NATIONAL UNIVERSITY OF PHARMACY FOREIGN LANGUAGES DEPARTMENT



ENGLISH ITEMS FOR LICENSING EXAMINATION PREPARING TO "KROK 1. PHARMACY"

Kharkiv NPhaU 2019

MINISTRY OF HEALTH IN UKRAINE NATIONAL UNIVERSITY OF PHARMACY FOREIGN LANGUAGES DEPARTMENT

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ENGLISH ITEMS FOR LICENSING EXAMINATION PREPARING TO "KROK 1. PHARMACY"

A SELF – ASSESSMENT PRACTICE TEST - BOOK FOR PHARMACY APPLICANTS

Kharkiv NPhaU 2019

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The self – assessment practice test - book includes test items in analytical chemistry, organic chemistry, physical and colloid chemistry, pathological physiology, biochemistry, pharmaceutical botany, microbiology, pharmacology for applicants in preparing to the licensing integrated examination in English "Krok 1". Pharmacy" and to further use in this learning / teaching.

The self – assessment practice test - book has been developed for pharmacy applicants at the Pharmaceutical University and faculties of Ministry of Health in Ukraine.

The practice test - book is intended for classroom and self - assessment work in study the subject "English in proficiency". It should be useful for applicants in their aducational acvivity.

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PREFACE

Organization of the classwork and self - assessment work of the applicants for higher education is the educational process on the subject "The English in proficiency". The fulfilment and the control of the classwork and the self - assessment work play an important role in the improvement of the teaching process in the University education. The applicants of the University education of full – time and part – time studies require a booklet in the English language for practicing tests to "Krok 1. Pharmacy". The purpose of the current booklet in the English language for practicing tests to "Krok 1. Pharmacy" for applicants is the fulfilment and the control of the English tasks containing vocabulary in the course of the classwork and self - assessment work to take a qualified examination successfully. The self – study practice test - book includes test items in analytical chemistry, organic chemistry, physical and colloid chemistry, pathological physiology, biochemistry, pharmaceutical botany, microbiology, pharmacology for applicants in preparing and use at the licensing integrated examination in English "Krok 1". Pharmacy" and further use in learning / teaching the program material.

A booklet of the English tests will allow applicants to consolidate the studied and fulfiled subject material in the course of the classwork and the self - assessment work by the University applicants.

In the course of the fulfilment of the English tests, containing vocabulary of the mentioned specific subjects the applicants will be able to master the following skills :

- freely and accuracy use professionally oriented vocabulary;
- work quickly and independently on the tests;
- be able to carry out a self control;
- assess himself by using current estimation grade :

Estimation grade

3

$$35 - 37 \text{ points} - 4 \text{ "B"} \text{ level} - \text{good}$$

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30 – 34 points – 4 "C" level – good, but try better
25 – 29 points - 3 "D" level – satisfactory
20 – 24 points - 3 "E" level – passed, but try better
0 - 19 points - 2 "FX" level – didn't pass
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The self – study practice test book has been developed for pharmacy applicants at the Pharmaceutical University and faculties of Ministry of Health in Ukraine.

PART 1

ANALYTICAL CHEMISTRY

Practice

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				vaniani

1. An is a n	nethod of quantitative ana	alysis for determini	ng the concentration of
an acid or base.			
a) back titration	b) acid – base titration	c) direct titration	d) displacement titration
2. An is a c	class of balance designed	to measure small n	nass in the sub-milligram
range.			
a) analytical chem	istry b) analytical analy	vsis c) analytica	determination d)
analytical balance			
3 is an elec	ctrode of the device conne	ected to the positive	e pole of battery.
a) anode	b) cathode c) ele	ctrode d) wi	re
4 is a nonto	oxic or minimally toxic ga	as which reduces or	displaces the
normal oxygen co	ncentration in breathing a	ir.	
a) asphyxiating ga	s b) propan gas c) me	thane gas	d) carbon monoxide
5 occur	s when two reagents are	used - one that rea	cts with the original
sample, and secon	d that reacts with the first	t reagent.	
a) acid – base titra	tion b) back titration	c) direct titration	d) displacement titration
6 is a ge	nerally cylindrical contain	ner with a flat botto	om.
a) bottle	b) test – tube	c) beaker	d) burette
7 is a squee	ze bottle with a nozzle. It	is used to rinse var	rious pieces of laboratory
glasswares.			
a) flask	b) syringe	c) pipette	d) bottle
8 is a grad	luated glass tube with a ta	p at one end for de	livering known volumes
of a liquid, especia	ally in titrations.		
a) burette	b) beaker	c) test – tube	d) bottle

9. Lead Nitrate an	d Sodium Potassiui	m Iodine are	that f	orm a yellow	v precipitate
for Lead Iodine.					
a) gaseous solutio	ns b) solid solu	itions	c) colourless	s solutions	d) liquid
solutions					
10 is a	piece of furniture v	where pharma	aceutical glas	sswares are d	ried.
a) table	b) dissicator	c) sca	les	d) items	
11 is a phar	maceutical item for	storage of di	stilled water	, solutions.	
a) bottle	b) flask	c) pip	ette	d) beaker	
12 is a for	m of volumetric an	alysis in whi	ch the forma	tion of a colo	oured
complex is used to	o indicate the end p	oint of a titra	tion.		
a) complex formation	tion titration b) di	rect titration	c) bac	ck titration	d)
displacement titra	tion				
13 is a st	trong, red colour, in	clining to pu	rple.		
a) green colour	b) black colour	c) yel	low colour	d) cri	mson colour
14 is a way	y to determine the c	contents of a	substance qu	antitatively.	
a) direct titration	b) back titration	c) complex	formation tit	ration d) dis	placement
titration					
15 is a sec	cond titration for me	etal ions that	do not have	a good indicate	ator.
a) direct titration b) complex formation titration c) displacement titration d)					
back titration					
16. Red crystals so	o – called 1	have the temp	perature of m	elting of 316	6 degrees
above zero.					
a) fluorescein	b) eosine	c) current	d) col	umn	
17 is a piece of laboratory glassware used for the evaporation of solutions.					
a) condenser	b) glass evaporation	ng dish	c) dissicator	d) fla	sk
18 are mad	e of glass. They are	used to tran	ısfer small ar	nounts of liq	uids.
a) burettes	b) beakers	c) pipettes	d) gla	sses	
19 is a glassware device used for distillation or dry distillation of substances.					
a) glass pipette	b) glass retort	c) glass rod	d) gla	.ss test – tube	

20 is a piece of laboratory equipment used	l to mix chemicals and liqu	uids for				
laboratory purposes.						
a) glass rod b) glass retort c) glass pip	ette d) glass bottle					
21 is a piece of laboratory equipment used to measure the volume of a liquid.						
a) straight circular cylinder b) oblique cylind	ler c) inclined cylinde	er d)				
graduated cylinder						
22 is cylindrical container with wide open	ing that may be sealed.					
a) bottle b) pitcher c) jar	d) cup					
23 is an hydrogen sulfide (H2S) gas. It is a	natural product of decay.					
a) odour of vinegar b) odour of rotten eggs	c) odour of rotten apples	d)				
odour of rotten pears						
24 is a type of titration based on a dox re-	action between the analyte	and titrant.				
a) back titration b) displacement titration	c) acid- base titration	d) oxidation				
reductions titration						
25 is any product of the condensation of	atmospheric water vapor th	nat falls				
under gravity.						
a) oxidation b) precipitation	c) evaporation	d)				
nuclearization						
26 is a branch of chemistry that deals wi	th the identification of eler	ments or				
grouping of elements present in a sample.						
a) qualitative analysis b) quantitative analysis	c) result of analysis	d) selective				
analysis						
27is a branch of chemistry that deals wit	h the determination of the	amount or				
percentage of one or more constituents of a samp	le.					
a) qualitative analysis b) quantitative analysis	c) result of analysis	d) selective				
analysis						
28 is a general test for the detection of ha	logens, nitrogen and sulph	nur in an				
organic compound.						

a) reaction of unifi	cation	b) reaction of	identificati	ion (c) react	ion of sepa	aration
d) reaction of dete	ction						
29. Chemists often	ı use nitroger	n gas to create	an inert atr	nosphei	re for a		
chemical reaction	in a reaction	vessel. It is	• • • • • • • •				
a) reaction of iden	tification	b) reaction of	detection	c) reac	tion of	separation	d)
reaction of unifica	tion						
30 is a me	thod that con	verts a mixtur	e or solutio	on of ch	emical	substances	s into
two or more distin	ct product m	ixtures.					
a) reaction of iden	tification	b) reaction of	detection	c) reac	tion of	separation	d)
reaction of unifica	tion						
31is a sub	stance or co	mpound added	l to a system	n to cau	ise a ch	emical rea	ction.
a) solution	b) reagent	c) liqui	d	d) mat	ter		
32 may	y involve dis	solution, extra	ction, react	tion wit	h some	chemical	
species.							
a) sample preparat	ion b) gla	sswares prepa	ration	c) furn	iture pr	reparation	d)
design preparation	Ĺ						
33 is the pro	ocess in which	ch a representa	tive piece o	of mater	rial is e	xtracted fr	om a
larger amount and	readied for a	nalysis.					
a) sample	b) san	npling	c) obj	ect	d) thing	
34 is an aqu	eous product	in which no p	recipitate h	as form	ned.		
a) suspension	b) insoluble	precipitate c) soluble p	recipita	te d) supemate	e
35 is the	separation of	f iron from A1	2(SO4)3 in	aqueou	ıs solut	ions.	
a) solution of iron	alum b) sol	id solution c	e) gaseous s	olution	d) liquid so	lution
36is a piece	of laboratory	glassware co	nsisting of	a finger	-like le	ength of gl	ass or
clear plastic.							
a) beaker	b) test – tub	e c) bottl	e	d) jar			
37 is a gr	aph of the pl	H as a function	of the amo	ount of	titrant (acid or ba	se)
added.							
a) back titration	b) displacen	nent titration	c) titration (curve o	d) acid	– base titra	ation

38is a way	y of expressing cor	ncentration.		
a) determination	b) measure	ment	c) weighing	d) titer
39. When excess of	calcium hydroxide	is added to li	mewater, a s	suspension of calcium
hydroxide particle	es arise, giving it a	milky aspect	. It is	
a) turbidity of lim	e water b) tu	rbidimetry	c) titration	d) measurement
	ORG	ANIC CHEN	MISTRY	
		Practice		
1. Choose the con	rrect variant.			
1 is a colo	ourless liquid orgar	nic compound	with the ch	emical formula
CH₃COOH.				
a) sulphuric acid	b) acetic acid	c) oxalic ac	id d) ur	ic acid
2 is the	organic compound	with the form	nula(CH ₃) ₂ C	О.
a) acetone	b) acetyl	c) acetylene	d) alo	cohol
3are non-ar	romatic compound	s.		
a) aldehyde	b) acrylonitrile	c) acidic	d) ali	phatic hydrocarbon
4 is the	amino acid that ha	s a single hyd	lrogen atom	as its side chain.
a) anion	b) aniline	c) glycerol	d) are	omatic
5 subs	tance doesn't conta	nin water.		
a) anhydride	b) anhydrous	c) asymmet	ric	d) butyl
6 is a org	ganic compounds be	earing the fur	nctional grou	p R-N=N-R'.
a) benzene	b) camphor	c) carbohyd	rate d) az	o dye
7 is a m	olecule that feature	es two joined	rings.	
a) bicyclic molecu	ule b) monator	nic molecule	c) macromo	olecular molecule d)
neutral molecule				
8 is the	association of a pa	ir of homolog	gous chromo	somes physically held
together by at least	st one DNA crosso	ver.		
a) bonding	b) carbonic	;	c) bivalent	d) cation
9 is a la	asting attraction be	tween atoms,	ions or mole	ecules that enables the
formation of chemical compounds.				

