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Booklet Series

Α	
11	

Register	
Number	

### 2009

## PHARMACY / PHARMACEUTICAL SCIENCES

Time Altowed : 3 Hours | [ Maximum Marks : 300

Read the following instructions carefully before you begin to answer the questions.

#### **DIPORTANT INSTRUCTIONS**

- This Booklet has a cover ( this page ) which should not be opened till the invigilator gives signal
  to open it at the commencement of the examination. As soon as the signal is received you should
  tour the right side of the booklet cover carefully to open the booklet. Then proceed to answer the
  questions.
- This Question Booklet contains 200 questions.
- Answer All questions.
- 4. All questions carry equal marks.
- 5. The Test Booklet is printed in four series e.g. A D C or D See Top left side of this page). The candidate has to indicate in the space provided in the Answer Shert the series of the booklet. For example, if the randidate gets A series booklet, he/she has to indicate in the side 2 of the Asswer Sheet with Blue or Black ink Ball point pen as follows:

# A BICILDI

- You must write your Register Number in the space provided on the top right side of this page. Do
  not write anything else on the Question Booklet.
- 7. An Answer Sheet will be supplied to you separately by the lavightor to mark the answers. You must write your Name. Register No. and other particulars on side 1 of the Answer Sheet provided, latting which your Answer Sheet will not be evaluated.
- 8. You will also encode your Register Number. Subject Code etc., with Illue or Black ink Balt point peo in the space provided on the side 2 of the Answer Sheet, if you do not encode properly or fail to encode the above information, your Answer Sheet will not be evaluated.
- B. Each question comprises four responses (A). (B), (C) and (D). You are to select ONLY ONE correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, others ONLY ONE response for each question. Your total marks will depend on the number of correct responses marked by you in the Ariswer Sheet.
- 10. In the Answer Sheet there are four brackets | A | | B | | C | and | D | against each question. To answer the questions you are to mark with Hall point per ONLY ONE bracket of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong, e.g. If for any item, (B) is the correct answer, you have to mark as follows:

### $\{A\} = \{C\} \{D\}$

- 1). You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is
- Padure to comply with any of the above instructions will render you liable to such action or penalty se the Commission may decide at their discretion
- 13. Do not tick-mark or mark the answers in the Question Booklet.

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HIP8

L. Which of the following trademarked sustained release systems are based on encapsulated drug particles that will dissolve at various rates?

- L Sequels:
- 11. **Spansules**
- III. Extentabs.

Of these

ΑÌ I only

III only B)

CI. I and II D١ l. II and III.

2. Compartmental models are often used to illustrate the various principles of pharmacokinetics. A compartment is best defined as

- A) any anatomic entity that is capable of absorbing drug
- ы a kinetically distinguishable pool of drug
- C) specific body organs in desues that can be assayed for drug
- D) any body fluid such as blood in urine that may contain drug.

Э. Dimethyl sulphoxide is commonly used as an excipient in transdermal patches. aa

- ΑÌ adhesive.
- B) permeation enhancer of lipophilic drugs
- C) permeation enhancer of hydrophilic drugs
- release liner. D١

Idea! conditions for effective transdermal drug delivery would include molecular. weight of ...... and pH of ...... for the saturated aqueous solution of the drug.

A) 500 Da. 1 – 5

B) > 500 Da, 1 - 5

CI. 500 Da, 5 − 9

> 500 Da. 5 + 9. D)

5. All of the following drugs are believed to undergo significant first-pass hepatic biotransformation, except

A) phenytola B lidocarne

a morphine D) nitroglycerine.

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HTPS 4

- Agglomeration in aerosols can be reduced by including
  - Al anionic surfactants with HLB greater than 10
  - Bl cationic surfactants with HLB less than 10
  - C) non-ionic surfactants with HLB greater than 10
  - D) non-tonic surfactants with HLB less than 10.
- 7. In a suspension, open network aggregate or floccule tends to
  - All settle quickly and cannot be easily redispersed
  - B) settle slowly and can be easily redispersed
  - C) settle quickly and can be easily redispersed
  - settle slowly and cannot be easily redispersed.
- 8. The particle size range of nano-particles is
  - A) Inm 1 pm

B) 1 nm — 1000 nm

C) 1nm — 100 nm

- D) 0.5 μm 1 nm.
- Transdermal drug delivery systems contain drugs meant for
  - A) local action

B) systemic action.

C) both (A) and (B)

- D) none of these.
- 10. Which one of the following per oral dosage forms is likely to exhibit the longest lag time?
  - A) Delayed release tablet
- B) Elixir

C Enteric coated tablet

- D) Sustained release capsule.
- The equation that describes the process of 'Passive Transport' is
  - A Noyes-Whitney equation
- B) Stokes law

C) Fick's law

- D) Hofmetster rule.
- 12. The gelatin used in the manufacture of capsules is obtained from collagenous material by
  - A) hydrolysis.

B) decarboxviation

C) acctylation.

