GPAT QUESTION PAPER 2015 WITH ANSWER KEY

GPAT QUESTIONS

1.	Which type of alkaloid is present	in Vinca?			
	(a) Ergot (b) Tr	ropane (c)	Indole	(d)	Quinoline
2.	What is the biological source of	Alexandrian Senna			
	(a) Cassia aungustifolia	(b)	Cassia acutifolia		
	(c) Cassia Bravifolia	(d)	Cassia Nerifolia		
3.	In the following drug find out the	e Potassium Sparing Diur	retics		
	(a) Milrinone (b) Th	hiazide (c)	Spironolactone	(d)	Amilioride
4.	How the wetting agent act in the	suspension			
	(a) Increase contact angle between	een substance and solver	nt		
	(b) Reduce contact angle betwee	en substance and solvent			
	(c) No change in contact angle b	etween substance and s	olvent		
	(d) None of the above				
5.	Which phase of suspension is re-	versible phase			
	(a) Cracking (b) Cr	reaming (c)	Phase Inversion	(d)	Coalscence
6.	Which eye infection is also called	as 'Pink Eye' infection			
	(a) Fungal keratitis (b) Vi	iral keratitis (c)	Conjunctivitis	(d)	Myopia
7.	Match compounds with the pathy	way they inhibit			
	(1) Vancoycin	(P)	Folate metabolism		
	(2) Rifampin	(Q)	DNA synthesis		
	(3) Puromycin	(R)	Protein synthesis		
	(4) Ciprofloxacin	(S)	RNA synthesis		
		(T)	Cell wall synthesis		
	(a) 1-T, 2-S, 3-R, 4-Q (b) 1-	-R, 2-S, 3-T, 4-P (c)	1-Q, 2-R, 3-T, 4-Q	(d)	1-T, 2-Q, 3-P, 4-S
8.	The given reaction in an example	e of			
	(a) Arndt-Eistert homologation	(b)	Mannich reaction		
	(c) Michael addition	(d)	Chichibabin amination	rea	ction
9.	What is the 6-methyl derivative of	of erythromycin			
	(a) Azithromycin (b) R	oxithromycin (c)	Clarithromycin	(d)	Clindamycin
10.	In the diagnosis of myasthenia g	gravis, only one of the fol	llowing drugs will be u	sed a	as a drug of choice
	(a) Neostigmine (b) Py	yridostigmine (c)	Physostigmine	(d)	Edrophoinum
11.	Methyl [5(proopylthio)-1H-benze	oimidazol-2yl] carbamat	te is Geneva name of wl	hich	of the following drug
	(a) Mebendazole (b) A	lbendazole (c)	Thibendazole	(d)	Triclabendazole
12.	Which of the following is oil of fr	ruit pulp			
	(a) Arachis oil (b) Ca	astor oil (c)	Olive oil	(d)	Apricot oil



13.	What is true about bioavailability	
	(a) Amount of unbound drug (Free drug reaching	systemic circulation)
	(b) Amount of bound Drug	
	(c) Amount of metabolite drug	
	(d) Amount of Excreted Drug	
14.	Polymorphs in pharmaceutical solids are detected b	y which technique
	(a) MS (b) LC-MS	(c) Solid state NMR (d) Coulter counter
15.	A series of α - acylureido penicillin's like azlocillin, n	nezloacillin, and piperacillin are superior because of
	(a) Reduced acid hydrolysis	(b) Increased β - lactmase resistance
	(c) Improved penetration through the cell envelop	(d) Slow rate of metabolism
16.	Bacillus subtilis is used in assay of which antibiotics	
	(a) Penicillin (b) Cephalosporin	(c) Vancomycin (d) Streptomycin
17.	Which of the following titrations will always have ar	equivalence point at a pH > 7.00
	(a) Weak acid with a weak base	(b) Strong acid with a weak base
	(c) Weak acid with a strong base	(d) None of the above
18.	Inadequate drying during coating of tablet leads to w	hich coating defect
	(a) Chipping (b) Lamination	(c) Mottling (d) Lamination
19.	Match the crude drug with its biological source	
	(1) Pale catechu	(P) Conium naculatum
	(2) Clove	(Q) Cymapsistetragonoloba
	(3) Gaur bean	(R) Uncariagambir
	(4) Hemlock	(S) Syzygiumaromaticum
	(a) 1-Q, 2-P, 3-S, 4-R (b) 1-Q, 2-S, 3-R, 4-P	(c) 1-R, 2-S, 3-Q, 4-P (d) 1-R, 2-S, 3-P, 4-Q
20.	Which of the following plot indicates the effects of a	ntagonist on receptors
	(a) Michaelis-Menten plots	(b) Line weaver burk Plots
	(c) Displacement plots	(d) Schild plots
21.	All of the following statements concerning zero-order	er degradation are true except
	(a) Its rate is independent of the concentration	
	(b) A plot of con Vs time gives a straight line on rea	ctilinear paper and a slope is a rate constant
	(c) Its half-life is a changing parameter	
	(d) Its concentration remains unchanged with respe	ectto time
22.	The liquefaction time of cocoa butter of hydrogenat	ed vegetable oil based suppositories is
	(a) 30-50 min	(b) 30-40 min
	(c) 11-17 min	(d) 3-7 min
23.	Which of the following is most likely to undergo lysi	S
	(a) A cell losing water from its cytoplasm	
	(b) A cell with inact, multilayer peptidoglycan cell w	all
	(c) A cell with disturbed pentaglycine bridges in its	cell wall

