Econazole	
	(3) Sulconazole	(4)	Fluconazole	

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(1)

uestion	Questions
No. 7.	Calcium levulinate is used as calcium replenisher; chemically it is: (1) calcium-2-oxo pentanoate dehydrate (2) calcium-3-oxo pentanoate dehydrate (3) calcium-4-oxo pentanoate dehydrate (4) calcium-5-oxo pentanoate dehydrate
8.	Which amino acid can form disulphide bonds? (1) Glycine (2) Proline (3) Glutamate (4) Cysteine
9.	The chemical shift value is: (1) Proportional to total number of protons (2) Not proportional to field strength (3) Ratio of number of protons in each group (4) Proportional to field strength
	 Which of the following strategy will increase the polarity and water solubility of a drug? (1) Removal of polar functional groups (2) Addition of extra alkyl groups (3) Replacing an aromatic ring with a nitrogen containing heterocyclic ring (4) Replacing an alkyl group with a larger alkyl group

CPG-EE-2018 (Pharmaceutical Sciences) Code-D
(2)

Question No.	Questions		
11.	The common base skeleton of physiologically active ergoline alkaloids is:		
	(1) Isolysergic acid	(2)	Clavorubine
	(3) Lysergic acid	(4)	2-phenylbenzopyrane
12.	Which of the following vegetable drugs contains ajoene?		
	(1) Valerianae radix	(2)	Allii sativi bulbus
	(3) Agrimoniae herba	(4)	Echinaceae radix
13.	Ginseng saponins are of the		_Series:
	(1) Lupine	(2)	Ursane
	(3) Dammarane	(4)	Abietane
14.	4. Choose the anthraquinone containing drug:		
	(1) Betulae folium	(2)	Graminis rhizome
	(3) Rhei rhizome	(4)	Herniariae herba
15.	Acid value is defined as :	angka distance at the garage way of the conjust of the service and the service at	
	 (1) Number of milligram of potassium hydroxide required to neutralize one gram of fat or oil (2) Number of gram of potassium hydroxide required to neutralize one gram of fat or oil (3) Number of Kilogram of potassium hydroxide required to neutralize one gram of fat or oil 		
THE COMMISSION AND ADDRESS OF THE COMMISS OF THE COMMISSION AND ADDRESS OF THE COMMISS OF THE COMMISSION AND ADDRESS OF THE COMMISS OF THE CO			
	(4) Number of ml of potassium gram of fat or oil	hydroxi	de (5N) required to neutralize one

CPG-EE-2018 (Pharmaceutical Sciences) Code-D
(3)

Question No.	Questions		
16.	Protoalkaloids are also called as:		
	(1) Amino alkaloid (2) Pseudo alkaloid		
	(3) True alkaloid (4) Extra alkaloid		
17.	The ring structure present in strychnine is:		
	(1) Indole (2) Pyrrole		
	(3) Pyridine (4) Piperidine		
18.	What kind of type of compounds can be detected by Mayer's reagent?		
	(1) Sesterterpenes (2) Starches		
Section of the sectio	(3) Alkaloids (4) Procyanidines		
19.	The senna-emodin aglycones and senna-emodin glycosides are		
	derivatives:		
	(1) Tetraterpenes		
egen Assentianes assenti	(2) Monoterpenes with labdane structure		
	(3) Pseudoguaianolides		
	(4) Anthraquinones		
20.	Dragendorffs reagent is composed of:		
	(1) Picric acid (2) Potassium bismuth iodide		
	(3) Alpha naphthol (4) Potassium mercuric iodide		

CPG-EE-2018 (Pharmaceutical Sciences) Code-D
(4)