D) conjugation.

x 801

5 HIPS 13. Opalux Is A) colour concentrate for fluidized bed coating ВI colour concentrate for film coating CI. complete colour concentrate for enteric coating  $\mathbf{D}$ colour concentrate for sugar coating. 14. Creams are Αb emulsions B) gels D١ C) jellies. magmas. Dissolution tests for tablets are done to measure indirectly 15. bloavallability Αì hardness Bl friability)  $\Box$ CI. solubility. Trichloromonofluoromethane is numerically designated as Αl 12 11 C) 114 Sealing in sugar coating is done Αl to release drug in the intestine to sustain release of the drug B) C) to round the edges of tablet core to prevent moisture penetration into tablet core.  $\mathbf{D}$ 18. ..... is used to remove the Pyrogen during the preparation of water for injection. Condenser Membrane filter B١ A Cl Still head D١ Filter head. The type of official eye ointment base is 19. A) hydrocarbon Bì absorption

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C)

08

 $\mathbf{D}\mathbf{I}$ 

water soluble.

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water miscible

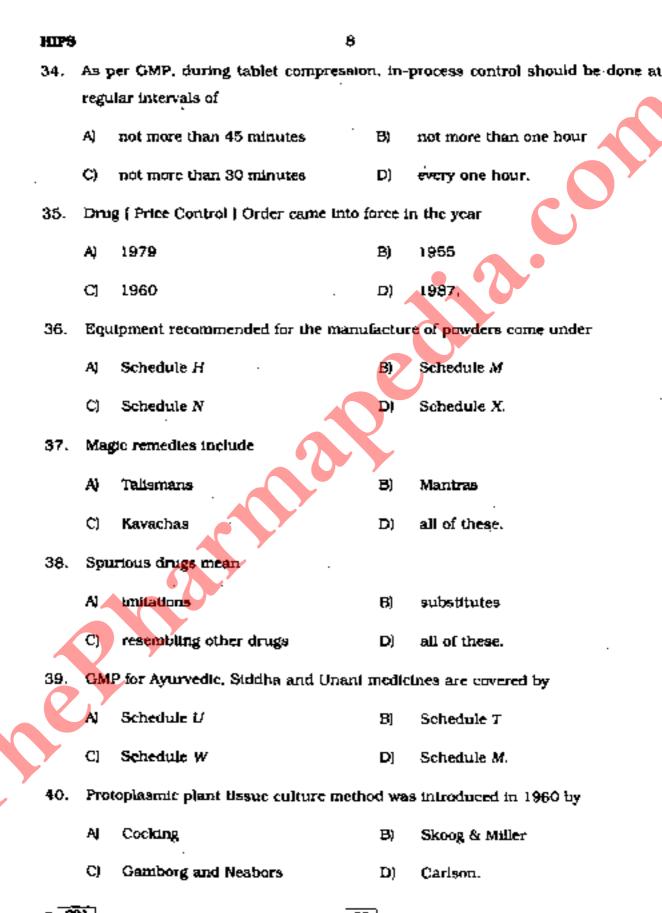
HIP8		6		
20.		nteral product with an osmotic profide solution is referred to as	easure	less than that of 0.9% w/v sodium
	A)	tsotonic solution	B)	hypertonic solution
	C)	hypotonic solution	DI	iso-osmotic solution.
21.	White	ch of the following is not a super-d	lsinteg	rant?
	A)	Microcrystalline cellulose	B)	Sodium starch glycolate
	C)	Croscarmelosc	D)	Crosporidone.
22.	Тего	ninally sterilized products are		
	A)	those that are sensitive to heat an	d gam	ma bradiation
	B)	those that can be sterilized after if	lling a	nd sealing
	C)	those products that can be autocl	aved	
	D)	usually suspensions of powders.		
23.	Slug	ging is also called as		
	A)	dry granulation	B)	wel granulation
	<b>C)</b>	bulk production	(O	direct compression.
24.	Pino	cytosis is known as		
	Ą	vestcular transport	B)	engulfment of amall solutes
	C)	engulfment of larger particles	D)	absorption phenomena.
25.	List	of the substances that are re	quired	to be used only under medical
	sup	ervision and which are labelled acc	cording	gly is / are
	AJ	R	B)	G
	C	<b>/</b> P	D)	C and C ,.
26.		abbahment(s) which has/have a qu g is / are	alified	I person engaged in compounding of
	A	Drug store	134	Chemists and druggists
	C)	Pharmacy	D)	none of these.
x <u>90</u>	)1		н	

HIP8 Licence for wholesale of drugs specified in the schedule C and C. is issued in Fonit · . A) 20-A B١ 20-B C) 21.B DΙ 22-A. The left hand top corner of the label of schedule X bulk drugs contains symbol. 28. Bì RMPΑl  $R_{x}$ C) х Dι  $x_{x}$ 29. In constitution of State Pharmacy Councils total number of Registered Pharmacists to be elected is A) five . B) six D) C) seven four. 30. The Drugs and Cosmetics Rules were passed in the year of A) 1945 1947 C11944 1946. How many representatives are nominated by the Central Government to Drug 31. Consultative Committee ? A) 1 B 2 C) 3 D) 4. The sample taken by the Drug Inspector from the retail premises should be 32. divided into 4 parts A) B) 3 parte C) 2 parts D) 5 parts. 33. As per CMP, change rooms to the aseptic areas of sterile product manufacturing area should be clearly demarcated into the following rooms, except A) Black room B) Blue room Ç) Grey room: D) White room.