(d) A cell a hydrophilic outermost layer in its cell wall



24.	Mat	tch the drugs with the d	isease for which it is pre	escrib	ed		
	(1)	Bedaquline		(P)	Anitdiabetic		
	(2)	Sitagliptin		(Q)	Anitiarrrhythmic		
	(3)	Mexilitine		(R)	Antidipressant		
	(4)	Paraoxitine		(S)	Antituberualr		
	(a)	1-S, 2-P, 3-Q, 4-R		(b)	1-S, 2-P, 3-Q, 4-R		
	(c)	1-Q, 2-P, 3-R, 4-S		(d)	1-R, 2-S, 3-P, 4-Q		
25.	Wh	ich micro-organism use	d in hairy root culture				
	(a)	Agrobact rhiaogens		(b)	A. tumefaciens		
	(c)	N. tabacum		(d)	Solanum chrysotrich	um	
26.	Dek	ayed disintegration in ta	blet is a result of				
	(a)	Large force of compre	ssion	(b)	Small force of comp	ressi	on
	(c)	Higher amount of gran	rule	(d)	Low amount of gran	ule	
27.	Mat	tch drugs with their rece	eptor that they inhibit				
	(1)	5HT _{1A} agonist		(P)	Cisapride		
	(2)	$5\mathrm{HT}_3$ antagonist		(Q)	Ketanserine		
	(3)	5HT _{2A} antagonist		(R)	Ondensetron		
	(4)	5HT ₄ agonist		(S)	Buspiron		
	(a)	1-S, 2-R, 3-Q,4-P		(b)	1-R, 2-S, 3-T, 4-P		
	(c)	1-Q, 2-R, 3-T, 4-Q		(d)	1-T, 2-Q, 3-P, 4-S		
28.	Pass	sive immunity in new bo	orn babies is due to				
	(a)	IgG (b) IgM	(c)	IgE	(d)	IgA
29.	Upp	er consolute temperatu	re and lower consolute t	empe	erature are related to		
	(a)	CMC temp		(b)	Kraft Temp		
	(c)	Cloud temp		(d)	Absolute temp		
30.	Com	rpact size, low weight m	ass instrument is:				
	(a)	EI-TOF		(b)	MALDI-Quadrapole		
	(c)	MALDI-TOF		(d)	Ion-Trap		
31.	A Ph	narmaceutical company	plans to market a generi	c vers	sion of a drug produce	who	se patent has expired
	has	expire (d) Which type o	f documentation must be	e subi	mitted to the FDA		
	(a)	IND		(b)	NDA		
	(c)	ANDA		(d)	SNDA & Letter of inte	ent	
32.			not produce azeotropic	mixt	are with water		
	(a)	Methanol		(b)	Ethanol		
	(c)	Propanol		(d)	Isopropanol		