Question No.	Questions
21.	Digoxin is contraindicated in the patients suffering from: (1) Angina pectoris (2) Ventricular tachycardia (3) Hypertension (4) Complete heart block
22.	The cardiac response to verapamil and nifedipine in human subjects is: (1) Verapamil causes tachycardia while nifedipine causes bradycardia (2) Both cause bradycardia (3) Verapamil causes bradycardia while nifedipine causes tachycardia (4) Both cause tachycardia
23.	A patient of iron deficiency anaemia has been put on iron therapy. What should be the rate of rise in haemoglobin level of blood so that response is considered adequate? (1) 0.05 - 0.1g% per week (2) 0.1 - 0.2 g% per week (3) 0.5 - 1.0g% per week (4) None of the above
24.	Hydroxyethyl starch is a: (1) Plasma expander (2) Haemostatic (3) Heparin substitute (4) Bile acid sequestrant
25.	Ethosuximide is: (1) Muscle relaxant (2) Anticonvulsant (3) Antidepressant (4) Hallucinogen

CPG-EE-2018 (Pharmaceutical Sciences) Code-D
(5)

Question No.	Questions		
26.	Which is the chemical structure of piroxicam: (1) (2) (3) (4) (4) (5) (6) (7) (7) (8) (9) (9) (1) (1) (1) (1) (2) (3) (4) (5) (6) (7) (7) (8) (9) (9) (1) (1) (1) (1) (2) (2) (3) (4) (5) (6) (7) (7) (8) (9) (9) (9) (1) (1) (1) (2) (2) (3) (4) (5) (6) (7) (7) (8) (9) (9) (1) (1) (1) (2) (2) (3) (4) (5) (6) (7) (7) (8) (9) (9) (9) (9) (1) (1) (1) (1		
27.	In a ¹³ C NMR spectrum:		
GOFFA COPPORT ABROMATION SIMILAR TO THE COMPANY OF THE COPPORT AND THE COPPORT ABROMATION SIMILAR TO THE COPPORT ABOVE THE COPPORT ABROMATION SIMILAR TO THE COPPORT ABOVE T	(1) a triplet is evidence of a CH ₃ group presence		
STATE THE METERS AND A STATE OF THE STATE OF	(2) the signals are between 0 and 10 ppm		
	(3) every C atom generates a signal		
	(4) all of the above		
28.	Strongest reducing agent in the electrochemical series is:		
	(1) Li (2) F		
	(3) H ₂ (4) All of the above		
29.	Freezing point depression is measured by:		
The art of the control of the contro	(1) Beckmann's apparatus (2) Land's Berger's apparatus		
And the state of t	(3) Antifreeze apparatus (4) None of the above		

CPG-EE-2018 (Pharmaceutical Sciences) Code-D
(6)

Question No.	n Questions		
30.	The head overlap of p-orbitals of two atoms give rise to bond called:		
AND THE PROPERTY OF THE PROPER	(1) sigma bond (2) pi bond		
	(3) ionic bond (4) covalent bond		
31.	Softening point of Lipsticks can be determined by:		
	(1) Breaking test method (2) Ring and ball method		
	(3) Strain test (4) Peroxide value test		
32.	Which one is the suitable method for potent drug mixing?		
	(1) Trituration (2) Tumbling		
MINISTER V. ANNO P. CONTROL OF THE PROPERTY OF	(3) Spatulation (4) Geometric dilution		
33.	Staphylococcus aureus is used for the IP assay of:	ensilar-relativas (16 m. a.). A Confessio de Care (16 m. a.).	
AND THE PROPERTY OF THE PROPER	(1) Bleomycin (2) Carbenicillin		
	(3) Kanamycin (4) Doxycycline		
34.	In gels the term 'magma' is referred to a:	menende communicación en en esta combinación de communicación de entre en entre en entre e	
	(1) Single phase gel (2) Two phase gel		
	(3) Jellies (4) Gels having low visco	osity	
35.	Licenses which are made in Form 24-A and issued in Form 25-A are:		
REPORT THE PROPERTY OF THE PRO	(1) Repackaging licenses (2) New drug license	* ***	
NET TO A CASE OF THE CASE OF T	(3) Loan license (4) None of above		