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		9		HIP6
41.		sugar concentration of molasses us uld be	ed in	the production of industrial alcohol
	A)	10% to 18%	B)	4% to 8%
	C)	15% to 25%	D)	20% to 30%.
42.	The	fibrin clot produced when thrombir	រ 1១ រាប្រ	xed with
	A	âbrinogen	<b>B</b> )	fibrin foam
	C)	dried human serum	D)	citrate-saline.
43,	Éxa	toxin producing bacteria are		
	Ą	Salmonella typhi	B)	Vibrio cholerae
	C)	Clostrictium tetani	D)	Pasteurella pestts.
44.	ГоЦ	owing are the carbon sources us	sed ir	the fermentative production of
	L-gl	utamic scid. except		
	A)	n-paralitn	)	acetic acid
	.C)	ethanol	D)	propylene glycol.
45.	Amo	ong the proteins present in horse se	rum, i	antitoxins ( diphtheria ) are largely
	8886	oclated with		
	A)	gamma globulins	B)	beta globuline
	C)	alburnina	D}	all of these.
46.	Sma	all bench femmentors are made up of	·····	material
	A)	ștainless steel	비	horosilicate glass
	C}	plastic	D)	all of these.
47.	Bloi	eactor is the instrument used for gr	owing	
	A)	bacterial cells	ы	insect cells
	c)	mammaltan cells	D)	both (B) and (C).

(Turn over

CO.

x 901

HIP5	•	10		
48.		nsfer of geneue material from one l teriophage is called	bacter	ium to another bacterium throu
	AJ	Transduction	B)	Conjugation
	C)	Transformation	D)	all of these.
49.	Mac	roglobulin is		
	A)	Ig M	B)	Ig A
	C)	lg D	D)	lg E.
50.	Sch	ick test is performed for testing the	Indiv	idual for the presence of
	A)	Polio	B)	Prieumonia
	CJ	Diphtheria	D)	Tuberculosis.
51.	The	target site on DNA for Barn HI ende	onucle	ase la
	A)	G L GATCC	B)	G ↓ AATTC .
	C)	ee ↑ ec	D)	A ↓ AGCTT.
52.	Qua	ality control of vaccines is carried or	at by .	studies.
	ΑĮ	tn otoo	B)	In ultro
	C)	in vivo and in vilro	D)	neither in vivo nor in vitro.
53.	Wh	ooping cough vaccine employs killed	i cell (	of
	Al	Bordelella pertussis	B]	Pseudomonas aeruginosa
	C)	Vibrio cholerae	DI	Salmonella typhii.
54.	Wh	ich one of the following is the suital	ble sit	e of self-injection of interferons ?
	A)	Subcutaneous	B)	Abdomen
<b>Y</b> .	C)	Legs	D)	Finger.
55.	A 5	ignificant number of antibodies now	յո ու	e belongs to immunoglobulin,
	Ą	lg G	BI	Ig H
	C)	lg M	D]	lg I,
r 😿	01	[OK	<del>a</del> 1	

HIP9

12

The first pharmaceutical product to be produced by mammalian cell culture is

A tPA. ы tRNA

C) tDNA

tG H . D)

India is the ...... country in the world to develop an indigenous Hepatitis-B vaccine.

2nd Λ

B) 3rd

C) 4th D) 5th.

65. Extinction E ≠

Εŀ

C)  $I_1 / I_0$ 

Dì

The stationary phase in Thin-Layer Chromatography (TLC) is

- A adsorbent.
- liquid held between glass plate and adsorbent
- glass plate C)
- none of these.

The wave number to defined as 67.

- number of waves per unit of length A)
- number of waves per unit of metre B)
- C) number of waves per cm
- number of waves per unit of width.

The quality assurance personnel responsibilities does not include:

- A) maintaining copies of approved study plans
- preparation of SOP B)
- O inspection of final reports to confirm methods and procedures
- D) issue of product development plan.

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69.	The	e constituents of Karl Fischer reagen	ıt are	:			
	A	$\mathrm{SO}_3$ , solution of lodine, anhydrou	а руг	ridine, «	thanol		
	B)	$\mathrm{SO}_{2}$ , solution of iodine, anhydrou	ıs pyr	ndine, a	acetone		
	C)	SO $_3$ , solution of todine, anhydrou	в рут	ridine.	inhydrous	methanol	
	D).	$\mathrm{SO}_2$ , solution of todine, anhydrou	в рут	ndine, (	unhydrous	methanol.	
70.		electron capture detector, mpounds of high electron affinity.	•	may t	e used a	s a cernler	gan for
	A)	Nitrogen	B)	Argo	1	7	
•	C)	Hydrogen	D)	Carto	on dioxide		
71.	Wh	nich of the following statements abou	t <b>IS</b> O	is inco	rrect ?	-	
	A)	ISO certifies organisations which a	гррђу	for 180	9001 cor	npliance.	
	B)	150 9000 is not a prescriptive star	ıdard	for gu	ality.	٠.	
	C)	ISO 9000 is a process oriented rat	her ti	han res	ult orient	ed standard.	
	D)	ISO 9000 does not provide industr	гу арс	ecific p	aformanc	e tédritemes	nts.
<b>72</b> .	The	e composition of the Bartum sulp	hatc	reagen	t used in	the limit t	est for
	şulj	lphates is					
	A)	Bartum sulphate, Sulphate free alc	ohal	and Fe	поив виф	hate	
	HI	Bartum chloride, alcohol and Potas	sium	chloric	le		
	CI	Bartum sulphate, alcohol and Pota	ssiun	n chlori	de		
	D)	Barium chieride. Sulphate free alco	ono) e	and Pot	assium su	ilphate.	
73.	Kat	tharometera & Bolometera are differe	ant ty	rpes of			