33.	For a particular durg, the rate of absorption but	not the extent of the absorption of GIT, is affected by							
	presence of food in GIT then taking the drug with	food will result in							
	(a) Smaller area under the plasma drug concentr	ation time curve							
	(b) Smaller maximal plasma drug concentration								
	(c) Smaller time at which the maximal plasma dr	rug concentration occurs							
	(d) Smaller fractional bioavailability and total clea	arance							
34.	According to USP Alcohol contains								
	(a) 94.9 to 96% Ethanol	(b) 94.9 to 96% Methanol							
	(c) 50% Ethanol	(d) 50% Methanol							
35.	What does in mean that a cell is polyploid								
	(a) That is contains more than 2 copies of one o	r a few of its of chromosomes							
	(b) That is contains more than 2 copies of a full	set of homologous chromosomes							
	(c) That is contains more than 2 copies of its sex	chromosome							
	(d) That is contains more than 2 copies of its au	itosomal chromosomes							
36.	Amount of dextrose in large volume infusion fluid	s							
	(a) 5% w/v	(b) 10% w/v							
	(c) 25% w/v	(d) 50% w/v							
37.	Anthelmintics having Immunosuppr	essant activity.							
	(a) Piperazine (b) Levamisole	(c) Ivermectin (d) Niclosamide							
38.	Choose correct statement for PEGylation: http://	/www.xamstudy.com							
	(A) Used to enhance In-vivo half-life of smaller Peptides and proteins								
	(B) Avoidance of Reticulo-endothelial (RES) clearance								
	(C) Reduce clearance rate through kidney								
	(D) All								
39.	Characteristics feature if hemorrhagic dengue fev	rer is							
	(a) Reduction in platelet count	(b) Reduction in RBC count							
	(c) Reduction in coagulation factors	(d) Increased RBC							
40.	The carbonyl starching frequency for simple aldeh	ydes, ketones, and carboxylic acids is about 1710 cm ⁻¹ ,							
	where as the carbonyl stretching frequency for es	sters is about cm ⁻¹							
	(a) 1650 (b) 1700	(c) 1750 (d) 1850							
41.	Plarographic method of analysis to obtain individu	al amounts of Cu^{2+} and Cd^{2+} in a given mixture of the two							
	ions (Cu2+ and Cd2+) is achieved by measuring t	their							
	(a) Half-wave potentials	(b) Migration currents							
	(c) Decomposition potentials	(d) Diffusion currents							
42.	Consider the reaction: $A + B \rightleftharpoons C$								
	The unit of the thermodynamic equilibrium const	tant for the reaction is							
	(a) mol L ⁻¹	(b) L mol ⁻¹							
	(c) mol ² L ⁻²	(d) Dimensionless							



43.		system does	not have orifice to release	the	drug.	
	(a)	Elementary Osmotic F	Pump	(b)	L-OROS	
	(c)	Sandwich Osmotic Pu	ımp Tablet	(d)	Controlled Porosity Osmo	tic Pump Tablet
44.	San	guinarine belongs to t	the subgroup of:			
	(a)	Morphinans		(b)	Benzyl isoquinolines	
	(c)	Phthalide isoquinolin	es	(d)	Benzophenanthrenes	
45.	Ider	ntify the IUPAC of dexa	nmethasone			
	(a)	2-Chloro-6α, 9α-diflu	ioro-11α, 17, 21-trihydroxy	/-16	α-methylpregna-1,4-dien-	3, 20-dione
	(b)	9α -Fluoro- 11β , 17α ,	21-trihydroxy-16β-methylp	oregi	na-1, 4-diene-3, 20-dione	
	(c)	9α -Fluoro- 11β , 17α ,	21-trihydroxy-16β-methylp	oregi	na-1, 4-diene-3, 20-dione	
	(d)	6α-Fluoro-11α, 21-d	ihydroxy-16α-methylpregn	a-1,	4-diene-3. 20-dione	
46.	Tan	noxifen is nonsteroida	l drug acting at steroid rec	epto	r(s) It produces which typ	e of effects
	(P)	Androgen		(Q)	Antiestrogen	
	(R)	Antiprogestogen		(S)	Estrogen	
	(a)	P and Q	(b) Q and S	(c)	Q and R	(d) R and S
47.	Wh	nich enzymes is used b	y the HIV to form DNA in t	he h	ost cell	
	(a)	Restriction endonucle	ease	(b)	DNA-directed polymeras	e only
	(c)	Reverse transcriptate	e only		Both (b)and (c)	
48.	'Sp.	arging' is the process	where			
	(a)	Silanol groups react	with trimethylsilyl group			
	(b)	An inert has is bubb	led through the solvent res	ervo	ir to remove dissolved gas	ses
	(c)	Solvents are mixed to	ogether in a fixed ratio			
	(d)	Column is washed w	ith solvents from nonpolar	to p	olar and reverse	
49.	Мо	rphine does not cause	:			
	(a)	Constriction of pupil		(b)	CNS depression	
	(c)	Respiratory depressi	ion	(d)	Diarrhoea	
50.	Wh	nich of the following is	not recommended in patie	nts v	vith renal insufficiency or	cardiac dysfunction
	(a)	Aloe	(b) Bisacodyl	(c)	Isapghol (d) Ma	agnesium hydroxide
51.	Hig	guchi model is applicab	le to drug that is In	the	formulation	
	(a)	Dissolved in formula	tion	(b)	Dispersed in formulation	Į.
	(c)	Chemically bound to	carrier in formulation	(d)	Osmotically controlled in	the formulation
52.	Wh	nich of the following in	correct about parenteral i	nutri	tion	
	(a)	Parentral nutrition so	olutions are hypertonic sol	utior	nsand IV fluids are isotonic	
	(b)	Parentralnutribtions	olutions and IV preparation	is ar	e isotonic solutions	
	(c)	Parentrtal nutrition s	solutions are hypertonic sol	lutio	ns and IV fluids are isoton	ic
	(d)	Parentral nutrition so	olutions can be supplement	ed w	ith mediacations	