a) bond	b) chlorination	c) coal	d) configuration
10 is a colourless	s liquid with a "sweet" sm	ell that can be dete	cted at low levels.
a) amine	b) carbon tetrachloride	c) benzoic acid	d) azo dye
11 is an organic	c compound that contains	a carboxyl group (C(=O)OH).
a) uric acid	b) sulphuric acid	c) acetic acid	d) carboxylic acid
12 is the lightw	veight black carbon and as	sh residue hydrocar	rbon produced by
removing water and oth	ner volatile constituents fro	om animal and veg	etation substances.
a) coal	b) dust	c) charcoal	d) sawdust
13 is an acid com	pound found in citrus frui	its.	
a) citric acid	b) sulphuric acid	c) acetic acid	d) oxalic acid
14 is the change	of the physical state of m	natter from gas pha	se into liquid phase.
a) cellulose	b) carbonic	c) anthracene	d) condensation
15 is a system	of connected p orbitals w	rith delocalized elec	ctrons in a molecule,
which in general lowers	s the overall energy of the	molecule and incre	eases stability.
a) contraction	b) conjugation	c) cycle	d) cyanide
16 is a chemica	l bond that involves the sl	haring of electron p	pairs between atoms.
a) covalent bond	b) dimethyl c) die	ethyl d) cy	vanate
17 is a chemica	al compound with the che	mical formula HCN	٧.
a) uric acid	b) sulphuric acid	c) cyanic acid	d) decarboxilation
18 are molecul	es composed of only two	atoms.	
a) neutral	b) diatomic	c) micro	d) monatomic
19 is an acid conta	aining two potential proto	ns to donate.	
a) dibasic acid	b) uric acid	c) acetic acid	d) oxalic acid
20is an cation	n with valence of 2.		
a) bivalent	b) ethane	c) divalent	d) ether
21 is a chemic	al bond between two cher	mical elements invo	olving four bonding
electrons instead of the	usual two.		
a) double bond	b) bond	c) bonding	d) bondage

22 is a chemical compound, a simple alcohol with the chemical					
formula C ₂ H ₅ OH.					
a) ether	b) ethanol	c) ethylene	d) formate		
23 is the simplest	t carboxylic acid.				
a) uric acid	b) oxalic acid	c) formic acid	d) acetic acid		
24 is a tube or pi	pe that is wide at the top a	and narrow at the b	ottom, used for		
guiding liquid or powder	r into a small opening.				
a) wire	b) pole	c) rubber	d) funnel		
25 is a simple	polyol compound.				
a) glucose	b) glycerol	c) glycol	d) ion		
26 are chemic	cal species that donate an	electron pair to an	electrophile to		
form a chemical bond in	relation to areaction.				
a) nucleophilic	b) phenol	c) polyamide	d) propane		
27 is an organic	compound with the form	ula $C_2H_2O_4$.			
a) sulphuric acid	b) oxalic acid	c) acetic acid	d) formic acid		
28 is a heterocy	clic aromatic organic con	npound with the ch	emical formula		
C_9H_7N .					
a) quinoline	b) saccharide	c) scheme	d) salicyl		
29 is a chemica	al bond between two atom	ns involving two va	lence electrons.		
a) double bond	b) bond	c) single bond	d) methane		
30 is a polymeric carbohydrate consisting of a large number of glucose units					
joined by glycosidic bon	ds.				
a) lactose	b) gele	c) fertilizer	d) starch		

PHYSICAL AND COLLOID CHEMISTRY

Practice

1. Choose the correct variant.

1. has to do with the uses of aggravated conditions of heat, humidity, oxygen, sunlight, vibration which speed up the normal aging processes of items.

a) accelerated ageing	b) activation energy	c) boiling tempera	iture d)
conjugation			
2 is a general pr	ocess in which molecu	ules separate or split in	nto smaller particles
such as atoms, ions or ra	dicals, usually in a rev	versible manner.	
a) association	b) dissociation	c) splitting	d) combination
3 replicates the	work of the real kidne	y.	
a) artificial stomach	b) artificial liver c)	artificial rectum	d) artificial kidney
4 of an object i	is the total displaceme	nt during some extend	led period of time,
divided by that period of	time.		
a) average placement	b) average movement	c) average displac	ement d) average
constituent			
5is a four carbon	acid, CH3CH2CH2C	COOH, with an unpleas	sant odor.
a) butiric acid b) oxa	alic acid c) sulphu	uric acid d) acetic aci	id
6 is defined as	the concentration of su	urfactants above which	n micelles form and
all additional surfactants	added to the system.		
a) charge b) chain	c) critical concentrati	on of micelle – formin	ng d)
coalescence			
7 is distributed	in the form of small p	particles (crystals, thre	ads, films or
platelets, droplets, or bul	obles) in the other, cor	ntinuous phase, the dis	persion medium.
a) colloidal dispersion	b) coarse – disperse s	ystem c) condition	d) equation
8 is the process	s by which organic sul	ostances are broken do	own into simpler
organic matter.			
a) composition	b) structure c)	combination	d) decomposition
9 water can make	ce a liquid thinner or w	veaker.	
a) mixed	b) diluted c)	transferred	d) drop
10is a structure th	at appears on the surfa	ace of an object when	it is exposed to a
fluid.			
a) single electrical layer	b) third electrical layer	er c) double electrica	al layer d) fourth
electrical layer			

11 is the electrical intensity or "pressure" developed by a source of electrical						
energy such as a battery or generator.						
a) electrical current b) electromotive force c) electrical cable d) electrical power						
12 is soluble in both of fat and water and enables fat to be uniformly dispersed						
in water as an emulsion.						
a) emulsifying agent b) equilibrium c) endothermal d) exchange						
13is a type of vaporization that occurs on the surface of a liquid as it changes into						
the gas phase when it reaches its boiling point.						
a) dimension b) emulsion c) evaporation d) decomposition						
14 is the ease at which the material can be fused together or to the temperature of						
amount of heat required to melt a material.						
a) fusibility b) mobility c) stationary d) movement						
15 is a method of rapid elimination of cholesterol from the plasma.						
a) absorption b) adsorption c) hemosorption d) option						
16 is the time required for the reactant concentration to decrease to one-half its						
initial value.						
a) double period b) first period c) full time d) half – life period						
17 is a redox electrode which forms the basis of the thermodynamic scale of						
oxidation-reductions potentials.						
a) hydrogen gas electrode b) electrode c) cathode d) anode						
18 is if each of the variables is directly proportional to the multiplicative						
inverse (reciprocal) of the other, or equivalently if their product is a constant.						
a) hyperbolic coordinates b) direct proportional c) inversely proportional						
d) properties						
19is the pH at which a particular molecule carries no net electrical charge or is						
electrically neutral in the statistical mean.						
a) isoelectric point b) point of view c) sharp point d) blunt point						
20 is a tool used to determine the mole fraction (x_i) or the mass fraction (w_i) of						
each phase of a binary equilibrium phase diagram.						

a) leverage	b) lever rule	c) restriction	d) measurement					
21 is when light bounces off an object.								
a) lightning	b) light	c) light scattering	d) light reflection					
22 is a general physical process where light is forced to deviate from a straight								
trajectory by one of	trajectory by one or more paths due to localized non-uniformities in the medium							
through which they pass.								
a) light	b) light scattering	c) light reflection	d) dark					
23 refers to	how effectively el	ectrons can get close to t	the nucleus.					
a) penetration	b) pathway	c) participation	d) elimination					
24 is the	creation of a solid s	substance from a solution	1.					
a) pressure	b) protection	c) precipitate	d) rate					
25 is a che	mical reaction in w	which the oxidation states	of atoms are changed.					
a) second	b) redox	c) singular	d) solute					
26 is an e	electrode which has	a stable and well-known	n electrode potential.					
a) reference electr	ode b) reference	e cathode c) reference	e anode d) reference					
27 is a subs	stance which lowers	s the surface tension of t	he medium in which it is					
dissolved.								
a) sedimentation	b) selectivit	y c) surface a	active substance d)					
electrode								
28 is a res	ference electrode b	ased on the reaction bety	veen elemental mercury					
and mercury(I) ch	loride.							
a) saturation	b) cathode c) and	ode d) saturate	d calomel electrode					
29is a naturally occurring material that is broken down by processes of								
weathering and er	osion.							
a) development	b) sediment	c) solution	d) maceration					
30 is a typ	e of biological or s	synthetic, polymeric men	nbrane that will allow					
certain molecules	or ions to pass thro	ough it by diffusion.						
a) permeable membrane b) membrane c) semipermeable membrane d)								
permeability								

31 is a sul	bstance that dissolves a s	olute resulting in a soluti	on.
a) solution	b) solubility	c) to dissolve	d) solvent
32. Particles of the	e same substance that		
a) stick together	b) hold together	c) stay together	d) be together
33 is the e	lastic tendency of a fluid	surface which makes it a	acquire the
least surface area p	oossible.		
a) surface activity	b) surface layer	c) surface tension	d) synergy
34is the me	easure of its resistance to	gradual deformation by	shear stress or
tensile stress.			
a) transition	b) wavelenght	c) limit	d) viscosity
35 interaction	on is an all-inclusive term	n to describe various prog	ressive interactions
between clay mine	erals and water.		
a) acid – water	b) hydrogen	c) water – clay	d) electricity
	PATHOLOGICA	AL PHYSIOLOGY	
	Pra	actice	
1. Choose the cor			
1 is a coll	ection of health effects th	nat are present within 24	hours of exposure to
high doses of ioniz	zing radiation.		
a) radiation	b) acute radiation sickne	ess c) $X - ray$ d) side	ckness
2 are endoo	erine glands that produce	a variety of hormones in	cluding adrenaline
and the steroids - a	aldosterone and cortisol.		
a) adrenal glands	b) thyroid glands	c) genes d) m	embrances
3 is a ma	ss of cells that lack the al	bility to invade neighbori	ng tissue or
metastasize.			
a) cancer	b) decomposition	c) benign tumor d) sv	velling
4 is the pro	cess by which blood cha	nges from a liquid to a go	el, forming a blood
clot.			

a) blood contamina	tion b) blood po	isoning	c) blo	od change	d) blood	
coagulation							
5 is the maxi	imum ç	quantity of	oxygen that	will co	mbine chemi	cally with the	
hemoglobin in a un	it volu	me of blood	d.				
a) blood oxygen cap	pacity	b) hy	drogen	c) oxy	gen	d) hemoglobin	
6 is a resilie	ent and	smooth el	astic tissue,	a rubbe	r-like paddin	g that covers and	1
protects the ends of	long b	ones at the	joints.				
a) catarrhal	b) burn		c) bleeding		d) cartilage		
7 occurs when the blood supply to part of your brain is interrupted or reduced.							
a) arterial hyperemi	ia t) atrophy	c) ce	rebral s	troke	d) cyanosis	
8 is the pro	ocess by	y which blo	ood changes	from a	liquid to a g	el, forming a blo	od
clot.							
a) clotting	b) corte	ex layer	c) bra	ain	d) for	ehead	
9 is a therap	y techi	nique used	in physical t	herapy,	where block	kage of blood in a	ın
area of the body is	deliber	ately made	•				
a) cerebral stroke	b) compress	sion ischemi	a	c) conscious	sness d)	
decompression							
10is a condit	tion cha	aracterized	by large am	ounts o	f dilute urine	e and increased	
thirst.							
a) diabetes mellitus	t b) delayed t	ype	c) dial	betes insipid	us d) embolu	lS
11 is a gro	up of n	netabolic d	isorders in w	hich th	ere are high	blood sugar level	ls
over a prolonged pe	eriod.						
a) examination	b) diabetes	mellitus	c) eye	lid	d) fever	
12 is the feeling that one cannot breathe well enough.							
a) gastric juice	b) edema		d) tun	nor	d) dyspnea	
13 is the rate at which red blood cells sediment occurs in a period of one hour.							
a) erythrocyte sedir	nentati	on rate	b) precipita	ite	c) white cell	ls d) red cell	S
14 is an al	bnorma	ıl enlargem	ent of your t	hyroid	gland.		
a) breath	b) ische	emia	c) goiter		d) larynx		