09 [ Turn over

B)

D}

detectors

recorders.

monochromators

rmation for molecular structur
Tame a saw IB
ery near IR.
perty of elute ?
Diode array detectors
MT.
lame Photometry
ll of these.
resacd in
arts per million
ertz.
hich reactant gas is most widely
leon
Dxygen.
imetry, the sensitivity can b
and at 1020 cm <sup>- 1</sup> indicates th
Amide - C = O
Hydroxyl group.

<b>\$</b> 1.	Asp	er the GLP, full calibration of spect	ropho	tometers should be done
	A)	once a day	8)	onec a month
	C)	every quarter	D)	half-yearly.
82.	The	closeness of the results obtained by	the p	procedure to the true value is
	A)	linearity	B)	precision
	C)	accuracy	D)	sensitivity.
83.	Whi	ch of the following contains a chron	opho	re ?
	Αŀ	Ethylene	B]	Ethane .
	Cl	Both (A) and (B)	D)	None of these.
84.	The	presence of which of the following	group	s increases fluorescence intensity?
	A)	Amirio group	Đ)	Nitro group
	C)	Both (A) and (B)	Di	None of these.
85.	The	purple colour formed in the limit te	st for	iron is due to
	Ą	Ferric thioglycolate	BJ	Ferrous thioglycolate
	C)	Ferrous glycolate	D)	Ferric glycolate.
86.	$\mathbf{R}_f$	value ranges from		
	A}	0 ta 1	B)	0 to 2
	Ċl	2 to -2	D)	+ 1 to - 1.
87.	In t	he limit test for arsenic the granulat	ed ztn	c and HCl help to
	Αŀ	Increase the sensitivity of the test		
	<b>B</b> )	produce stable colour		
	C	provide an acid medium		
M	D	reduce the arsenic or arsenious ac	id to a	arsine.
88.		he limit test for sulphates, the alcoh	nol in	the Barium sulphate reagent helps
	ta.			
	A)	increase the solubility	D)	prevent ppt of impurities
	C)	clarify the solution	D)	prevent super-saturation.
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HIP9		16		
° <b>89</b> .		volume of carrier gas required to e an is expr <b>es</b> sed as	lute o	me half of the compound from the
	A)	Retention time	B)	$R_f$ value
	C)	R <sub>X</sub> value	D)	Retention volume.
90.	In IE	t spectrum, the functional group reg	tion is	
	A)	4000 cm <sup>-1</sup> to 900 cm <sup>-1</sup>	Bŧ	4000 cm <sup>-1</sup> to 1400 cm <sup>-1</sup>
	C)	1400 cm <sup>-1</sup> to 900 cm <sup>-1</sup>	D)	4000 cm <sup>-1</sup> to 660 cm .
91.		ample is withdrawn or seized from ed. The payment of fair price of the		
	A)	ts made to the drug store owner		
	B)	le not made		
	C)	is made to the drug store owner a	ınd in	case of refusal a Form is filled up
		with a receipt		
	D)	the drug store owner must be insi-	sted t	o give it free of cost.
92.	Dru	gs Technical Advisory Board ( DT.	AB )-	Allopathy consists of 18 members
	whe	reas DTAB-Ayurvedic, Siddha and l	Jnani	drugs consists of
	A)	16 members	B)	20 members
	C)	15 members	D)	none of these.
<del>9</del> 3.		list of disease for which advertises sultation with	nent t	panned or prohibited is finalised in
	AJ	Drugs Technical Advisory Board		
	Ð	Drugs Testing Laboratory		
	a	Central Drugs Laboratory		
	D)	None of these.		
94.	Whi	ch one of the following is not the wi	ng of	Drugs and Cosmettes Act ?

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Administrative wing

Advisory wing

Education and Pharmacy wing.

Analytical wing

B)

D)

95.	Gudakhu is a tobacco product used for rubbing against human teeth, contains tobacco powder, time and molasses along with red mineral matter. Within the						
1		provision of D & C Act it is					
	A)	cosmetic	B)	food			
	C)	drug	Dj	none of these.	4		
96.	Sch	edule M incorporating GMP ( Gr	ood Manui	facturing Practices ) was introduced			
	in						
	A)	1987	B)	1986			
	C)	1989	D)	1990.			
97,	in ti	he Drugs ( Price Control ) Order	r, 1995 th	e first schedule consists of			
	A)	list of books	<b>B</b> ).	list of bulk drugs			
	C)	list of formulations	D)	none of these.			
98.	The	First Schedule of Drugs and Co	osmetics A	ct. 1940 comprises			
	A)	the list of books of references t	for Ayurve	dic, Siddha and Unani medicines			
	B)	list of Pharmacy books					
	C)	list of Homeopathic books					
	D)	none of these.					
<b>9</b> 9.	Bau	ch Processing Records ( BPR ) si	nould cont	ain the following details, except			
	A)	Analytical control number		·			
	Bļ.	Raw material manufacturers' d	ذلها		-		
	C]	Batch number					
4	(II)	Date of commencement of open	ration.				
100.	The	Head Office of Drugs Technical	Advisory	Board is at			
	A)	New Deltd	B)	Kolkata			
	CJ.	Mumbai	D)	Chennal.			
z 90	1		49	Turn over			

HIP8

18

101. The antiarrhythmic drug quinidine is

- A) (+) stereotsomer of quinine
- B) (-) stereotsomer of quinine
- C) {+} racemic mixture of quinine
- Dl none of these.