53.	Cyclic AMP (cAMP) is an important second messen	ger i	n signal transduction p	oathway(s)Which enzyme
	catalyzes the generation/accumulation of cAMP after	r a re	eceptor – ligand intera	ction
	(a) Protein kinase A	(b)	cAMP phosphodieste	rase
	(c) Guanylyl cyclase	(d)	Adenylate cyclase	
54.	Which of the following in not include in immunization	on pr	ogramme as per WHO	recommendations for all
	children			
	(a) BCG (b) Oral polio	(c)	Measels	(d) Typhoid
55.	Match the given condition with appropriate drug use	ed fo	r its treatment	
	(1) Pernicious anemia	(P)	Erythropetin	
	(2) Meagaloblastic anemia	(Q)	Oprelvekin	
	(3) Anemia associated with chronic renal failure	(R)	Ratenteral Vitamin B_1	2
	(4) Thrombocypeniadue to cancer chemotherapy	(S)	Folic acid	
	(a) 1-P, 2-Q, 3-R, 4-S (b) 1-R, 2-S, 3-P, 4-Q	(c)	1-R, 2-Q, 3-S, 4-P	(d) 1-R, 2-P, 3-S, 4-Q
56.	In mammals, The major fat in adipose tissue is:			
	(a) Triglyceride	(b)	Cholesterol	
	(c) Sphingophospholipids	(d)	Phospholipids	
57.	Plarographic method of analysis to obtain individual	amoı	unts of Cu ²⁺ and Cd ²⁺ in	a given mixture of the two
	ions (Cu ²⁺ and Cd ²⁺) is achieved by measuring their			
	(a) Half-wave potentials	(b)	Migration currents	
	(c) Decomposition potentials	(d)	Diffusion currents	
58.	What is the objective of trademark			
	(a) To claim exclusive properties of products or ser	vices	ì.	
	(b) To claim innovation of products or services			
	(c) To deal with market place of expressive ideas			
	(d) To protect consumers from being misled			
59.	Turbulent flow is exhibited by fluids whose			
	(a) Re<40' (b) Re>40'	(c)	Re=40	(d) All of the above
60.	Characteristics of drug-protein binding			
	(P) Often parallels drug lipid solubility			
	(Q) Drug-plasma albumin binding tends to be relative	vely r	nonselective	
	(R) Acidic drugs bind to albumin while basic drug b	ind t	o glycoproteins	
	(S) In rheumatoid arthritis patients, increased alph	na1-	acidic glycoprotein tei	nds to promote increased
	lidocaine protein binding			
	(a) P and Q (b) P, Q and R	(c)	P, Q, R and S	(d) P and R
61.	$C = O \ stretchings \ are \ very \ strong \ and \ easily \ observable$	band	ls in IR spectroscopy. H	owever in the IR spectrum
	of glucose C=O absorption band is not seen. Why			
	(a) In glucose, C=O group is not terminal	(b)	In glucose C=O group	is absent
	(c) In glucose, hemiacetal group is present	(d)	In glucose, hemiketal	group is present