15 1s a K1	nd of skin rash with	n red, raised, itchy b	oumps.		
a) rash	b) hives	c) redness	d) ivy		
16 is a slee	ep disorder where p	people have trouble	sleeping.		
a) insomnia	b) sleep	c) slumber	d) sleepless		
17 is hear	t's main pumping c	hamber.			
a) larynx	b) heart	c) left ventricular	d) chamber		
18 is an ov	oid or kidney-shap	oed organ of the lym	phatic system.		
a) lung	b) neck	c) chin	d) lymph node		
19 are cancerous tumors that can potentially result in death.					
a) malignant tumo	ors b) tumors	c) cancers	d) suffoca	tions	
20 is a pale	e colour of the skin	that can be caused	by illness, emotion	onal shock or	
stress, stimulant u	se, or anemia.				
a) poisoning	b) pallor	c) purine	d) redness		
21 is the m	neasure of the abilit	ty of a material to su	apport the format	ion of a	
magnetic field wit	hin itself.				
a) leukemic failure	e b) irritation	c) permeabil	lity d) disorde	r	
22are com	ponents of blood w	hose functions are t	to react to bleeding	ng from blood	
vessel injury by cl	umping, thereby in	nitiating a blood clot			
a) illnesses	b) platelets	c) organs	d) blood v	essels	
23 is fluid	accumulation in the	ne tissue and air spa	ces of the lungs.		
a) purine basis	b) nephron	c) tongue	d) pulmon	ary edema	
24 is an ac	ute form of exudat	ive inflammation in	which the enzym	nes produced	
by white blood ce	lls cause liquefaction	on of the affected tis	ssues, resulting ir	the formation	
of pus.					
a) inflammation	b) heart atta	nck c) purulent i	nflammation	d) pus	
25 is an ex	udate, typically wh	nite-yellow, yellow,	or yellow-brown	, formed at the	
site of inflammation during bacterial or fungal infection.					
a) pus b) edd	ema c) inf	lammation	d) pain shock		
26 is an ar	rea of swelling of the	he lower layer of sk	in and tissue just	under the skin.	

a) Quincke's eden	na b) plate	elet c	e) tumor	d) decomposition	
27 is an	abnormal red	ness or flushi	ng of the s	kin.	
a) ulcer	b) vein	c) redno	ess	d) stasis	
28 results	from the biolo	ogical process	s of wound	l repair in the skin, as well as in	
other organs and t	issues of the b	ody.			
a) wound	b) smell	c) serui	m	d) scar	
29 is a re	29 is a reaction to proteins in antiserum derived from a non-human animal				
source, occurring 5–10 days after exposure.					
a) seasickness	b) airsickness	s c) serui	m sickness	d) dyspnea	
30 is a sev	30 is a severe deficiency in caloric energy intake, below the level needed to				
maintain an organ	ism's life.				
a) starvation	b) reduction	c) serui	m	d) biology	
31is a condition of severely deficient supply of oxygen to the body that arises					
from abnormal br	eathing.				
a) hanging	b) falling	c) suffe	ocation	d) jumping	
32 is a tran	nsient abnorma	al enlargemen	nt of a bod	y part or area not caused by	
proliferation of ce	ells.				
a) inflammation	b) rash	C	e) cerebral	stroke d) swelling	
33 is an au	itoimmune dis	ease in which	the body'	s immune system mistakenly	
attacks healthy tis	sue in many p	arts of the bo	dy.		
a) systemic lupus	erythematosus	b) hive	s c) ras	sh d) redness	
34 is a tou	igh band of fib	rous connect	ive tissue	that usually connects muscle to	
bone and is capable of withstanding tension.					
a) ankle	b) toe	c) tendon	d) ca	rtilage	
35 is an e	endocrine glan	d in the neck,	, consisting	g of two lobes connected by an	
isthmus.					
a) lymph node	b) ear	c) eyebrow	d) th	yroid gland	

BIOCHEMISTRY

Practice

1 is an anar	tomical term for lo	ose connective tissi	ue composed	of adipocytes.
a) adipose tissue	b) absorption	c) adsorption	d) evaporati	on
2 is a hom	odimeric protein er	nzyme of 86 kiloda	ltons.	
a) alkaline battery	b) alkaline	c) biliary obstructi	ion d) alk	caline phosphatese
3 are ster	roid acids found pre	edominantly in the	bile of mamı	nals and other
vertebrates.				
a) sulphuric acids	b) bile acids	c) uric acids	d) acetic aci	ids
4blocks the	e bile ducts, which	carry bile to the sm	nall intestine	for digestion and
waste removal.				
a) chylomicron	b) citric acid	c) biliary obstructi	ion d) tric	carboxylic acid
cycle				
5 is interru	uption of a chemica	l pathway owing to	one chemic	al
substance inhibiting	ng the effect of anot	ther by competing	with it for bi	nding or bonding.
a) competitive inh	ibition b) ext	idation c) dec	composition	d) composition
6 may a	also be caused by in	nfections, trauma to	o the eye, che	emical burns,
immune system di	seases and certain of	other eye condition	s, such as uv	eitis, glaucoma.
a) determination	b) diarrhea	c) cornea va	ascularisation	d) disorder
7 are a suc	lden, involuntary m	nuscle contraction of	or over-short	ening; while is
generally temporar	ry and non-damagin	ng.		
a) consumption	b) cramps	c) diabetes i	insipidus	d) derivative
8is the brea	akdown of large ins	soluble food molec	ules into sma	all water-soluble
food molecules.				
a) digestion	b) ethanol	c) fermentat	tion	d) cycle
9 is an ab	onormal accumulati	on of fluid in the in	nterstitium, l	ocated beneath the
skin and in the cav	rities of the body.			
a) decrease	b) increase	c) order	d) edema	

10 is a ho	rmone, neurotransn	nitter, and medication	on.			
a) methane	b) epinephrine	c) morphine	d) injection			
11 is a r	redox coenzyme, mo	ore specifically a pr	osthetic group of a protein,			
involved in severa	involved in several important enzymatic reactions in metabolism.					
a) festering wound	d b) free radio	cals c) flavin ade	enine dinucleotide d) gall –			
bladder						
12 is a me	tabolic process that	produces chemical	changes in organic substrates			
through the action	of enzymes.					
a) wound	b) pus	c) decomposition	d) fermentation			
13. When a cut ge	ets infected, it starts	to and smel	ll bad.			
a) rotten	b) fester	c) blow up	d) change			
14 is a sma	ll hollow organ wh	ere bile is stored an	d concentrated before it is			
released into the s	mall intestine.					
a) liver	b) gall – bladder	c) stomach	d) intestine			
15 is a stone formed within the gall - bladder out of bile components.						
a) gall – stone	b) gall – bladder	c) liver	d) stomach			
16 is a sw	elling in the neck re	esulting from an en	larged thyroid gland.			
a) neck	b) chin	c) goiter	d) ear			
17 is a form	n of inflammatory a	arthritis characterize	ed by recurrent attacks of a red,			
tender, hot, and sv	wollen joint.					
a) rash	b) gout	c) hives	d) itch			
18 is cause	ed by inadequate pla	aque removal. Plaq	ue contains germs which attack			
the healthy tissue	around the teeth.					
a) gum bleeding	b) bleeding	c) teeth	d) lips			
19 is a yel	lowish or greenish 1	pigmentation of the	skin and whites of the eyes due			
to high bilirubin le	evels.					
a) gout	b) hives	c) lactose	d) jaundice			
20 is one	e of the five major g	groups of lipoprotei	n which transport all fat			
molecules around	the body in the ext	racellular water.				

a) lipid peroxidation	on b) low – der	sity lipoproteins	c) inhibition d) ma	aple syrup	
disease					
21 is the p	process in which fre	e radicals "steal" el	ectrons from the li	pids in cell	
membranes, result	ting in a cell damag	e.			
a) noncompetitive	inhibition b) epi	nephrine c) lipi	d peroxidation	d) high	
energy compound					
22 is an autosomal recessive metabolic disorder affecting branched-chain amino					
acids.					
a) maple syrup dis	sease b) illness	c) elimination	on d) evaporati	ion	
23 is a cor	ndition making it di	fficult or impossibl	e to see in relative	ly low light.	
a) night blindness	b) blindness	c) visibility	d) sore eyes	S	
24 is the process of converting pyruvate to acetyl-CoA.					
a) oxidation	b) decarboxylation	c) determina	tion d) ox	idation	
decarboxylation of pyruvate					
25 is an organic compound with the formula H2NC6H4CO2H.					
a) acetic acid	b) para – aminober	nzoic acid c) oxa	d) uri	ic acid	
26 is a cor	ndition that results i	n weak or soft bone	es in children.		
a) rickets	b) limping	c) dislocation	d) fracture		
27 is an ef	ffect based on the el	lectrolyte-non elect	rolyte interaction,	in which the	
non-electrolyte co	uld be less soluble	at high salt concent	rations.		
a) whitening	b) spitting	c) salting - out	d) vomiting	,	
28 is a di	isease resulting fror	n a lack of vitamin	C (ascorbic acid).		
a) quinsy	b) scurvy	c) scarlet fever	d) fever		
29 is a group of disorders that affects hemoglobin, the molecule in red					
blood cells that delivers oxygen to cells throughout the body.					
a) leukemia	b) anemia	c) brain	d) sickle – cell and	emia	
30is a seve	ere deficiency in ca	loric energy intake,	below the level ne	eeded to	
maintain an organ	ism's life.				
a) overfeeding	b) eating	c) starvation	d) lunch		

31 is a dis	saccharide (glucose + frue	ctose) with the mo	lecular formula		
C12H22O11.					
a) saccharide	b) sucrose c) lac	etose d) gl	ucose		
32 has the	e three dimensional shape	es of a protein.			
a) body structure	b) structural pattern	c) tertiary structu	re d) structure		
33 is the	craving for fluids, resulting	ng in the basic inst	inct of animals to drink.		
a) hunger	b) tiredness	c) rickets	d) thirsty		
34is an e	endocrine gland in the nec	ck, consisting of tw	vo lobes connected by an		
isthmus.					
a) thyroid gland	b) goiter	c) double chin	d) chin		
35 is a th	iamine (vitamin B ₁) deriv	ative which is pro-	duced by the		
enzyme thiamine diphosphokinase.					
a) thiamine deriva	tive b) sucrose	c) thiamine pyrop	phosphate d) lactose		
36is a n	mitochondrial inner memb	orane protein that i	s a regulated proton		
channel or transpo	orter.				
a) membrane	b) protein	c) thyroid gland	d) uncoupler		
37 is an o	organic compound with ch	nemical formula C	O(NH2)2.		
a) urea b) uri	c acid c) urine	d) acetic ac	eid		
38 is a liq	uid by-product of metabo	lism in humans an	d in many animals.		
a) uric acid	b) urea c) uri	ne d) su	alphuric acid		
39 is a type	e of injury which happens	relatively quickly	in which skin is torn, cut		
or punctured (an o	ppen wound).				
a) cut	b) wound	c) ill d) sie	ck		

PHARMACEUTICAL BOTANY

Practice

1. Choose the correct variant.

1. is a cell that displays antigen complexes with major histocompatibility complexes (MHCs) on their surfaces.