102. The IUPAC nomenclature of Piroxicam is

- A) 2H-1, 2-benzothiazine-3-carboxamide, 4 hydroxy 2-methyl-N-pyridinyl-, 1, 1-dioxide
- B) 2-naphthalene acetic acid, (+) 6 methoxy-a-methyl
- C) Benzene acetic acid (±) α-methyl-4-(2-methyl propyl)
- D) Benzoic acid. 2-! (2, 6-dichloro-3- methy phenyl) amino |

103. Prazepam differs in structure from Diazepam by

Al N-methyl group

- B) N-propyl group
- C) N-cyclo propyl methyl group
- D) N-cyclo propyl group.

104. Some psychoactive phenothicaines listed below have the following side chains at position 10, which are given in 1 to 4. Match them correctly:

a) Chlorpromazine

- 3-[4 methyl piperazinel-yl] propyl
- b) Prochlomerazine
- 3. (1 methy) piperide 2-yl) ethyl.

c) Thioridazine

- 3-|4- (2 hydroxy ethyl.)
   ptperazine 1-V | propyl
- d) Perphenazine 4. Dimethyl aminopropyl.

Codes:

- a b c d
- AJ 4 1 2 3
- 명 1 2 1 3
- C1 2 3 4 2
- D) 3 4 3 1.

108 x

٠

HIPS

105.	i. From the given pairs of diuretics in which pair both the drugs do not require the presence of aldosterone to produce diuresia?				
	A)	Mannitol and Spiranolactone			
	B) ·	Spiranolactone and Triamterene			
	C)	Triamterene and Amiloride			
	D)	Spiranolactone and Amiloride.			
106.	The	diuretic that is natriuretic, chlorure	tic. sa	luretic and antikaliuretic, is	
	A)	Spiranolactone .	B)	Furosemide	
	Cl	Ethacrynic acid	D)	Acctazolamide.	
107.		he given pairs of antihistamines, t histamines is	he pa	ir in which both are. 'dual-acting'	
	Ą	Cettrizine and Cromolyn sodium			
	B)	Azelastine and Cetifizine	1		
	CJ	Azelastine and Ketotifon			
	D)	Ketotifen and Cromolyn sodium.			
108.	Diaz	zoxide and Minoxidil can be describe	d aş		
	A)	Potassium channel openers	BJ	Potassium sparing diuretics	
	Cl	Calcium channel blockers	D)	Sodium channel openers.	
109		he lidocaine series of local anaesthe			
	Chai	in up to three carbon units,	1	•	
	A)	Increases	B)	abolishes	
4	디	reduces	D)	does not alter,	
110.	Whi	ch of the following anti-histamines ly ?	does	not cross the blood brain barrier	
	A)	Diphenhydramine	B)	Cyclizine hydrochloride	
	C)	Chlorpheniramine maleate	D)	Cetirizine.	
<b>z</b> 90	Ε;	{ <del>09</del>	]	( Turn over	

HIPS

20

111. The fluorine in Flurazepam is present in

A) 5 position

Εŭ 3 | position

C) 2' position D١ 4 ' position.

Ranitidine contains ...... heterocyclic ring.

Αì Imidazole B) Furan

C) Thiazole DΙ Pyridine.

113. Aspirin can be estimated by

- A) non-aqueous titration
- ы complexometry

acid-base titration. C)

dead-stop end point method. D)

114. Which of the following is anti-cholinergic drug?

Al Carbachol

Phenyl ephrine B)

C) Eucatropine Di Procainamide.

115. Clouding is used in the treatment of the following disorders, except

Al glaucoma Βì hypertension

arrhythmia C)

Ð١ opiate withdrawal syndrome.

NHCH (CH<sub>3</sub>)

116.

is the structure of

CH2 CONH2

Atenolol

뭐 Metoprolol

Acebutolol

D) Timolol.

117. A central carbon atom not directly connected to any H $_2$  and is connected to a tertiary nitrogen through a 2 carbon unit on the other side with relatively small groups on the nitrogen is the pharmacophore of

- A) H, receptor antagonists
- B) Narcotte analgesies

C) Thiazide diuretics Ð١ Butyrophenone antipsychotrics.