62.	What is/are use/s of phenol coefficient							
	(a) Tocompare a disinfectant's killing efficacy to the	at of	phenol					
	(b) To determine the dilution at which the disinfect	ant is	s to be used					
	(c) To determine the purity of disinfectant							
	(d) All of the above							
63.	Arrange the following esters as per decreasing orde	rofi	ate of saponification					
	(I) Ethyl benzoate	(II)	(II) Ethyl p- methoxybenzoate					
	(III) Ethyl p- chlorobenzoate	(IV)	Ethyl p-nitrobenzoate	e				
	(a) I>II>II>IV (b) IV>III>II	(c)	IV>III>I>II	(d) II>IV>I>III				
64.	Which of the following statements about bentonite a	are C	ORRECT					
	(P) Gycerin is used to pre-wet the bentonite prior t	to mi	xing with water to for	m its gel				
	(Q) Aqueous bentonite suspensions retain their vis	cosiț	y above pH 6 but are p	orecipitated by acids				
	(R) MgO increase gel formation while alcohol in sign	nifica	nt amounts can precip	oitate bentonite gel				
	(S) Betonite exhibits rheopexy							
	(a) P and Q (b) Q and R	(c)	P,Q and R	(d) P, Q, R and S				
65.	Acid insoluble ash of a leaf is called as							
	(a) Earthy matter & silica	(b)	Inorganic content					
	(c) Organic Content	(d)	All of the above					
66.	Grape fruit juice is P- glycoprotein and CYP40 enz	yme	inhibitor . if drug X	is degraded by proteolytic				
	enzymes, administration of grapefruit juice with X							
	(a) Increase bioavailability of X	(b)	Decrease Bioavailabil	lity of X				
	(c) Does not affect bioavailability of X	(d)	Cause unexpected ac	tion of X				
67.	Tannins give positive test for all of the following EXC	CEPT						
	(P) Goldebeater skin test	(Q)	Phenazone					
	(R) Biuret test	(S)	FeCl ₃					
	(a) P and Q (b) Q and R		P, Q and R	(d) P,Q and S				
68.	Vigabatrin is a GABA analogue that potentiates action	on of	GABA in the brain bed	cause it				
	(a) Binds to GABA receptor and acts as agonist							
	(b) Inhibits GABA transaminase							
	(c) Blocks NMDA receptor via the glycine binding s	site						
	(d) Inhibits neuronal reuptake of GABA from synap	oses						
69.	Drug that increases systolic B.P. but reduces diastoli	ic B.F).					

(c) Nor Epinephrine

(a) Isoproterenol

(b) Epinephrine



(d) Propranol

70.	Which o	f the following are	chai	racteristics for colloid	mills			
	(P) Due	to centrifugal force	es, t	he mill undergoes per	iodio	cal vibratory movemen	ıt	
	(Q) Part	ticles smaller than	1 μm	can be obtained with	ther	n		
	(R) The	main types of colle	oid n	nills are hammer , turb	ine a	and dial mills		
	(S) The	principle of their	oper	ation is based on the a	abras	sion of particles at high	ı spe	eed
	(a) Only	, P, Q and R are co	rrec	t	(b)	Only P and R are corre	ect	
	(c) Only	y Q and S are corre	ect		(d)	P, Q, R and S are corre	ct	
71.	Inflamat	ion of soft tissue d	ue to	hyaluronidase is call	ed a	5		
	(a) Ten	dinitis			(b)	Bursitis		
	(c) Cell	ulitics			(d)	Cumulative Injury Disc	ordei	(CID)
72.	The hyd	lroxyl derivative of	cym	ene is called as what				
	(P) Thy	200 - 100 -		Carvacrol	(R)	Menthol	(S)	Cumene
	(a) P, Q	, R and S	(b)	P, Q, and R	(c)	P and Q	(d)	Only P
73.	Which	of the following are	e the	correct properties of	ferr	oin? Ferroin is		V . Le
	(P) 1, 1	0-phnathroline			(Q)	A bidentate ligand con	nplex	ζ
	(R) Rec	l in reduced form			(S)	Blue in oxidized form		
	(a) P a	nd Q	(b)	R and S	(c)	P, R and S	(d)	P, Q, R and S
74.	Each of	the following is a	glyco	osaminoglycan dengue	feve	r is		
	(a) Cho	ondroitin and derm	atan		(b)	Heparan and heparin		
	(c) Hya	aluronic acid and k	erat	in	(d)	Keratin and chitin		
75.	If X is a	n equivalent of silv	er de	posited is silver coulo	met	er and Y is an equipme	nt o	f copper deposited in
	copper	coulometer when	cons	stant current is passed	d thr	ough the electrochemic	cal c	ell for the same time
	which o	f the following is c	orre	ct				
	(a) $X =$	Y	(b)	X = 2Y	(c)	X = Y/2	(d)	2X = Y
76.	Which	f the following class	ses o	f medication is the mos	st co	nmon initial treatment	of m	en with symptomatic
	benign	prostatic hypertro _l	ohy ((BPH)				
	(a) Alp	ha-1 agonist	(b)	Alpha-1 blocker	(c)	Beta-1 agonist	(d)	Beta-1 blocker
77.	Which	of the following rea	igent	ts can be used for alka	loid	detection		
	(P) Ma	yer reagent			(Q)	Kedde reagent		
	(R) Dr4	lagendoff reagent			(S)	Alcoholic solution of 2,	4 di	nitrophenylhydrazine
	(a) Onl	y P and Q are corr	ect			Only P and R are corr		
	` '	y P and Rare corre			` '	Only R and S are corr		
78.						s to the shown in /mai		
70				Schedule V		Schedule U		Schedule W
79.						um are correct EXCEP		e.
						in peripheral blood sr		
	1076. 53			1.5		tment because of liver	пур	mozoites
				ultiple infection can be	see	n within single KBC		
	luj Cau	ses more severe d	12Cq?	se in pregnancy				