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Question No.	Questions
36.	What are known as balsams?
	(1) Resins dissolved in volatile oil
The control of the co	(2) A mixture of volatile oils with sesquiterpenes
	(3) Resins dissolved in water
CONTRACTOR	(4) Polysaccharide mixed with volatile oil
37.	Saponin containing drugs are used as:
many distribution of the control of	(1) Laxative (2) Bitter tonic
	(3) Expectorant (4) Emetic
38.	The volatile oils consist of a mixture of
THE RESIDENCE OF THE PROPERTY	(1) Oxygen free mono- and diterpenes
	(2) Aliphatic and cyclic mono - and triterpenes
	(3) Aliphatic and cyclic mono - and sesquiterpenes and phenyl-propane
THE COMMISSION AND A STREET	derivatives
Distribution of the Principle of the Pri	(4) Highly oxygenated mono- and diterpenes
39.	The iridoids are:
	(1) Constituents of volatile oils
Constitution of the Consti	(2) Starting unit of the tannin biogenesis
ROSSINATION OF THE PARTY AND T	(3) Precursor of biosynthesis of saponins
minores eminores de la constitución de la constituc	(4) Precursors of the biogenesis of certain alkaloids
	The core (DI visal Sciences) Code-D

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Question No.	Questions
40.	Choose the right test for identification of anthraquinones:
	(1) Marquis test (2) Froehde test
	(3) Liebermann-Burchard test (4) Bornträeger test
41.	Codeine is used clinically as:
	(1) Analgesic (2) Antitussive
	(3) Antidiarrhoeal (4) All of the above
42.	The most prominent and dose related side effect of salbutamol is:
	(1) Rise in blood pressure
	(2) Muscle tremor
	(3) Hyperglycaemia
	(4) Central nervous system stimulation
43.	Sodium cromoglycate has a role in the treatment of the following conditions except:
	(1) Chronic bronchial asthma
	(2) Chronic urticaria
	(3) Chronic allergic rhinitis
A CONTRACTOR OF THE CONTRACTOR	(4) Chronic allergic conjunctivitis
44.	Hydrocortisone exerts the following actions:
	(1) Increases both K ⁺ and Ca ²⁺ excretion
	(2) Decreases both K ⁺ and Ca ²⁺ excretion
Marie Consideration and the second	(3) Decreases K ⁺ but increases Ca ²⁺ excretion
	(4) Increases K ⁺ but decreases Ca ²⁺ excretion
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Questic No.	Questions
45.	Which hormone acts through a cytoplasmic receptor: (1) Calcitriol (2) Prolactin (3) Vasopressin (4) None of the above
46.	Circulating testosterone levels in men are elevated during treatments with: (1) Danazol (2) Finasteride (3) Ketoconazole (4) Flutamide
47.	Estrogen therapy can worsen the following associated condition except: (1) Migraine (2) Cholelithiasis (3) Acne vulgaris (4) Endometriosis
	A macrolide antibiotic used as powerful immunosuppressive agents is: (1) Clarithromycin (2) Azithromycin (3) Erythromycin (4) Tacrolimus
	Select the correct statement about benzodiazepines (BZDs): 1) All BZDs facilitate GABA mediated CI influx into neurons 2) Different BZDs exert the same degrees of hypnotic, anxiolytic and anticonvulsant actions 3) The BZD receptor is homogeneous at all neuronal sites 4) The muscle relaxant action of BZDs is not blocked by flumazenil

Question No.	Q	uestion	as
50.	Gray baby syndrome is the side effect of:		
	(1) Chloramphenicol	(2)	Penicillin
	(3) Paracetamol	(4)	Ibuprofen
51.	The polarity of a molecule is exp	pressed	by:
	(1) bond strength	(2)	dipole moment
	(3) bond length	(4)	shape
52.	Standard used for NMR is:		
	(1) Trimethyl Silane	(2)	Tetramethyl Silane
	(3) Tetraethyl Silane	(4)	Triethyl Silane
53.	A conductance cell is calibrated by using:		
	(1) NaCl	(2)	$\mathrm{Hg_2Cl_2}$
	(3) KCl	(4)	Na ₂ SO ₄
54.	Xenon arc lamp is the source of	light in:	
	(1) Spectroflourimeter	(2)	Flame Photometer
	(3) Infrared spectroscopy	(4)	Colorimetry
55.	Luminescence term applied to:		
	(1) Absorbed radiation		
	(2) Re-emission of absorbed rad	liation	
	(3) Excited radiation		
	(4) Transmitted radiation		