4 BOL

118.	Ноп	atropine is a semisynthetic obt	alned i	or s	ynthesised by reacting
	A)	Tropine and Succinic acid	Е	ŋ	Tropine and Malic acid
	C)	Tropine and Fumaric acid	Ē	Þ	Tropine and Mandelic acid.
119.	The	2 '-chloro substituted analogue	of oxe	æερι	am iş
	A)	Lorazepam	E	<b>)</b> )	Diazepam
	C)	Тетняхерат	D	)	Prazepam.
120.	Anal	lgesic with N-Aryl anthranillic at	eld nuc	leus	s is
	A)	Paracetamol	В	ij	Meclofenamic acid
	C)	Phenyl butazone	Ľ	<b>)</b>	Anti-pyrine,
121,	Cho	linergic receptor antagonist exis	ting as	eпa	antiomer is
	A)	Methacholine	В	]	Carbachoi
	C)	Acetyl choline	D	]	Bethanechol.
122.	Тпр	elennamine is used as its			
	A)	Succinate	B		Maleate
	C)	Adipate	D	)	Citrate.
123.	Whi	ch one of the following is not a r	юп-ba	rbitı	urate ?
	A)	Paraldehyde	B)	)	Carbromal
	<b>C</b> ]	Nitrazepam	D	ì	Thiopental Sodium
124.	Cycl	omethycaine sulphate is used it	ı		
	A)	unaesthetic in chemical burns			
	B	skin abrasions			•
	C)	dermatological lesions			
1	DI	all of these.			
125.	Rese	rpine is contraindicated in pati	enta w	ith a	a history of
	A)	Epilepsy	. В	)	Hypertension
	C)	Mental depression	D	)	Schizophrenia.
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HIP8 22 126. Digitalis overdose can be reversed by the administration of A) Phenytoin B) Calcium വ Fab fragments of Digoxin antibody D١ Sodium. 127. Druga causing allergic reactions generally act as Αì Antigen ы Haptens Antibodies  $\mathbf{D}$ C) Mediators. 128. A potent tranquilizer which also exhibits strong hypotensive effect is A Chlordiazepoxide Meprobamate B) C) Reserptine D] Thorazine. Salicylates are metabolised through A) hydroxylation B) oddation conjugation with glucuronic acid D) reduction. 130. Sodium valproate acts by blocking the metabolism of GABA ΑÌ  $\mathbf{B}$ blocking the GABA receptor blocking the conduction of impulses blocking the release of GABA. 131. Atorvastatin should be taken at night after dinner because A) it induces sleep synthesis of cholesterol is maximum during night the patient would be affected by sunlight if taken during daytime. C) of better absorption. D)

132,		Thiocyanate accumulation and the consequent toxicity is a possibility when				
I	exce	excess dose of ts administered.				
i i	A	Minoxidil	<b>B</b> )	Hydralazine		
ļ	C)	Sodium nitroprusside	D)	Cloudine.		
133.	The	specific antidote for Paracetamol po	Isonit	ug is		
<b>!</b>	A)	4-Methyl Pyrrazole	<b>B</b> )	N-Acetyl cysteine		
<u> </u>	<b>C</b> )	Folinic acid	D)	Sodium thiosuiphate.		
134.	Digi	talis produces bradycardia by the fo	llowir	ng mechanisma, except		
į P	A)	reflexly through no dose gangiton				
ŀ	<b>(B</b> )	direct stimulation of vagal centre				
ŧ.	C)	sensitization of SA Node to acetylch	ıoline			
	D)	senettization of SA Node to adrenal	line.			
1 1135.	БЛО	carpine can be used in				
: :	ΑĮ	Asthma	B) .	Coronary insufficiency		
-	C]	Glaucoma	D)	Hyperthyroidism.		
136.	Fluc	oxetine is a / an				
}	A)	5-HT partial agonisi				
: 	B)	anti-histambile				
ļ	C)	inhibitor of 5-HT uptake				
į	D	apecific 5-HT 3 receptor antagonist	t.			
137.	Tole	rance refers to genetically determin	ed ser	sitivity to a drug called as		
	Al	innate tolerance	•			
<u>.</u>	<b>B</b> }	learned tolerance				
į	C).	acute tolerance				
1,	<b>D)</b>	dispositional tolerance.				
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138.	Which one of the following is correctly matched?				
	A)	α-adrenergic antagonist	_	Usinoprii	
	B)	β-adrenergic antagonist	_	Propranolol	
	C)	Arterial vasodilators	_	Clonidine	
	D)	Calcium channel blocker	_	Diazoxide.	
139.	The	movement of drug from a region of	f <b>hig</b> h	drug concentration to a region o	
	low-	drug concentration is referred as			
	A)	facilitated diffusion	B)	pore transport	
	C)	active transport	D)	vesicular transport.	
140.	The	biotransformation reaction involved	in me	etabolism of methyl dopa is	
	ΑĴ	Acetylation	B]	Sulphation	
	C)	N-oxidation	D)	S-oxidation.	
141.	ln (	as(hma/COPD patients, which ty	pe of	antihypertensive drug should be	
	avo	ided ?			
	A)	β-adrenergic blockers	<b>B</b> )	Diuretics	
	C)	Calcium charinel blockers	D)	ACE Inhibitors.	
142.	Dry	iga having hydroxyl or carboxylic aci	d grou	ip can easily conjugate with	
	Αì	aulphate	Bĵ	glyctne	
	C)	acetyl coenzyme-A	DI	glucuronic acid.	
143.	Cole	estipol is a/andrug	<b>§</b> -		
	A)	HMG CoA reductase inhibitor	·B)	activate PPAR-a receptors	
	C)	Bile acid binding agent	D)	heavy metal binding agent.	
144.	Rate	e limiting step in the biosynthesis of	cated	holamines te	
	A)	formation of doparnine	B)	formation of dopa	
	C)	transport of tyrosine	D)	formation of noradrenaline.	
2 90	н	O B			