80.	The chairman of the investi	gational new Drug (IND)	com	mittee in India is	
	(a) Drugs controller Genera	al of India, Government (of In	dia	
	(b) Secetary, Department of	f Health Reasearch, Gove	ernm	ent of India	
	(c) Directorate General of	Health Sciences, Governi	nent	of India	
	(d) Secretary, Department	of Biotechnology, Govern	mer	it of India	
81.	In the filling of container w	hat is the meaning of "ov	erfil	l container"	
	(a) Container filled to its m	inimum capacity	(b)	Container filled to its	maximum capacity
	(c) Empty container		(d)	Cleaned container	
82.	What is the name of floor o	n which production worl	k is c	lone rather than admi	nistration
	(a) Administration area		(b)	Production area	
	(c) Quality control area		(d)	Quarentine Area	
83.	Quinoline contains two bas	ic rings. One of the rings	in q	uinolone. It is attache	d to second ring via o one
	carbon bridge. Which in the	e second ring			
	(a) 8-Azabicyclo [3.2.1] oc	tane	(b)	1-Azabicyclo [2.2.2]	octane
	(c) 1, 4-Diazabicyclo [2.2.2] octane	(d)	Rubane	
84.	Which of the first drugs are	potentiated by the seco	nd		
	(a) Phenytoin - Ethinyloes	tradiol			
	(b) Warfarin - Phenobarb	itone			
	(c) Lithium- Thaazide diur	etics Potentiated due to i	reduc	ced Lithium clearance	
	(d) Bromorcriptine- Metpo	oclopramide			
85.	Which of the following is a	long acting $\beta 2$ agonist	that	can be given by nebu	lization and as well a dry
	powder inhaler for the treat	ment of COPD			
	(a) Foramterol (b) Albuterol	(c)	Pulmicort	(d) Fluticasone
86.	Which anticholinergic drug	mostly used as anti Parl	kinso	n drug	
	(a) Procyclidin (b) Methinicol	(c)	Tacrin	(d) Atropine
87.	To create successful new p	product, a company und	ersta	nds consumers, mark	cets, and competitors and
	develop a/an				
	(a) Impressive advertising	campaign	(b)	Strong wed site to pu	ish the product
	(c) Aggressive marketing s	strategy	(d)	Product that satisties	s consumers' needs
88.	Which of the following met	hod is an example of facil	litate	ed diffusion?	
	(a) Passive diffusion		(b)	Endocytosis	
	(c) Carrier mediated diffus			Active transport	
89.	Which of the following cau	ses arterial and bronchia			aggregation
	(a) Prostaglandin E ₂		(b)	Prostaglanding A ₂	
	(c) Prostaglandin D ₂	999 AV AS	(d)	Thromboxane A ₂	
90.	What is mechanism of action		. 22		
	(a) Inhibition of GABA tra			Blockade of sodium	
	(c) Blockade of glutamate	receptor	(d)	Blockade of GABA re	eceptors