a) accessory cell	b) dead cell	c) alive cell	d) cell	
2 is a fru	uit in which some o	f the flesh is derive	ed not from the	he ovary but from
some adjacent tiss	ue exterior to the ca	arpel.		
a) vegetable	b) food	c) aggregate –acce	essory fruit	d) dairy product
3are the r	nost diverse group	of land plants.		
a) anisocytic	b) annual plants	c) apical meristem	d) ang	giosperms
4is	a plant collected fro	om the phloem or b	ast surround	ing the stem of
certain dicotyledo	nous plants.			
a) fiber	b) bast fiber	c) cartilage	d) flower	
5 is a flow	wering plant that tal	kes two years to co	mplete its bio	ological lifecycle.
a) annual plant	b) flowering plant	c) addition i	root	d) biennial plant
6 is a zy	gomorphic, sympet	talous corolla with	the limb divi	ided into two lips.
a) bilabiate corolla	a b) collateral	bundle c) col	lenchyma	d) companion cell
7 is a frui	t with a large "ston	e" inside.		
a) bundle	b) root	c) stone – fruit	d) ste	em
8 is a	colony containing	a fixed number of c	cells, with lit	tle or no
specialization.				
a) cincinnus	b) coenobium	c) bundle	d) plant	
9 are a	a division of vascula	ar land plants conta	nining a singl	e extant class.
a) cutinization	b) cystoliths	c) buds	d) coi	nifers
10is a	rounded undergrou	and storage organ co	onsisting of a	a swollen stem base
covered with scale	e leaves.			
a) corymb	b) corm	c) conifer	d) branch	
11 is a bo	otanical term for an	inflorescence with	the flowers g	growing in such a
fashion that the ou	itermost are born oi	n longer pedicels.		
a) corymb	b) corm	c) bulb	d) root	
12 wind	s along the surface	of the soil by issuin	ng many vert	tical branches.
a) exoderm	b) endoderm	c) embryo root	d) creening	stem

13 forms a	s a result of an equa	al division of a term	inal bud into two
equal branches.			
a) dichotomous branch	b) dicotyledon	c) didynamous	d) druse
14 are one of	the two groups into	which all the flower	ering plants or
angiosperms were forme	erly divided.		
a) druses	b)didynamous	c) dicotyledons	d) dichotomous
branchings			
15 has four	stamens disposed in	n pairs of unequal le	ength.
a) druse b) die	dynamous	c) dicotyledon	d) fibril
16 has the fo	orm of a funnel or o	cone.	
a) funnelform b) rh	izome c) bu	lb d) bra	anch
17 are inter	nal buds found in s	ponges and are invo	olved in asexual
reproduction.			
a) glossy black berries	b) glycogen	c) gemmules	d) funnelforms
18 are a group of	seed-producing pla	ants.	
a) halophytes b) he	speridiums	c) internodes	d) gymnosperms
19 is a group or	cluster of flowers a	rranged on a stem t	hat is composed of a main
branch or a complicated	arrangement of bra	anches.	
a) bud b) inflorens	cence c) ste	em d) bra	anch
20 are the con	npletely undifferen	tiated meristems in	a plant.
a) intercalary meristems	b) inulins c) cy	narodiums d) lat	eral meristems
21 extend	horizontally from t	he primary root (rad	dicle) and serve to anchor
the plant securely into the	ne soil.		
a) legumes b) lat	eral roots	c) mesoderms	d) ovoids
22 is a plant in t	he family Fabaceae	e (or Leguminosae)	, either the fruit or a seed
of such a plant.			
a) pedicle b) leg	gume c) oc	rea d) ph	loem
23 is a thi	n outgrowth at the	junction of leaf and	leafstalk of many
grasses.			

a) halophyte	b) chlorenhyma	c) paracytic	d) ligula	ate	
24. It is so – called	d when the	stamens of a flower	are unit	ted as a tube around the	
style of the carpel.					
a) monocotyledon	b) monoadelphous	c) multilayer palisa	ade d) m	icrofilaments	
25 have f	our distinct structur	ral features: leaves,	stems, ro	oots and flowers.	
a) monoadelphous	s b) perigonium	c) monocotyledons	d) cyna	rodium	
26 is a pla	ant structure formed	of stipules fused in	ito a she	ath surrounding the	
stem.					
a) ocrea	b) ovoid	c) palmatipartite	d)) pedicle	
27 has th	ie same shape as an	egg, or a similar sh	ape.		
a) xylem	b) thyrsus	c) stamen	d)) ovoid	
28 has le	obes with incisions	that extend over ha	lf-way to	oward the petiole.	
a) palmatipartite	b) receptacle	c) root cap	d)) fibrilla	
29 has a superior and inferior notch that forms an intervertebral foramen					
with a pedicle on	with a pedicle on an adjacent vertebra.				
a) sieve tube	b) spadix	c) pedicle	d) siliqu	ie	
30 is a	plant that lives mor	re than two years.			
a) sliming	b) perennial plant	c) plasmode	sma d)) raceme	
31 is the	sterile parts of a flo	wer.			
a) perigonium	b) vine	c) meristem	d) radial	bundle	
32 are all th	ne veins are present	in the form of a net	work.		
a) tendrils	b) stems	c) buds	d)	pinnate – reticulates	
33 is the	female reproductive	e part of a flower.			
a) .tubular	b) pistil	c) wound meristen	d) rhizome	
34 are a	a very heterogeneou	is group of extinct p	olants wi	th mostly fern-like	
foliage but with re	eal seeds.				
a) pteridosperms	b) plasmodesmas	c) endoderms	d)) angiosperms	
35 is an	unbranched, indete	erminate type of inf	lorescen	ce bearing pedicellate	
flowers along its a	axis.				

a) rhizome	b) bulb	c) raceme	d)	fern	
36 i	s the first part of a s	seedling (a g	rowing pl	ant embryo) to emerge from
the seed during the	e process of germina	ation.			
a) inulin	b) radicle	c) cynarodi	um d)	black berry	7
37 is an org	gan or structure whi	ich receives	a secretio	n, eggs, spe	rm.
a) receptacle	b) tracheid	c) tendril	d)	fern	
38 is	the only stem of the	e plant.			
a) addition root	b) anisocytic	c) bast fiber	: d)	rhizome of	fern
39 are eld	ongated living cells	(sieve-tube	elements)	of the phloe	em, the nuclei of
which have fragme	ented and disappear	ed and the t	ransverse	end walls o	f which are
pierced by sievelik	ke groups of pores.				
a) biennial plants	b) sieve tube	es c) and	nual plant	s d) plants
40 is a t	type of fruit (seed ca	apsule) havi	ng two fu	sed carpels	with the length
being more than th	nree times the width				
a) silique	b) spadix	c) leg	gume	d) mesoderm
41 is	s a type of spike infl	orescence h	aving sma	all flowers b	orne on a fleshy
stem.					
a) stem	b) paracytic	c) spa	adix	d) glycogen
42 is th	ne pollen-producing	reproductiv	e organ of	f a flower.	
a) corymb	b) creeping s	stem c) cys	stolith	d) stamen
43 is	s a specialized stem,	leaves or p	etiole with	n a threadlik	te shape.
a) tendril	b) pedicle	c) oc	rea	d) gemmule
MICROBIOLOGY					
Practice					
1. Choose the correct variant.					
1 include many types of cancer, particularly those of the bone marrow and					
blood cells (leuker	mia, lymphoma, mu	ltiple myelo	oma), and	certain chro	nic infections.
a) acquired immur	nodeficiencies	b) illnesses	c) diseas	es d) disorder

2 is a serious infectious disease caused by gram-positive, rod-shaped bacteria
known as Bacillus anthracis.
a) hives b) ulcer c) anthrax d) pollution
3 is a medication made up of antibodies against the tetanus.
a) artificial active immunity b) antitetanus immunoglobulin c) anti – viral drug d)
autoclaving
4 causes gastroenteritis, an inflammation of the gastrointestinal tract
involving both of the stomach and the small intestine.
a) allergen b) antibiotic c) acute intestinal infection d) amoebic
dysentery
5 is a laboratory method to check for certain antibodies or antigens in a
variety of body fluids including saliva, urine, cerebrospinal fluid, or blood.
a) blood tellurium agar b) bactericidal c) anaerobic wound infection d)
agglutination test
6 is a disorder of sight due to the eye and brain not working well together.
a) ambiopia b) coli – index c) capsular bacteria d) bismuth
sulfite agar
7 inhibits the synthesis of mycolic acid, resulting in disruption of the
bacterial cell walls.
a) penicillin b) antitetanus immunoglobulin c) anti – TB action d) blue -
green pigment
8 are germs. They are different in size and shape.
a) illnesses b) bacteria and fungi c) disorders d) contamination
9 is a type of asexual reproduction in which a new organism develops from
an outgrowth or bud due to cell division at one particular site.
a) budding reproduction b) colienteritis c) capsular bacteria d) amoebic
dysentery
10 is an infection caused by the bacterium Corynebacterium diphtheriae.
a) autoclaving b) allergen c) immunity d) causative agent of difteria

11	. refers to the conta	umination of c	our environn	nent and or fo	ood source
with microscopic	organisms, like virt	uses, bacteria,	fungi, and	parasites.	
a) drying	b) degree of biolog	gical contami	nation	c) disinfecti	on of air d)
elective medium					
12 in	dicates, utilizes hot	t air that is eit	her free froi	m water vapo	or, or has very
little of it, and who	ere this moisture pl	ays a minima	l or no role	in the process	s of
sterilization.					
a) dry heat	b) enrichment med	dium	c) evaluatio	n of the gene	eral d)
infection					
13 base	ed on a physical exa	ım, medical aı	nd immuniz	ation history,	, and the
signs and sympton	ns of muscle spasm	ns, stiffness ar	nd pain.		
a) temperature	b) diagnosis of fev	ver c) diag	gnosis of tet	anus d) dia	agnosis of
infection					
14 is us	sed for the estimation	on of coliform	bacteria in	water sample	es using the
membrane filtratio	on technique.				
a) flowing stream	b) stream	c) flagellum	d) en	do broth	
15 indicar	tes that the water ha	as been conta	minated wit	th the fecal m	naterial of
humans or other a	nimals.				
a) faecal contamin	nation of water	b) bacteria a	nd fungi	c) pollution	d)
contamination					
16 is a	ı lash-like appendaş	ge that protruc	des from the	e cell body of	certain
bacterial and euka	ryotic cells and wh	ose primary f	unction is lo	ocomotion.	
a) mechanism of in	nfection	b) flagellum	c) str	eptobacilli	d) microbial
number					
17 have	e square ends and a	are arranged in	n long chain	IS.	
a) gram – positive	streptobacilli	b) gram – ne	gative micr	oorganisms	c) gram –
positive rods with	chopped ends	d) general po	ollution of w	vater	
18 is a sp	pectrum of condition	ons caused by	infection w	ith the humar	n
immunodeficiency	y virus (HIV).				

a) hemolytic strep	tococci	b) infectious mone	onucleosis	c) isolation	of pure
cultures d) HIV in	fection				
19 con	ntains antibo	dies.			
a) immune serum	b) immunol	ogy c) liquid prepa	ration d) syı	rup	
20 wa	is based on sp	pores from the Ster	me strain of I	B. anthracis.	
a) live attenuated	vaccine	b) serial dilution	c) live vacc	ine STI	d)
antibiotics					
21 is a c	complex prod	cess ultimately dep	endent on tu	mor cells.	
a) membrane filter	method	b) tumor growth	c) drugs	d) live atten	uated
vaccine					
22 is d	lefined as the	e lowest concentrat	ion of an anti	i- microbial t	hat will
inhibit the visible	growth of a r	nicroorganism afte	er overnight i	ncubation.	
a) microorganisms	a) microorganisms resistance b) identification of a selective culture c) pseudomonas				
d) minimum inhib	itory concent	tration of the antibi	iotic		
23rec	ognizes the	presence of microo	organisms in	general and s	pecific
pathogenic microo	organisms.				
a) microbiological	purity	b) non – sewn fila	ments of a m	nicelle c) per	netration into
tissue d) pre	ecipitate reac	tion in gel			
24 can	not reproduc	e outside their hos	t cell, meanir	ng that	
the parasite's repro	oduction is en	ntirely reliant on in	tracellular re	sources.	
a) picornaviruses	b) assessme	nt c) obligator	y intracellula	ar parasitism	d)
organisms					
25	has antibodi	es for protection as	gainst respira	ntory infection	n with
Francisella tul	arensis.				
a) injection	b) prophylae	ctic and therapeutic	e serum c) lic	quid preparat	ion
d) syrup					