				<del></del>
145	ACE	inhibitore can cause	. terat	ogenicity.
	A)	Phocomelia	Bj	Hyperplasta
	C)	Phytomelia	DJ	Hypoplasia.
146.	Anu	dote for benzodiazepine overdosage	ls	
	Ą	Flumazenil	B)	Flupenthixol
	C)	Fluphenazine	D)	Fluoxentine.
147.	White	ch of the NSAIDS would be of partic	cular i	use in an arthritic patient who has
	difflo	culty in remembering to take his/he	r med	ication during the day 7
		Parallel and a second	-	
	AJ	Diclofenae sodium	B}	Fenoprofen
	C)	Ibupr0fen	D)	Oscaprozin.
148.	The	type of tissue culture used for the p	produc	ction of root-associated metabolities
		10WTL 89		
			4	
	A)	desue culture	B)	hairy root culture
	C)	two-phase system culture	DJ	all of these.
149.	The	production of secondary metabolites	a ta lir	iked to the
	A)	induction of morphological different	iation	
	B)	topographical changes		•
	C)	environmental changes		
	D]	atmospheric changes.		
150.	The	optimum pH of tissue culture media	a le	
	A	5 + 8	B)	6 - 8
M	CI	5 - 6	Dł	5 - 7.
: 151.	Rote	mical source of cotton is		
131		anter contract or contain to		
	A)	Populus nigra	B)	Gossyptum harbadense
	C)	Linum usitassimum	D]	none of these.

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O-Glycoside, N-Glycoside.

D)

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HIP9 27 158. Adenine and kinetin are collectively called as-Gibberellins A Auxina B) C Cytokinin D١ Zcatin. 159. The ideal way to provide from for a root culture would be to include . in the medium. B)  $\operatorname{Fe}_{A}(\operatorname{SO}_{A})_{S}$ Al FeCl<sub>3</sub> C) fe ELTIA Ð١ 160. Which type of glycoside is present in aloes? A O-Glycostde ÐΙ S-Glycostde C) N-Glycoside C-Glycoside. DΙ 161. Keller-Kiliani is a colour test specific for the identification of A Sugar Molety BJ. Glycoside Motety Deoxy Sugar Molety Both (A) and (B). Dì 162. Which of the following drugs is a patural insecticide? ΑÌ Pyrethrum Tuis( ы  $\mathbb{C}$ **Туюрога** DI Baet. 163. Absorbent cotton dissolves completely with uniform swelling in Al 60% w/w sulphuric acid 90% formic acid B) C) Ammontacal copper oxide Dĭ Ferrous ammonium sulphate. 164. Development of Novel hybrid plant can be achieved with A) organ culture cell-suspension culture: B) CI. callus culture D) protoplast culture.

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FIIP9		28		
165.	The 1	otanical name of Aloes from South	Africa	a ( Cape variety ) is
	Al	Aloe barbadensts	B)	Aloe ferox
	C)	Aloe perryi	D)	Aloe condetabrum.
166.	Сам	sta senna is cultivated in		
	A)	India	<b>B</b> )	Arabta ·
	C)	Somalia	D)	Sudan.
167.	Napi	hthalene glycoside isolated from ser	nna le	aves and pods is
	A)	Sennoside A		
	B)	Rhein-1-glucose		
	C) .	Rhein-8 diglucoside		
	D)	6-hydroxymusizin glucoside.		
168	Follo	owing are the chemical constituents	of Br	ahmi except
	A)	Seponina	<del>B</del> )	Glucosides
	C)	Alkaloid Brahmine	Dj	Herpeştine.
169.	Sem	na conteins		
	Ą	C-glycosidea	B)	O-glycosides
	Cl	S-glycosides	D}	N-glycosides.
170.	Digi	talis leaves should be dried below		
	A	50°C	B)	80°C
	Q	60°C	D)	100°C.
<b>17</b> 1.	Cen	tella asiatica belongs to the family o	ıſ	
	A)	Scrophulariaceae	B	Umbelitierae
	C)	Rosaceae	D)	Araliaceae.
2 <b>(</b> 9	10	O	<u>.                                    </u>	

		. 2	9		HIPS
172.	Holy	hasti is the synonym for			
	ρij	Methi	<b>B</b> )	Gymmema	
	c)	Tulst	D)	Digitalis.	
173.	A pla	acement for storage of products is	3		
	Αį	private warehouse	E)	public warehouse	
	C)	bonded warehouse	D)	all of these.	
174.	White	ch of the following levels of materi	ai cautic	ons against stock-out ?	
	Ą	Reordering level	B)	Minimum level	
	C)	Maximum level	D)	Average stock level.	
175.	Selec	ction of site of a drug store depon	da upon		
	A)	availability of finance	В	existence of hospitals	
	C)	safety	(d	all of these.	
176.	Whic	th of the following is/are objective	(s) of pu	rchasing?	
	A)	Purchase of right quality	5)	Purchase of right quantity	
	C)	Purchase from right source	DI	All of these.	
177.		can be considered as prin	nary son	arces of drug information.	
	A)	Pharmacopocias	BĄ	Journals [ drug based ].	
	CI	Package inserts	D)	Formulartes.	
178.	Inda	pandde is taken preferably in the	morning	g because	
	AJ	exposure to sunlight helps conver	raion to	active metabolite	
	B)	to minumize the effect of increase	d freque	ncy of urination during night	t .
	C)	cholesteroi synthesis is least duri	ng dayt	tme	
	D)	cholesterol synthesis is maximud	i during	dayume.	