91.	Passive diffusion follows which order of kinetics								
	(a) Non selective and mixed order	(b)	Selective and first ord	er					
	(c) Non selective and first order	(d)	Selective and mixed o	rder					
92.	Conc v/s time curve drown from single oral dose, wh	hich	parameter can be calcu	late	d				
	(a) Elimination constant (b) Rate constant	(c)	Absorption peak	(d)	Plasma conc.				
93.	If a basic drug reabsorbed significantly from kidney	whic	h of the following state	emei	nt will be correct				
	(a) Its renal clearance increases in basic urine	(b)	Its renal clearance dec	creas	ses in basic urine				
	(c) Its renal clearance increases in acidic urine	(d)	Its renal clearance dec	creas	ses in acidic urine				
94.	o, m, p- isomers can be differentiated on the basis o	f:							
	(a) Chemical shift	(b)	Coupling constant						
	(c) Extinction coefficient	(d)	Dipole moment						
95.	Monitoring of plasma drug concentration is required	ł whi	le using:						
	(a) Antihypertensive drugs	(b)	Levodopa						
	(c) Lithium carbonate	(d)	MAO inhibitors						
96.	Bacterial endotoxin are mainly detected by								
	(a) Pyrogen test (b) LAL test	(c)	Thermal test	(d)	Bacterial tes				
97.	The shelf life of a medicine is defined as:								
	(a) Time required for 10% degradation of drug								
	(b) Time required for 50% degradation of drug								
	(c) Time required for 90% degradation of drug								
	(d) Time required for 100% degradation of drug								
98.	In which rearrangement reaction, Isocyanate is form	ned?							
	(a) Curtious (b) Lossen	(c)	Both A & B	(d)	None				
99.	Chitin gets converted in to Chitosan upon:								
	(a) Acetylation	(b)	Deacetylation						
	(c) Oxidation	(d)	Reduction						
100.	Efficiency of drug is checked in modest population in	1							
	(a) Clinical trail-phase1	(b)	Clinical trail-phase2						
	(c) Clinical trail-phase3	(d)	Clinical trail-phase4						
101.	The mixed gland of our body which secrets both hor	mon	es and digestive enzyr	ne, s	o pancreatic enzyme				
	digest which substances								
	(a) Lipids, Protein, Carbohydrate but not Nucleic ac	id							
	(b) Protein, Carbohydrate, Nucleic acid but not Lipid	ds,							
	(c) Carbohydrate, Lipids, nucleic acid but not Protei	in							
102.	In which type of bacteria the cell wall is thicker								
	(a) Gram +ve (b) Gram -ve	(c)	Both	(d)	None				
103.	Out of the following anti cancer drug cardio toxicity	is se	en in						
	(a) Mitomycin-C (b) Doxorubicin	(c)	Methotraxate	(d)	Cyclophosphamide				
104.	Which of the following free radical is most dangerou	us fre	e radical						
	(a) O ⁻ (b) H ⁺	(c)	H_2O_2	(d)	Superoxide				