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Question No.	Questions
56.	Which one of the following indicator is used in complexometric titration:
	(1) Phenolphthalein (2) Methyl orange
	(3) Murexide (4) Methyl Red
57.	The brief duration of action of an ultra short acting barbiturate is the result of:
	(1) slow rate of metabolism in the liver
	(2) high degree of binding to plasma proteins
	(3) low lipid solubility resulting in a minimum concentration in the brain
	(4) rapid rate of redistribution from the brain owing to its high liposolubility
58.	Which of the fellering 1
	Which of the following drug is contraindicated in patients taking nitrates: (1) Phenytoin (2) Sildenafil
	(-)
	(3) Montelukast (4) Clomipramine
59.	Which one of the following drugs is contraindicated in dengue fever:
	(1) Aspirin (2) Paracetamol
	(3) Both (4) None
60.	Dilantin is used as:
	(1) Skeletal muscle relaxant (2) Analgesic
	(3) Anti epileptic (4) Antidepressant
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Question No.	Questions
61.	Chenopodium oil is used for:
	(1) Hook worm disease (2) Diarrhoea
	(3) Cough (4) Malaria
62.	Quercetin is a:
	(1) Flavone glycoside (2) Flavanone glycoside
	(3) Flavonol glycoside (4) None of these
63.	Atropine can be identified by:
	(1) Gerrard reaction (2) Vitali Morin reaction
	(3) Van- Urk's test (4) All of these
64.	Cape aloes are obtained from:
	(1) Aloe ferox (2) Aloe perryi
	(3) Aloe vera (4) Aloe barbadensis
65.	Quinoline alkaloids are derived from:
	(1) L-tyrosine (2) L-tryptophan
	(3) L-lysine (4) None of these
66.	The Isoquinoline ring system is present in which of the following alkaloids?
	(1) Nicotine (2) Papaverine
	(3) Pilocarpine (4) Pelleterine

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Question No.	Questions
67.	Agent obtained from rind of citrus fruits is:
	(1) Acacia (2) Agar
	(3) Starch (4) Pectin
68.	Acrolein test is given by:
	(1) Cholesterol (2) Glycerol
	(3) Sphingol (4) Glycosides
69.	Rutin is:
	(1) Triterpene glycosides (2) Lactone glycoside
	(3) Steroidal glycoside (4) Flavonoid glycoside
70.	Marmelosin is active constituents of:
	(1) Bael (2) Aloe
	(3) Tragacanth (4) Rhubarb
71.	Which of the following is a prodrug:
The state of the s	(1) Hydralazine (2) Clonidine
	(3) Captopril (4) Enalapril
72.	Atropine is contraindicated in:
MARGONIA TO COLOROTO SERVICE	(1) Pulmonary embolism (2) Digitalis toxicity
SE MANDAMENT PARA CAMPANTA CAM	(3) Iridocyclitis (4) Raised intraocular tension

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Question No.	Questions
73.	Noradrenaline is administered by:
	(1) Subcutaneous injection (2) Intramuscular injection
	(3) Slow intravenous infusion (4) All of the above
74.	The following 5-HT receptor is not a G protein coupled receptor:
	(1) 5-HT1 (2) 5-HT2
	(3) 5-HT3 (4) 5-HT4
75.	The following is a selective 5-HT4 agonist:
	(1) Buspirone (2) Sumatriptan
	(3) Clozapine (4) Cisapride
76.	Choose the correct statement about sumatriptan:
	(1) It activates serotonergic neurones in raphe nuclei
	(2) It tends to suppress both pain and vomiting in migraine
	(3) It does not carry risk of precipitating coronary vasospasm
	(4) It is combined with ergotamine for treatment of severe migrain
77.	Which of the following is an irreversible inhibitor of cyclo-oxygenase:
	(1) Aspirin (2) Phenylbutazone
	(3) Indomethacin (4) Piroxicam