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179.		g term storage of which one o 20°C?	f the fol	lowing vaccines demands storage
	A)	DPT	<b>B</b> ]	DŤ
	<b>C</b> ]	Oral polio vaccine	Ď]	TT.
180.	in ir	nmunization parlance, VVM refer	ra to	
	A	Vulnerable Vaccine Method		
	B)	Vulnerable Vaccine Mode		
	C)	Vaccine Vial Monitor		
	D)	Vital Vaccine Method.		
181.	ICH	means		
	A]	International Conference on Har	rmonisati	on
	B)	International Committee on Har	monisati	on
	C]	international Council on Harmo	nisation	
	DI	none of these.	,	
182.	The	dose related adverse reaction is	called a	9
	A]	Type A	B)	Туре В
	C)	Туре С	ומ	Type D.
183.		is available on inte	met thro	ugh the National Library of Medicine
	Į NI	M) home page at www.nkm.nth.	gov.	
	A	BIOSIS	B)	embase
	Cl	MEDLINE	D)	Science Citation Index.
184	. In A	ABC analysis C denotes		
7	A)	average usage value items		
	B)	low usage value items		•
	C)	costly and valuable items		
	D)	fast moving items.		•
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		. 31		KIPS			
185.	The	drugs that show antagonistic effects	មា ភា	ture whereby the sensitivity of the			
	tissues to one drug is altered by another drug, are						
	A)	Trimethoprin and Sulphonamide					
	B)	Acetylcholine and Noradrenaline					
	C)	Digitalia glycosides and Diurettes					
. •	Dì	Warfarin and Phenobarbital.					
186.	The	term used to describe abnormal dra	ıg res	ponse is			
	A)	Hypersensitivity	B)	Idiosyncrasy			
	C)-	Anaphylaida	D)	Teratogenicity.			
187.	Hos	pital pharmacy deals with					
	A)	supply of ancillary products					
	B)	storage of biological products					
	C)	purchase of inventory drugs					
	Dì.	both (A) and (B).					
188.	Dru	g causing direct liver damage is					
	A)	Isoniazid	ßì	Indomethacin			
	C	Phenytoin	D)	Aspirin.			
L <b>8</b> 9.	Milk	and antacida reduce absorption of	letrac	yclines by forming			
	A)	chelation	B)	complexes			
	C)	protein hinder	D)	insoluble complexes			

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32 HIP8

190. Which one of the following statements is matched correctly?

- Drug abuse repeated consumption of a drug A
- use of drugs for the conditions for which they Drug miauac B)

are unsuited

- decreased response to pharmacological drugs Drug addiction
- periodic or chronic intoxication produced by Drug tolerance D١ repeated consumption.

### 191. Medication errors include

- dispensing errors and medication ΑĮ
- B) patient compliance
- exact prescription C)
- D) nane of these.
- 192, Coffee, tea and fruit juiges antagonise the efficacy of .......... antipsychotic drugs
  - A) Thioxantins

Butyrophenones Ð

**Phenothiazines** 

- Sulptride, D)
- 193. The principles of ICH guideline for GCP have their origin in
  - Declaration of Canada
  - Declaration of Helsinki B)
  - Declaration of Austria Ç)
  - Declaration of Australia.

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33 KIPS 194. Phase-I clinical trials are carried out 1. to determine the maximum tolerated dose in humans. 11. to determine the pharmacokinetics and pharmadynamics activity in healthy adult males. III. in healthy adult females. IV. Of these AŁ. I and II Rί II. III and IV C) VI bna III DΙ t. Il and III. 195. A child who swallows an overdose of fluoride containing multivitamin product should be treated with dilute Ca (OH) 2 solution A) acetyl cysteine Bì CI docusate sodium D١ stropine sulphate. 196. Cholestyramine will probably interfere with the Gl absorption of Chlorothiazide ı, Warfarin 11. Ш. Phenobarbital. Of these J only Il and III -BI CL. J. II and III D١ no interference. 197. Drug information sources include all, except ournals Αi Bì drugdex dallies online pharmacy (ournals.) C1 D١ 198. In inventory control the turnover rate is calculated by which of the following formulae ? Annual purchase + Annual inventory 8) Annual purchase x Annual inventory Annual inventory + Annual purchase CI Dì Annual purchase + Annual inventory.

Turn over

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HIP6 34

199. Aluminium hydroxide gel is combined with Magnesjum hydroxide gel in antacid preparations to

- A) ensure synergism
- B) counter the constipating effect of magnesium hydroxide
- C) balance the purgative effect of magnesium hydroxide
- improve the absorption of magnesium hydroxide.

200. Match List I correctly with List II and select your answer using the codes given below :