26 depends on antibiotics which must be active against the offending
pathogen(s) and must reach sufficient concentrations at the site of infection where
microorganisms have induced severe inflammation.
a) disease b) vaccine c) penetration into tissue d) toxigenicity
27 is a method widely used in molecular biology to make many copies of a specific DNA segment.
a) polymerase chain reaction b) quick reaction c) secondary immune response
d) specific hereditary immunity
28 are types of bacteria used to detect and estimate the level of faecal
contamination of water.
a) trichomoniasis b) ulcers c) sanitary – indicative microorganisms
d) Seitz filters
29 is a member of the phylum Spirochaetes which contains distinctive diderm (double-membrane) bacteria.
a) Treponema pallidium b) yeast fungi c) restoration of normal microflora
d) spirochaete bacterium
30 is a member of the coagulase-negative staphylococci (CoNS).
a) S. haemolyticus b) endo broth c) dry heat d) drying
31 is an infection in any part of urinary system.
a) infection b) urinary tract infection c) treatment of infection d) contamination
32 is a discontinuity or break in a bodily membrane that impedes the organ to continue its normal functions.

a) liver cirrhosis	b) leukemia	c) ulo	cer d) 1	tumor	
33 are the fungus k	·	ngle-celled n	nicroorgan	isms classified	d as members of
a) difteria of the	e throat	b) viruses	c) disinfe	ection of air	d) yeast fungi
		PHARM	ACOLOG	\mathbf{Y}	
		Pra	actice		
1. Choose the co	orrect variant	•			
1. The diagnosis	of the	should	be made b	y measuring q	uantitative PBG
before starting sp	pecific treatme	nt for porph	yria.		
a) acute attack	b) alopecia	c) all	ergen	d) afferent	nerves
2	are a divers	se group of j	pharmacolo	ogical agents u	used in the treatment
of epileptic seizu	ires.				
a) amenorrhea	b) anticonvu	ılsants	c) antiepi	leptic d) an	ntivirals
3	. are steroidal	androgens th	hat include	natural andro	gens like
testosterone and	so on.				
a) anxiolytics	b) antitussiv	res	c) anti – u	ılcer effect	d) anabolic
steroids					
4 are	e substances th	at reduce fe	ver.		
a) antitussives	b) atony	c) an	tipyretics	d) at	topen
5	are medecines	that suppre	ss coughing	g.	
a) alopecia	b) antitussiv	res c) all	ergen	d) agonist	
6 is th	ne cessation of	breathing.			
a) apnoea	b) asthenia	c) an	tiviral	d) allergy	
7 is the	e feeling of boo	dy fatigue, o	r tiredness	•	
a) acidosis	b) alopecia	c) ast	thenia	d) afferent	nerves
8 are	used as a short	t-term treatn	nent for bip	oolar disorder	to control psychotic
symptoms such a	as hallucination	ns, delusions	s, or mania	symptoms.	

a) aspiryxia	b) anapsychotic i	nedications c) at	movenimeurar n	ode d) alony
9	. controls the heart i	rate.		
a) agonist	b) allergen	c) antipyretic	d) atrioventic	ular node
10	is a proliferative ph	nysiological proces	ss in which the b	ody facilitates
the repair of a bo	one fracture.			
a) bone healing	b) cachexia	c) catabolism	d) carotid sin	ıs
11 is 1	oss of weight, musc	le atrophy, fatigue	,weakness and s	significant loss of
appetite in some	one.			
a) colitis	b) endometriosis	c) cachexi	a d) colla	pse
12	is a dilated area at t	he base of the inte	rnal carotid arte	ry just superior to
the bifurcation of	f the internal carotid	l and external caro	tid at the level o	of the superior
border of thyroid	cartilage.			
a) cognitive func	tion b) ca	rotid sinus	c) diarrhea	d) dyspnea
13is	s a condition of the	digestive system cl	haracterized by	hard feces that
are difficult to pa	ass.			
a) hypotension	b) hyperten	sion c) h	irsutism d) constipation
14 is	the condition of hav	ring at least three le	oose or liquid be	owel movements
each day.				
a) diarrhea	b) constipation	c) rectum	d) feces	3
15 is	s the feeling that one	e cannot breathe w	ell enough.	
a) exstrasystole	b) epilepsy attack	c) glaucon	na d) dysp	nea
16 is so	mething that helps lo	oosen mucus so yo	ou can cough it u	ıp.
a) heart attack	b) expectorant	c) erythrop	poietin d) faint	ing
17 is a lo	oss of consciousness	and muscle streng	gth characterized	d by a fast onset,
short duration, an	nd spontaneous reco	overy.		
a) fainting	b) consciousness	c) loss	d) term	ination
18	is common name for	or myocardial infa	rction, when the	blood supply to
a part of the hear	t is interrupted.			
a) epilepsy attack	(b) fainting	c) heart attack	d) hirsutism	

19 is	excessive body hai	r in men and wome	en on parts of	f the body where
hair is normally al	osent or minimal.			
a) infarction	b) hirsutism	c) hair	d) diarrhea	
20 is a	n measurement of th	ne pressure of brain	tissue and th	e cerebrospinal
fluid that cushions	s and surrounds the	brain and spinal co	ord.	
a) cachexia	b) catabolism	c) colitis	d) intracrani	al pressure
21 is	the fluid pressure i	nside the eye.		
a) intraocular pres	ssure b) hypotens:	ion c) hy	pertension	d) hirsutism
22 is an	ny technique to indu	ice the absence of s	sensation in a	specific part of the
body, generally fo	or the aim of inducing	ng local analgesia,	that is, local	insensitivity to
pain, although oth	er local senses may	be affected as wel	11.	
a) meningitis	b) metabolism	c) local ane	sthesia	d) migraine
23 is a se	mi-solid tissue whi	ch may be found w	ithin the spor	ngy or cancellous
portions of bones	in birds and mamm	als.		
a) myofibril	b) bone marrow	c) myasther	nia	d) ovulation
24 can cause severe throbbing pain or a pulsing sensation, usually on just one				
side of the head.				
a) migraine	b) headache	c) brain	d) bone mar	row
25 is a medical condition in which excess body fat has accumulated to the extent				
that it may have a	negative effect on l	health.		
a) proctitis	b) sedative	c) sepsis	d) obesity	
26 is a	an abnormal conditi	on of the mind that	t results in di	fficulties
determining what is real and what is not.				
a) probiotics	b) prebiotics	c) psychosis	d) stomatitis	S
27 is re	ecovery from illness	s or injury.		
a) symbiotics	b) reconvalescence	e c) scorbutus	d) sur	factant
28 is a cl	hronic and severe m	nental disorder that	affects how	a person thinks,
feels, and behaves	· .			
a) schizophrenia	b) nerve	c) disorder	d) mental	

29 1s a	disease resulting in	om a lack of vitam	in C (ascorbic acid).
a) tetany	b) toxic goiter	c) stroke	d) scorbutus
30 is a	medical condition i	n which poor blood	I flow to the brain results in cell
death.			
a) sulphonamides	b) stroke	c) sedative	d) proctitis
31 is	a medical sign cons	sisting of the involu	intary contraction of muscles,
which may be cau	sed by disease or o	ther conditions.	
a) sepsis	b) psychosis	c) tetany	d) probiotics
32 is a	thyroid gland that c	ontains autonomou	sly functioning thyroid nodules
with resulting hyp	erthyroidism.		
a) toxic goiter	b) goiter	c) gland	d) contamination
33 is a re	sult of untreated leg	g vein problems.	
a) tuberculosis	b) cancer	c) ulcer	d) trophic ulcer
34 is a	medicine taken or	given to counteract	a particular poison.
a) tumor	b) antidote	c) tranquilizer	d) ventricular fibrillation
35 is when	the heart quivers in	stead of pumping of	due to disorganized electrical
activity in the ven	tricles.		
a) stomatitis	b) sedative	c) ventricular fibri	llation d) tranquilizer

Translate the following words & phrases

Task1. Fill in the missing information of the following extracts.

1.	Name the psychostimulant with (аналептична дія)
	, which is a (пуринова похідна)
	·
2.	Name the process of (спонтанне зчеплення) of (краплі) in an emulsion to each other
3.	It is known that in plants the synthesis of (вторинний резервний) оссигь in
4.	A 10-year-old child has height of 178 cm and body mass of 67 kg. These (ознаки) are (викликані) by the (функціональні порушення) of the
5.	(Кількісний вміст) of hydrogen peroxide can be (визначити) (за допомогою) of the following self-indicator method
6.	A patient with high risk of (крововиливи) is recommended to take vicasol (menadione) by his (лікар) This drug is the (структурний аналог) of
7.	When tongue of an experimental rabbit is (змазані) with (скипидар), the (уражена ділянка) reddens and its blood supply increases. What type is arterial hyperemia occurs in this case
8.	Name the structural unit of a (колоїдний розчин) of a medicinal substance

A patient presents with (стійка тахікар,	дія)	,
exophthalmos, high (збудливість)	, increase	ed basal
(обмін речовин)	What (розлад)	can lead
to the development of his syndrome		
10.After the (вилучення гною)	taken from urethra	had been
inoculated on ascitic agar, it resulted in		
colonies. Micros		(грам-
негативні) kidney		
is it		
11.Name the (реакції) and (conditions allow determination of certain		
10 177		•
12. What drug is (виробляється) salicylic acid and (оцтовий ангідрид)_		between
13. There are certain (вимоги) used in preparation of some (лікарські indicator is used to (визначення)	форми)	What
14.It can be safely (передбачається)	that the (діти)	born
from the mothers with the history of (K	ip) will not be affe	
(кір)outbreak during their s		: 1 - 41 - : - 6 4 -
будинок) Wh with the (стійкість) to this	at classes of antibodies provisions disease?	ide the infants
15. What (реагент) is used in	the (реакція) give	en below?
16.During (регулярний огляд)	a patient presents	with
(збільшена щитовидна залоза)		
exophthalmos, increased body tempera		
hormone should be (вимірювати)	in the patient's blo	

17. What type of (провідний пучок)	is characteristic of
primary anatomical structure of a (корінь)	
18.A specialist of the analytical laboratory (виког	нує
пряме) iodometric (в	визначення)of
ascorbic acid. What indicator is used in this ca	ase?
19.Gastric juice analysis is of great (діагностичн	ne e
значення) in cases о	of gastric diseases. What
compound is used as a (стимулятор секреції))
in clinical examinations?	
20.How according to the Pharmacopoeia is pH	
(визначається)?	
21.A doctor needs to prescribe the patient a drug	for (замісної терапії)
after thyreoidectomy. Wh	at drug would you recommend?
22What (ліки використовуються для зупинки)
a bronchospasm?	
A. β-(адренергічні агоністи)	
B. β-(адренергічні антагоністи)	
С. α-(адренергічні агоністи)	
D. (Інгібітори холін естерази)	
Е. (мускаринові агоністи)	
23. А (розчленована квітка)	has numerous stamens
that are united by the (шматочки	
нитками)	
(пучків) What is this	type of
(андроциум)?	