105. The	e phosphate of a metal	has the formula MHPO4. T	he fo	ormula of its Bromide v	vouk	l be:
(a)	MBr	(b) MBr2	(c)	MBr3	(d)	MBr4
106. Sili	cone based adhesive u	sed in TDDS possess follov	ving	properties:		
(a)	Chemical and biologic	cal inertness	(b)	Low toxicity		
(c)	Low sensitization and	d irritation	(d)	All		
107. Sch	leuniger tester is used	for the tablets to measure:				
(a)	Roughness	(b) Hardness	(c)	Dissolution	(d)	Friability
108. Cre	atinine clearance is us	ed as a measurement of:				
(a)	Passive renal absorpt	tion	(b)	Glomerular filtration	ate	
(c)	Renal excretion rate		(d)	All		
109. 1-[2	2-[(2-chloro thienly)m	ethoxy]-2-(2,4-dichlorophe	nyl)	ethyl]-1Iimidazole is:		
(a)	Oxiconazole		(b)	Sulconazole		
(c)	Tioconazole		(d)	Miconazole		
110. The	e drug of choice in pro	longed febrile convulsions i	s:			
(a)	Carbamazepine	(b) Diazepam	(c)	Phenytoin	(d)	Paracetamol
111. Geo	ometrical isomerism is	possible in case of:				
(a)	2-Pentene	(b) Pentane	(c)	Propene	(d)	Ethene
112. The	e loading dose (DL) of a	a drug is usually based on t	the:			
(a)	Total body clearance	of the drug				
(b)	Percentage of drug bo	ound to plasma proteins				
(c)	Fraction of drug excr	eted unchanged in the uri	ne			
(d)	Apparent volume of c	listribution & desired drug	cond	centration in plasma		
113. Bio	logically active arachid	onic acid is http://www.xa	ımstu	idy.com		
(a)	All transeicosatetraen	ioic acid	(b)	All cis eicosatetraeno	ic ac	id
(c)	All transeicosatrienoi	c acid	(d)	All cis eicosatrienoic a	acid	
114. Ant	idiabetic action of glib	uridestart at molecular leve	l by	which mechanism		
(a)	Phosphorylation of re	eceptor	(b)	Binding to potassium	ion.	S
(c)	Decrease in potassiur	n effiux	(d)	Increase in potassium	effi	ux
115. Mo	mordica charantia hav	ing blood sugar lowering a	ctivi	ty due to:		
(a)	Momordicin	(b) Charantin	(c)	Momortin	(d)	Charantiamarin
116. Ins	ulin stimulates glucose	transport by promoting th	ne tra	anslocation of:		
(a)	GLUT 4		(b)	GLUT 2 & GLUT 4		
(c)	GLUT 1 & GLUT 4		(d)	GLUT 2		
117. Ora	ıl rehydration salt cont	ains ionic electrolytes in co	ncer	ntration mmlo/L		
(a)	Na ⁺ 20, K ⁺ 10	(b) Na+ 40, K+ 20	(c)	Na ⁺ 53, K ⁺ 40	(d)	Na ⁺ 60, K ⁺ 20
118. Լո բ	oinacol – pinacolone re	arrangement, the final pro	duct	is ketone. What is the	start	ing compound for the
rea	rrangement					
(a)	1, 1-diol	(b) 1, 2-diol	(c)	1, 3-diol	(d)	Geminal diol



- 119. Which of the following method is useful for measuring the number of viable cells in a culture
 - (a) Plate count technique

(b) Dry weight method

(c) Petroff-Hauser counter

- (d) Light scattering in a spectrophotometer
- 120. Seeding involves the spread of cancer cells to
 - (a) Blood vessels

- (b) Serious membranes of body cavities
- (c) Fascia surrounding muscles and bones
- (d) Dermis and subcutamneum of the skin
- 121. Barbiturates are being replaced by hypnotic benzodiazepines because of
 - (a) Low therapeutic index

- (b) Suppression in REM sleep
- (c) High potential of physical dependence, abuse
- (d) All of the above
- 122. Adverse drug Event reporting in the responsibility of all of the following EXCEPT
 - (a) Pharmacist and physician

(b) Manufacturer

(c) Consumer

- (d) Regulatory authorities
- 123. Time dependent dilatant behavior is knows as
 - (a) Thixotrophy
- (b) Rheopexy
- (c) Rheomalaxis
- (d) Plastic

- 124. Chairman of DTAB is:
 - (a) Health minister of India

(b) Director general of Health services

(c) Drug controller of India

(d) President of AICTE

- 125. Plasmodesmata is:
 - (a) Lignified element

- (b) Vascular element
- (c) Very fine protoplasmic thread
- (d) None

End of paper

ANSWER KEY GPAT 2015

1-c	2-b	3-c	4-b	5-b	6-c	7-a	8-b	9-a	10-d
11-b	12-c	13-a	14-c	15-c	16-d	17-c	18-a	19-с	20-d
21-d	22-d	23-d	24-a	25-a	26-a	27-a	28-a	29-a	30-b
31-с	32-c	33-b	34-a	35-b	36-a	37-b	38-d	39-a	40-c
41-d	42-d	43-d	44-b	45-b	46-b	47-c	48-b	49-d	50-d
51-b	52-a	53-d	54-a	55-b	56-a	57-d	58-c	59-b	60-c
61-c	62-a	63-c	64-c	65-a	66-b	67-d	68-b	69-a	70-с
71-c	72-с	73-d	74-d	75-a	76-b	77-b	78-с	79-b	80-a
81-b	82-b	83-b	84-c	85-a	86-a	87-c	88-c	89-d	90-b
91-a	92-b	93-b	94-b	95-c	96-b	97-a	98-с	99-b	100-b
101-a	102-a	103-b	104-d	105-b	106-d	107-b	108-b	109-с	110-b
111-a	112-d	113-b	114-c	115-b	116-с	117-d	118-b	119-a	120-b
121-d	122-d	123-b	124-b	125-d					