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Question No.	Que	stions	
78.	Anti-inflammatory dose of aspirin	given to diabetics is prone to cause :	
	(1) Hyperglycaemia	(2) Hypoglycaemia	
	(3) Ketoacidosis	(4) Alkalosis	
79.	The NSAIDs aggravate the following diseases except:		
	(1) Hypertension	(2) Congestive heart failure	
	(3) Peptic ulcer	(4) Chronic gout	
80.	Hyperuricaemia is produced by the	following drugs except :	
PONINCO MELA PRIMICA MARIA	(1) Ethambutol	(2) Pyrazinamide	
	(3) Hydrochlorothiazide	(4) Sulfinpyrazone	
81.	Shrinkage of gel by extrusion of liquid is called:		
A CONTRACTOR OF THE CONTRACTOR	(1) Syneresis	(2) Dilatancy	
BERTAL AND	(3) Plasticity	(4) Diaphoresis	
82.	List of diseases that a drug should n	ot claim to cure is given in Schedule	
	(1) J	(2) L	
The second secon	(3) C	(4) H	
83.	Cell wall of gram negative bacteria possesses the following characteristics:		
	(1) T - 1 1: 11	(2) Lacks techoic acid	
AND THE PROPERTY AND TH	(3) Lacks carbohydrates	(4) Lacks proteins	
84.	Source of agar is:		
Total designation of the state	(1) Gelidium melesi	(2) Gelidium amansii	
	(3) Gelidium laminari	(4) Gelidium topicana	

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Question No.	Questions
85.	Carr's index is used to determine:
	(1) Powder flow (2) Particle size
	(3) Elasticity (4) Polymorphism
86.	Sink condition is necessary in the process of absorption because:
	(1) It increases the disintegration of the dosage form
	(2) It increases the dissolution process of the drug by maintaining the concentration gradient
	(3) It increases the process of absorption by facilitating the transfer of
	drug across the cell membrane
	(4) None of the above
87.	The properties of solutions containing surface active agents change sharply
	over a narrow concentration range and is called as:
	(1) Critical Micelle concentration
	(2) Ionic concentration
	(3) Hydrogen ion concentration
	(4) Surface tension
88.	Schedule O is related to:
	(1) Standards for Disinfected fluids
	(2) Standards for ophthalmic preparations
	(3) Requirement of factory premises
	(4) Standards for cosmetics

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	Questions
89.	The most important barrier to drug transport when applied topicall the skin is:
	(1) Dermis (2) Stratum corneum (3) Sweat glands (4) Hair follicles
90.	The toughness of a material can be reduced by: (1) heating the material (2) treating the material with gas (3) treating the material with liquid nitrogen (4) none of these
TO COLUMN	How many grams of a drug are required to prepare 500 ml of a 1:250 olution? (2) 0.4 (4) 0.2
The second secon	ne value that shows the time to kill 90% of microorganisms present in a

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Question No.	Questions
93.	Cam tracks are used in tablets for:
	(1) Feeding the granules
	(2) Fixing the shape
	(3) Compressing the granules
	(4) Guiding the movement of punches
94.	Which size of needle has the largest diameter?
	(1) 18 gauge (2) 16 gauge
	(3) 20 gauge (4) 14 gauge
95.	A rolling cabinet at a hospital which is used to dispense emergency medication is commonly called a:
	(1) EMS Cart (2) Stash Cart
	(3) Crash Cart (4) Blue Cart
96.	If the dose of a formulation is two teaspoonfuls, how many doses will be in 300 ml of liquid preparation?
	(1) 10 (2) 30
	(3) 20 (4) 3000
97.	Energy required for size reduction is directly proportional to new surface area produced is the statement of:
	(1) Kicks Theory (2) Martin Theory
	(3) Rittingers Theory (4) Fitz theory
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Question No.	Questions
98.	In nail polish, the polymer used as a film-former is: (1) Cellulose acetate phthalate (2) Hydroxypropyl methyl cellulose (3) Nitrocellulose (4) Polylactic acid
99.	Auto-immunity disease are caused by: (1) Sequestrated antigen (2) Cross reaction in circulating antigen (3) Genetic abnormality (4) All of these
	Mean Residence Time (MRT) is: (1) AUMC/Cp (2) AUMC/AUC (3) AUC/AUMC (4) 1/AUMC

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