D. (динамічнии)	
24. A patient was prescribed losartan fo	or treatment of (артеріальна
гіпертензія)	What mechanism of action
does this drug have?	
А. (Ангіотензин - рецепторна	
блокада)	
В. (Інгібування ангіотензин - пере	етворюючого
ферменту)	
С. (Інгібування	
фосфодіестерази)	
D. (Активація центральних α-	
адренорецепторів)	
Е. (Блокада кальцієвих	
каналів)	
розчин) solution containing cations of the V production of a (зелено-жовтий	
осад)	
(катіони) were	e in the solution?
26.A laboratory received ethanol and n pозрізнити) b	nethanol. What reaction can be used (щоб between these two substances?
А. (Йодоформний тест)	
В. (Тест Бейлстейна)	
С. (Формування хелатного компл міді)	
D. (окислення)	

Е. (Реакція з галогенідридидами неорганічних
кислот)
27. (Виберіть кетон) from the
monosaccharides (наведених нижче)
KEYS
ANALYTICAL CHEMISTRY
Practice
1. Choose the correct variant.
1. An is a method of quantitative analysis for determining the concentration of
an acid or base.
a) back titration b) acid – base titration c) direct titration d) displacement titration
2. An is a class of balance designed to measure small mass in the sub-milligram
range.
a) analytical chemistry b) analytical analysis c) analytical determination d)
analytical balance
3 is an electrode of the device connected to the positive pole of battery.
a) anode b) cathode c) electrode d) wire
4 is a nontoxic or minimally toxic gas which reduces or displaces the
normal oxygen concentration in breathing air.
a) asphyxiating gas b) propan gas c) methane gas d) carbon monoxide
5 occurs when two reagents are used - one that reacts with the original
sample, and second that reacts with the first reagent.

a) acid – base titra	ation	b) back titra	tion	c) direct titration	d) displace	ment tit	ration
6 is a generally cylindrical container with a flat bottom.							
a) bottle	b) tes	t – tube		c) beaker	d) burette		
7 is a squee	eze bot	tle with a noz	zle. It	is used to rinse va	rious pieces	of labor	ratory
glasswares.							
a) flask	b) syı	ringe		c) pipette	d) bottle		
8 is a grad	duated	glass tube wi	th a ta	p at one end for de	elivering kno	wn volu	umes
of a liquid, especi	ally in	titrations.					
a) burette	b) bea	aker		c) test – tube	d) bottle		
9. Lead Nitrate an	d Sodi	um Potassiur	n Iodir	ne are that	form a yellov	w precij	pitate
for Lead Iodine.							
a) gaseous solutio	ns	b) solid solu	tions	c) colourles	ss solutions	d) liqu	ıid
solutions							
10 is a	piece	of furniture v	where p	oharmaceutical gla	sswares are	dried.	
a) table	b) dis	sicator		c) scales	d) items		
11 is a phar	maceu	tical item for	storag	ge of distilled water	r, solutions.		
a) bottle	b) fla	sk		c) pipette	d) beaker		
12 is a for	rm of v	olumetric an	alysis i	in which the forma	ation of a col	oured	
complex is used to	o indic	ate the end po	oint of	a titration.			
a) complex forma	tion t	itration	b) dir	rect titration	c) back titra	ation	d)
displacement titra	tion						
13 is a si	trong, 1	red colour, in	clining	g to purple.			
a) green colour	b) bla	ck colour		c) yellow colour	d) cr	imson c	colour
14 is a way	y to de	termine the c	ontent	s of a substance qu	ıantitatively.		
a) direct titration	b) ba	ck titration	c) con	nplex formation tit	tration d) di	splacen	nent
titration							
15 is a sec	cond ti	tration for me	etal ion	ns that do not have	a good indic	eator.	
a) direct titration	b) con	mplex format	ion tit	tration $c)$ displace	ment titratio	n	d)
back titration							

16. Red crystals	so – called	have the tem	perature of meltin	ng of 316 de	egrees
above zero.					
a) fluorescein	b) eosine	c) current	d) column	1	
17 is a j	piece of laborator	ry glassware use	ed for the evapora	ation of solu	tions.
a) condenser	b) glass evapor	rating dish	c) dissicator	d) flask	
18 are ma	de of glass. They	are used to tra	nsfer small amou	nts of liquid	S.
a) burettes	b) beakers	c) pipettes	d) glasses	•	
19 is a glas	ssware device use	ed for distillatio	n or dry distillatio	on of substar	nces.
a) glass pipette	b) glass retort	c) glass rod	d) glass to	est – tube	
20 is a pi	ece of laboratory	equipment used	d to mix chemical	s and liquid	s for
laboratory purpo	ses.				
a) glass rod	b) glass retort	c) glass pip	ette d) glass b	ottle	
21 is a	piece of laborato	ry equipment u	sed to measure th	e volume of	a liquid.
a) straight circula	ar cylinder b	o) oblique cylino	der c) incline	d cylinder	d)
graduated cylina	ler				
22 is cylin	ndrical container	with wide open	ing that may be se	ealed.	
a) bottle	b) pitcher c) jar	d) cup		
23 is an hy	ydrogen sulfide (H2S) gas. It is a	natural product	of decay.	
a) odour of vineg	gar b) odour	of rotten eggs	c) odour of rotten	apples	d)
odour of rotten p	ears				
24 is a ty	pe of titration bas	sed on a dox re	action between th	e analyte an	d titrant.
a) back titration	b) displacemen	nt titration	c) acid - base tit	ration d)	oxidation
– reductions titre	ation				
25 is any	product of the co	ondensation of	atmospheric wate	r vapor that	falls
under gravity.					
a) oxidation	b) precipitation	n	c) evaporation	d)	
nuclearization					
26 is a branch of chemistry that deals with the identification of elements or					
grouping of elem	grouping of elements present in a sample.				

a) qualitative analy	vsis b) qua	antitative analys	s c) re	sult of analys	is d) selective
analysis					
27is a bran	ch of chem	istry that deals v	ith the	determination	of the amount or
percentage of one o	r more cons	stituents of a sar	ple.		
a) qualitative analys	sis b) qu	antitative analys	is c) re	sult of analys	is d) selective
analysis					
28 is a gene	eral test for	the detection of	halogens	s, nitrogen an	d sulphur in an
organic compound.					
a) reaction of unific	eation	b) reaction of io	lentifica	tion c) rea	action of separation
d) reaction of detec	etion				
29. Chemists often	use nitroge	n gas to create a	inert at	mosphere for	· a
chemical reaction in	n a reaction	vessel. It is	• • • • •		
a) reaction of ident	ification	b) reaction of d	etection	c) reaction (of separation d)
reaction of unificati	ion				
30 is a meth	nod that cor	overts a mixture	or soluti	on of chemica	al substances into
two or more distinct	t product m	ixtures.			
a) reaction of identi	fication	b) reaction of d	etection	c) reaction	of separation d)
reaction of unificati	on				
31is a subs	stance or co	mpound added t	a syste	m to cause a	chemical reaction.
a) solution <i>b</i>	b) reagent	c) liquid		d) matter	
32 may	involve dis	solution, extract	ion, reac	ction with son	ne chemical
species.					
a) sample prepara	tion b) gla	sswares prepara	ion	c) furniture	preparation d)
design preparation					
33 is the prod	cess in which	ch a representati	e piece	of material is	s extracted from a
larger amount and readied for analysis.					
a) sample	b) san	npling	c) ob	ject	d) thing
34 is an aqueous product in which no precipitate has formed.					
a) suspension b	o) insoluble	precipitate c)	soluble p	precipitate	d) supemate

35 is the	separation of iron	from A12(SO	4)3 in aqueous so	olutions.
a) solution of iron	n alum b) solid sol	lution c) gase	eous solution	d) liquid solution
36is a piece	of laboratory glas	ssware consisti	ng of a finger-lik	e length of glass or
clear plastic.				
a) beaker	b) test – tube	c) bottle	d) jar	
37 is a g	raph of the pH as	a function of th	ne amount of titra	ant (acid or base)
added.				
a) back titration	b) displacement t	titration c) titr	ation curve d) a	cid – base titration
38is a way	y of expressing co	ncentration.		
a) determination	b) measure	ement	c) weighing	d) titer
39. When excess	calcium hydroxide	is added to lin	newater, a susper	nsion of calcium
hydroxide particle	es arise, giving it a	milky aspect.	It is	
a) turbidity of lim	e water	b) turbidime	try c) titration	d)
measurement				
	ORG	ANIC CHEM	ISTRY	
		Practice		
1. Choose the con	rrect variant.			
1 is a colo	ourless liquid orga	nic compound	with the chemica	ıl formula
CH₃COOH.				
a) sulphuric acid	b) acetic acid	c) oxalic acid	d d) uric acio	d
2 is the	organic compound	d with the form	$ula(CH_3)_2CO.$	
a) acetone	b) acetyl	c) acetylene	d) alcohol	
3are non-ar	romatic compound	ls.		
a) aldehyde	b) acrylonitrile	c) acidic	d) aliphati	c hydrocarbon
4 is the	amino acid that ha	s a single hydr	rogen atom as its	side chain.
a) anion	b) aniline	c) glycerol	d) aromati	c
5 subs	tance doesn't conta	ain water.		
a) anhydride	b) anhydrous	c) asymmetr	ic d) b	utyl
6 is a org	ganic compounds b	earing the fund	ctional group R-	N=N-R'.

a) benzene	b) car	npnor c) car	bohydrate	a) azo aye	
7	is a molecule	that features two j	oined rings.		
a) bicyclic n	nolecule	b) monatomic mol	ecule c) ma	cromolecula	molecule d)
neutral mol	ecule				
8	is the associa	ation of a pair of ho	mologous ch	romosomes]	physically held
together by	at least one I	ONA crossover.			
a) bonding		b) carbonic	c) bive	alent	d) cation
9	is a lasting a	attraction between a	atoms, ions or	r molecules t	hat enables the
formation o	f chemical co	ompounds.			
a) bond		b) chlorination	c) coa	ıl	d) configuration
10 is	a colourless	liquid with a "swee	et" smell that	can be detec	ted at low levels.
a) amine		b) carbon tetrachi	oride c) ben	nzoic acid	d) azo dye
11 i	s an organic	compound that con	tains a carbo	xyl group (C	(=O)OH).
a) uric acid		b) sulphuric acid	c) ace	etic acid	d) carboxylic acid
12	is the lightwo	eight black carbon	and ash resid	ue hydrocarb	oon produced by
removing w	ater and other	er volatile constitue	nts from anir	nal and vege	tation substances.
a) coal		b) dust	c) cha	arcoal	d) sawdust
13 is	an acid comp	ound found in citru	is fruits.		
a) citric aci	d	b) sulphuric	acid	c) acetic aci	d d) oxalic
acid					
14 is	s the change	of the physical state	e of matter fr	om gas phase	e into liquid phase.
a) cellulose		b) carbonic	c) ant	hracene	d) condensation
15	is a system of	of connected p orbi	tals with delo	ocalized elect	trons in a molecule,
which in ge	neral lowers	the overall energy	of the molecu	ale and increa	ases stability.
a) contraction	on	b) conjugation	c) cyc	ele	d) cyanide
16 i	s a chemical	bond that involves	the sharing of	of electron pa	irs between atoms.
a) covalent	bond	b) dimethyl	c) diethyl	d) cya	nate
17	is a chemical	compound with th	e chemical for	ormula HCN	
a) uric acid		b) sulphuric acid	c) cya	nic acid	d) decarboxilation
		4	4		

18 are molecule	es composed of only two a	ntoms.	
a) neutral	b) diatomic	c) micro	d) monatomic
19 is an acid contain	ining two potential proton	is to donate.	
a) dibasic acid	b) uric acid	c) acetic acid	d) oxalic acid
20is an cation	with valence of 2.		
a) bivalent	b) ethane	c) divalent	d) ether
21 is a chemica	l bond between two chem	nical elements invo	lving four bonding
electrons instead of the u	isual two.		
a) double bond	b) bond	c) bonding	d) bondage
22 is a chemical	compound, a simple alco	hol with the chemic	cal
formula C ₂ H ₅ OH.			
a) ether	b) ethanol	c) ethylene	d) formate
23 is the simplest	t carboxylic acid.		
a) uric acid	b) oxalic acid	c) formic acid	d) acetic acid
24 is a tube or pi	pe that is wide at the top a	and narrow at the bo	ottom, used for
guiding liquid or powder	into a small opening.		
a) wire	b) pole	c) rubber	d) funnel
25 is a simple	polyol compound.		
a) glucose	b) glycerol	c) glycol	d) ion
26 are chemic	cal species that donate an	electron pair to an	electrophile to
form a chemical bond in	relation to areaction.		
a) nucleophilic	b) phenol	c) polyamide	d) propane
27 is an organic	compound with the form	ula $C_2H_2O_4$.	
a) sulphuric acid	b) oxalic acid	c) acetic acid	d) formic acid
28 is a heterocy	clic aromatic organic con	npound with the che	emical formula
C_9H_7N .			
a) quinoline	b) saccharide	c) scheme	d) salicyl
29 is a chemica	l bond between two atom	s involving two val	lence electrons.
a) double bond	b) bond	c) single bond	d) methane

30 is a polymer	ric carbohydrate consistir	ng of a large numb	er of glucose units
joined by glycosidic bo	nds.		
a) lactose	b) gele	c) fertilizer	d) starch
PH	IYSICAL AND COLLO		Y
	Practice	9	
1. Choose the correct			
1 has to do wit	h the uses of aggravated	conditions of hea	t, humidity, oxygen,
sunlight, vibration which	ch speed up the normal ag	ging processes of i	items.
a) accelerated ageing	b) activation energy	c) boiling temper	erature d)
conjugation			
2 is a general p	process in which molecul	es separate or spli	t into smaller particles
such as atoms, ions or r	adicals, usually in a reve	rsible manner.	
a) association	b) dissociation	c) splitting	d) combination
3 replicates the	e work of the real kidney		
a) artificial stomach	b) artificial liver c) a	rtificial rectum	d) artificial kidney
4 of an object	t is the total displacement	t during some exte	ended period of time,
divided by that period of	of time.		
a) average placement	b) average movement	c) average disp	<i>lacement</i> d) average
constituent			
5is a four carbo	on acid, CH3CH2CH2CC	OOH, with an unpl	easant odor.
a) butiric acid b) or	xalic acid c) sulphur	ic acid d) acetic	acid
6 is defined as	s the concentration of sur	factants above wh	ich micelles form and
all additional surfactant	s added to the system.		
a) charge b) chain	c) critical concentration	on of micelle – for	rming d)
coalescence			
7 is distribute	ed in the form of small pa	rticles (crystals, th	nreads, films or
platelets, droplets, or bu	ubbles) in the other, conti	nuous phase, the	dispersion medium.
a) colloidal dispersion	b) coarse – disperse sy	stem c) conditi	ion d) equation
	46		

8 is the	process by which o	organic substances	are broken do	wn into simpler
organic matter.				
a) composition	b) structure	c) combina	tion	d) decomposition
9 water c	an make a liquid th	ninner or weaker.		
a) mixed	b) diluted	c) transferr	ed	d) drop
10is a struc	cture that appears o	on the surface of an	object when it	t is exposed to a
fluid.				
a) single electrical	l layer b) third ele	ctrical layer c) do	uble electrica	d layer d)
fourth electrical la	ayer			
11 is the	e electrical intensit	y or "pressure" dev	eloped by a so	ource of electrical
energy such as a b	oattery or generator	r.		
a) electrical curren	nt b) electrom	notive force c) ele	ectrical cable	d) electrical power
12 is solu	able in both of fat a	and water and enabl	es fat to be un	niformly dispersed
in water as an em	ulsion.			
a) emulsifying ag	<i>rent</i> b) equilibri	um c) endother	mal d) exc	hange
13is a type of	of vaporization that	coccurs on the surfa	ace of a liquid	as it changes into
the gas phase whe	en it reaches its boi	ling point.		
a) dimension	b) emulsion	c) evaporation	d) decompos	sition
14 is the ea	ase at which the ma	nterial can be fused	together or to	the temperature or
amount of heat re-	quired to melt a ma	aterial.		
a) fusibility	b) mobility	c) stationary	d) movemen	t
15 is a met	hod of rapid elimir	nation of cholestero	l from the pla	sma.
a) absorption	b) adsorption	c) hemosorption	d) option	
16 is the t	time required for th	ne reactant concentr	ation to decre	ase to one-half its
initial value.				
a) double period	b) first period	c) full time	d) half – life	e period
17 is a r	edox electrode wh	ich forms the basis	of the thermo	dynamic scale of
oxidation-reduction	ons potentials.			
a) hydrogen gas e	e <i>lectrode</i> b) ele	ectrode c) ca	thode	d) anode

18 is if	each of the v	ariables is directly	propoi	rtional to the	multipli	cative
inverse (reciprocal	l) of the other	, or equivalently	if their	product is a	constant.	
a) hyperbolic coor	dinates	b) direct proporti	onal	c) inversely	proport	ional
d) properties						
19is the j	pH at which a	a particular molec	ule carr	ries no net el	ectrical c	harge or is
electrically neutral	l in the statist	ical mean.				
a) isoelectric poin	t	b) point of view	c) sha	rp point	d) blunt	point
20 is a tool	used to deter	mine the mole fra	ction (x	(a) or the mas	ss fractio	n (w _i) of
each phase of a bin	nary equilibri	um phase diagran	n.			
a) leverage	b) lever rule	c) restriction	n	d) me	easureme	ent
21 is when	light bounce	s off an object.				
a) lightning	b) light	c) light sca	ttering	d) lig	ht reflec	tion
22 is a ger	neral physical	process where lig	ght is fo	orced to devi	ate from	a straight
trajectory by one o	or more paths	due to localized i	non-uni	formities in	the medi	um
through which the	y pass.					
a) light	b) light scat	tering c) lig	ght refle	ection	d) dark	
23 refers to	how effective	ely electrons can	get clos	se to the nucl	leus.	
a) penetration	b) pathway	c) pa	rticipat	ion	d) elimi	nation
24 is the	creation of a	solid substance from	om a so	lution.		
a) pressure	b) protection	c) pr	ecipitat	te	d) rate	
25 is a che	mical reaction	n in which the oxi	dation	states of ator	ms are ch	nanged.
a) second	b) redox	c) sin	ngular		d) solut	e
26 is an e	lectrode which	ch has a stable and	ł well-k	nown electro	ode potei	ntial.
a) reference electr	rode b) refe	erence cathode	c) refe	erence anode	e d) reference
27 is a subs	tance which	lowers the surface	tension	n of the med	ium in w	hich it is
dissolved.						
a) sedimentation	b) sele	ectivity	c) sur	rface active s	substanc	e d)
electrode						

		Practice	
	PATHOLO	GICAL PHYSIOLOG	SY
a) acid – water	b) hydrogen	c) water –	clay d) electricity
between clay mineral			
		term to describe vario	us progressive interactions
a) transition	b) wavelengt	nt c) limit	d) viscosity
tensile stress.			
34is the measu	ure of its resistan	ce to gradual deformat	ion by shear stress or
a) surface activity	b) surface lay	yer c) surface	tension d) synergy
least surface area pos	sible.		
33 is the elast	tic tendency of a	fluid surface which ma	ikes it acquire the
a) stick together	b) hold toget	her c) stay together	d) be together
32. Particles of the sa	me substance tha	ıt	
a) solution	b) solubility	c) to dissolve	d) solvent
31 is a substa	ance that dissolve	es a solute resulting in	a solution.
permeability			
a) permeable membra	ne b) membrane	c) semipermeabl	<i>le membrane</i> d)
certain molecules or i	ons to pass throu	gh it by diffusion.	
30 is a type o	f biological or sy	nthetic, polymeric mer	nbrane that will allow
a) development	b) sediment	c) solution	d) maceration
weathering and erosic	on.		
29is a naturally	y occurring mater	rial that is broken down	n by processes of
a) saturation b)	cathode c) anoc	de <i>d) saturate</i>	ed calomel electrode
and mercury(I) chlori	de.		
28 is a refere	ence electrode bas	sed on the reaction bety	ween elemental mercury

1. Choose the correct variant.

1. is a collection of health effects that are present within 24 hours of exposure to high doses of ionizing radiation.

a) radiation	b) acute radiation	sickness c) X –	ray d) sic	kness	
2 are endo	crine glands that pro	duce a variety of he	ormones inc	cluding adrer	naline
and the steroids - a	aldosterone and cort	isol.			
a) adrenal glands	b) thyroid glands	c) genes	d) me	mbrances	
3 is a ma	ss of cells that lack	the ability to invade	e neighborir	ng tissue or	
metastasize.					
a) cancer	b) decomposition	c) benign tur	nor d) sw	elling	
4 is the pro	ocess by which bloo	d changes from a lie	quid to a ge	1, forming a	blood
clot.					
a) blood contamin	ation b) blood pois	soning c) bloc	od change	d) blood	
coagulation					
5 is the max	ximum quantity of o	xygen that will con	nbine chemi	ically with th	ie
hemoglobin in a u	nit volume of blood				
a) blood oxygen c	apacity	b) hydrogen	c) oxygen	d)	
hemoglobin					
6 is a resil	ient and smooth ela	stic tissue, a rubber	-like paddir	ng that covers	s and
protects the ends of	of long bones at the	joints.			
a) catarrhal	b) burn	c) bleeding	d) cartilage		
7 occurs v	when the blood supp	oly to part of your b	rain is inter	rupted or rec	luced.
a) arterial hyperen	nia b) atrophy	c) cerebral si	troke	d) cyanosis	
8 is the pr	rocess by which blo	od changes from a l	liquid to a g	el, forming a	ı blood
clot.					
a) clotting	b) cortex layer	c) brain	d) for	rehead	
9 is a thera	py technique used i	n physical therapy,	where block	kage of blood	d in an
area of the body is	deliberately made.				
a) cerebral stroke	b) compressi	ion ischemia	c) cor	nsciousness	d)
decompression					
10is a cond	ition characterized b	by large amounts of	dilute urine	e and increas	ed
thirst.					

a) diabetes mellitus	b) delayed	type	c) diabetes	insipidus	d) embolus
11 is a grou	ip of metabolic d	lisorders in v	which there a	re high bloo	d sugar levels
over a prolonged pe	riod.				
a) examination	b) diabetes	mellitus	c) eyelid	d) f	ever
12 is the feel	ing that one canr	ot breathe w	ell enough.		
a) gastric juice	b) edema		d) tumor	d) d	yspnea
13 is the rate	at which red blo	ood cells sed	iment occurs	in a period	of one hour.
a) erythrocyte sedin	nentation rate	b) precipita	ate c) w	hite cells	d) red cells
14 is an ab	normal enlargen	nent of your	thyroid gland	1.	
a) breath b) ischemia	c) goiter	d) la	rynx	
15 is a kind	l of skin rash wit	h red, raised	, itchy bump	s.	
a) rash b) hives	c) redness	d) iv	У	
16 is a sleep	disorder where 1	people have	trouble sleep	ing.	
a) insomnia b) sleep	c) slumber	d) sl	eepless	
17 is heart's	main pumping o	hamber.			
a) larynx b) heart	c) left vent	<i>ricular</i> d) cl	namber	
18 is an ovoi	id or kidney-shap	ped organ of	the lymphati	ic system.	
a) lung b) neck	c) chin	d) ly	mph node	
19 are cance	erous tumors that	t can potenti	ally result in	death.	
a) malignant tumor	b) tumors	c) ca	ncers	d) suffoca	tions
20 is a pale of	colour of the skir	that can be	caused by ill	lness, emoti	onal shock or
stress, stimulant use	, or anemia.				
a) poisoning	b) pallor	c) pu	ırine	d) redness	
21 is the mea	asure of the abili	ty of a mater	rial to suppor	t the format	ion of a
magnetic field withi	n itself.				
a) leukemic failure	b) irritation	c) pe	ermeability	d) disorde	r
22are compo	onents of blood v	whose function	ons are to rea	ct to bleeding	ng from blood
vessel injury by clui	mping, thereby in	nitiating a bl	ood clot.		
a) illnesses	b) platelets	c) or	gans	d) blood v	essels

23 is f	luid accun	nulation in th	e tissue and air spa	aces of the lung	S.
a) purine basis	3	b) nephron	c) tongue	d) pulm	onary edema
24 is an	n acute for	m of exudati	ve inflammation in	n which the enz	ymes produced
by white blood	d cells caus	se liquefaction	on of the affected ti	issues, resulting	g in the formation
of pus.					
a) inflammati	on	b) heart atta	ck <i>c) purulent</i>	inflammation	d) pus
25 is a	n exudate,	typically wh	ite-yellow, yellow	, or yellow-bro	wn, formed at the
site of inflamr	nation duri	ng bacterial	or fungal infection	ı .	
a) pus b)) edema	c) infl	ammation	d) pain shock	
26 is a	an area of s	welling of th	e lower layer of sl	kin and tissue ju	ist under the skin.
a) Quincke's	edema	b) platelet	c) tumor	d) decomposit	ion
27 is	s an abnorr	nal redness o	or flushing of the si	kin.	
a) ulcer	b) vei	n	c) redness	d) stasis	
28 res	ults from t	he biological	process of wound	l repair in the sk	kin, as well as in
other organs a	nd tissues	of the body.			
a) wound	b) sm	ell	c) serum	d) scar	
29 is	a reaction	to proteins i	n antiserum derive	ed from a non-h	uman animal
source, occurr	ing 5–10 d	ays after exp	oosure.		
a) seasickness	b) airs	sickness	c) serum sickness	d) dysp	nea
30 is a	severe def	iciency in ca	loric energy intake	e, below the lev	el needed to
maintain an or	ganism's li	fe.			
a) starvation		b) reduction	c) serum	d) biology
31is a c	condition o	f severely de	ficient supply of o	xygen to the bo	dy that arises
from abnorma	1 breathing	•			
a) hanging	b) fall	ing	c) suffocation	d) jump	ing
32 is a	transient a	bnormal enla	argement of a body	y part or area no	ot caused by
proliferation o	of cells.				
a) inflammation	on	b) rash	c) cerebral	stroke d) swelling

33 is an au	itoimmune d	isease	in which the	e body's i	mmı	ne system mistakenly
attacks healthy tis	sue in many	parts o	of the body.			
a) systemic lupus	erythematos	sus	b) hives	c) rash		d) redness
34 is a too	igh band of f	fibrous	connective	tissue tha	at us	ually connects muscle to
bone and is capab	le of withstar	nding	tension.			
a) ankle	b) toe	c) tei	ndon	d) carti	ilage	
35 is an e	endocrine gla	and in	the neck, co	nsisting o	of tw	o lobes connected by an
isthmus.						
a) lymph node	b) ear	c) ey	ebrow	d) thyr	oid g	rland
		Bl	OCHEMIS	STRY		
			Practice	;		
1 is an ana	ntomical term	n for lo	ose connect	tive tissue	e con	nposed of adipocytes.
a) adipose tissue	b) absorption	on	c) adsorpti	on (d) ev	aporation
2 is a hom	nodimeric pro	otein e	nzyme of 80	5 kilodalt	ons.	
a) alkaline battery	b) alkaline		c) biliary o	bstructio	n	d) alkaline phosphatese
3 are ste	roid acids for	und pr	edominantly	y in the b	ile of	f mammals and other
vertebrates.						
a) sulphuric acids	b) bile acid	S	c) uric acid	ds c	d) aco	etic acids
4blocks th	e bile ducts,	which	carry bile to	o the sma	ll int	estine for digestion and
waste removal.						
a) chylomicron	b) citric aci	d	c) biliary o	obstructio	on	d) tricarboxylic acid
cycle						
5 is interr	uption of a c	hemic	al pathway o	owing to	one o	chemical
substance inhibiting	ng the effect	of and	other by com	npeting w	ith it	for binding or bonding.
a) competitive inh	nibition	b) ex	udation	c) deco	mpo	sition d) composition
6 may	also be cause	ed by i	infections, tr	rauma to	the e	ye, chemical burns,
immune system diseases and certain other eye conditions, such as uveitis, glaucoma.						

a) determination	b) diarrhea	c) cornea va	iscularisatio	n d)		
disorder						
7 are a suc	dden, involuntary n	nuscle contraction o	or over-shorte	ening; while is		
generally tempora	ry and non-damagi	ng.				
a) consumption	b) cramps	c) diabetes is	nsipidus	d) derivative		
8is the bre	akdown of large in	soluble food molecu	ıles into sma	ll water-soluble		
food molecules.						
a) digestion	b) ethanol	c) fermentat	ion	d) cycle		
9 is an al	bnormal accumulat	ion of fluid in the in	nterstitium, lo	ocated beneath the		
skin and in the cav	vities of the body.					
a) decrease	b) increase	c) order	d) edema			
10 is a hor	rmone, neurotransr	nitter, and medication	on.			
a) methane	b) epinephrine	c) morphine	d) injection			
11 is a redox coenzyme, more specifically a prosthetic group of a protein,						
involved in severa	al important enzyma	atic reactions in met	tabolism.			
a) festering wound	d b) free radio	cals c) flavin ade	enine dinucl	eotide d) gall –		
bladder						
12 is a met	tabolic process that	produces chemical	changes in o	organic substrates		
through the action	of enzymes.					
a) wound	b) pus	c) decomposition	d) feri	mentation		
13. When a cut ge	ets infected, it starts	to and smel	l bad.			
a) rotten	b) fester	c) blow up	d) cha	ange		
14 is a small hollow organ where bile is stored and concentrated before it is						
released into the s	mall intestine.					
a) liver	b) gall – bladder	c) stomach	d) inte	estine		
15 is a stone	e formed within the	gall - bladder out o	of bile compo	onents.		
a) gall – stone	b) gall – bladder	c) liver	d) sto	mach		
16 is a sw	elling in the neck r	esulting from an enl	larged thyroi	d gland.		
a) neck	b) chin	c) goiter	d) ear			

17 is a form	n of inf	lammatory a	rthritis	characterize	ed by r	ecurrent atta	cks of a red,
tender, hot, and sv	vollen	joint.					
a) rash	b) got	ut	c) hive	es		d) itch	
18 is cause	d by ir	nadequate pla	aque re	moval. Plaqı	ue con	tains germs v	which attack
the healthy tissue	around	the teeth.					
a) gum bleeding	b) ble	eding	c) teet	h	d) lips	S	
19 is a yell	owish	or greenish p	oigmen	tation of the	skin a	and whites of	the eyes due
to high bilirubin le	evels.						
a) gout	b) hiv	es	c) lact	ose	d) jau	ndice	
20 is one	of the	five major g	roups	of lipoprotein	n whic	h transport a	ll fat
molecules around	the bo	dy in the extr	racellul	ar water.			
a) lipid peroxidation	on	b) low – den	sity lip	oproteins	c) inh	ibition d) ma	ple syrup
disease							
21 is the p	rocess	in which free	e radic	als "steal" el	ectron	s from the li	pids in cell
membranes, result	ing in	a cell damage	e.				
a) noncompetitive	inhibi	tion b) epi	nephri	ne c) lipi	d pero	xidation	d) high
energy compound							
22 is an au	ıtosom	al recessive	metabo	olic disorder	affecti	ng branched	-chain amino
acids.							
a) maple syrup dis	sease	b) illness		c) eliminatio	n	d) evaporati	on
23 is a cor	ndition	making it di	fficult	or impossibl	e to se	e in relativel	y low light.
a) night blindness	;	b) blindness		c) visibility		d) sore eyes	
24 is the process of converting pyruvate to acetyl-CoA.							
a) oxidation	b) dec	arboxylation	l	c) determina	ition	d) oxi	idation
decarboxylation o	f pyru	vate					
25 is an or	rganic	compound w	ith the	formula H21	NC6H	4CO2H.	
a) acetic acid	b) par	·a – aminobe	enzoic (acid c) oxa	lic aci	d d) uri	c acis
26 is a cor	ndition	that results i	n weal	or soft bone	es in c	hildren.	
a) rickets	b) lim	ping	c) disl	ocation		d) fracture	

27 is an e	effect based on	the electrolyte-non e	lectrolyte interact	ion, in which th
non-electrolyte c	ould be less sol	uble at high salt cond	centrations.	
a) whitening	b) spitting	c) salting - out	d) vom	iting
28 is a c	disease resulting	g from a lack of vitar	min C (ascorbic ac	eid).
a) quinzy	b) scurvy	c) scarlet fever	d) fever	C
29 is a	a group of disor	ders that affects hem	noglobin, the mole	cule in red
blood cells that d	elivers oxygen	to cells throughout th	ne body.	
a) leukemia	b) anemia	c) brain	d) sickle – cel	ll anemia
30is a sev	vere deficiency	in caloric energy into	ake, below the lev	rel needed to
maintain an organ	nism's life.			
a) overfeeding	b) eating	c) starvation	d) luncl	n
31 is a d	isaccharide (glu	acose + fructose) wit	h the molecular fo	ormula
C12H22O11.				
a) saccharide	b) sucrose	c) lactose	d) glucose	
32 has th	ne three dimens	ional shapes of a pro	tein.	
a) body structure	b) structural p	oattern c) tertiar	y <i>structure</i> d) structure
33 is the	craving for flu	ids, resulting in the b	pasic instinct of an	imals to drink.
a) hunger	b) tiredness	c) rickets	d) thirs	ty
34is an	endocrine gland	d in the neck, consist	ing of two lobes c	onnected by an
isthmus.				
a) thyroid gland	b) goiter	c) double	e chin d) chin	
35 is a th	niamine (vitami	n B ₁) derivative which	ch is produced by	the
enzyme thiamine	diphosphokina	se.		
a) thiamine deriv	ative b) sucr	ose c) thiam	ine pyrophosphat	e d) lactose
36is a	mitochondrial i	nner membrane prote	ein that is a regula	ated proton
channel or transp	orter.			
a) membrane	b) prote	ein c) thyroi	d gland d) uncoupler
37 is an	organic compo	und with chemical fo	ormula CO(NH2)2	
a) urea b) ui	ric acid c	e) urine d)	acetic acid	

38 1s a liq	juid by-product of i	netabolism in huma	ans and in many animals.
a) uric acid	b) urea	c) urine	d) sulphuric acid
39 is a type	e of injury which ha	appens relatively qu	uickly in which skin is torn, cut,
or punctured (an	open wound).		
a) cut	b) wound	c) ill	d) sick
	PHARMA	ACEUTICAL BO	ΓΑΝΥ
		Practice	
1. Choose the con	rrect variant.		
1 is a cel	l that displays antig	gen complexes with	major histocompatibility
complexes (MHC	cs) on their surfaces		
a) accessory cell	b) dead cell	c) alive cell	d) cell
2 is a fr	ruit in which some of	of the flesh is derive	ed not from the ovary but from
some adjacent tiss	sue exterior to the c	carpel.	
a) vegetable	b) food	c) aggregate –acc	cessory fruit d) dairy product
3are the	most diverse group	of land plants.	
a) anisocytic	b) annual plants	c) apical meristen	d) angiosperms
4is	a plant collected fr	om the phloem or b	past surrounding the stem of
certain dicotyledo	onous plants.		
a) fiber	b) bast fiber	c) cartilage	d) flower
5 is a flo	wering plant that ta	kes two years to co	omplete its biological lifecycle.
a) annual plant	b) flowering plant	c) addition	root d) biennial plant
6 is a zy	ygomorphic, sympe	etalous corolla with	the limb divided into two lips.
a) bilabiate corol	<i>la</i> b) co	llateral bundle	c) collenchyma d)
companion cell			
7 is a fru	it with a large "stor	ne" inside.	
a) bundle	b) root	c) stone – fruit	d) stem
8 is a	colony containing	a fixed number of	cells, with little or no
specialization.			

a) cincinnus	b) coenobium	c) bundle	d) plant	
9 are	e a division of vasc	cular land plants co	ontaining a sing	le extant class.
a) cutinization	b) cystoliths	c) buds	d) co	onifers
10is	a rounded undergr	ound storage orga	n consisting of	a swollen stem base
covered with sca	ale leaves.			
a) corymb	b) corm	c) conifer	d) branch	
11 is a t	potanical term for	an inflorescence w	ith the flowers	growing in such a
fashion that the	outermost are born	on longer pedicel	.S.	
a) corymb	b) corm	c) bulb	d) root	
12 wir	nds along the surfa	ce of the soil by is	suing many ver	rtical branches.
a) exoderm	b) endoderm	c) embryo root	d) creeping	g stem
13 f	forms as a result of	f an equal division	of a terminal b	oud into two
equal branches.				
a) dichotomous	branching b)	dicotyledon c)	didynamous	d) druse
14 are	one of the two gro	oups into which all	the flowering	plants or
angiosperms we	re formerly divided	d.		
a) druses	b)didynaı	mous c) dicoty	<i>ledons</i> d) di	chotomous
branchings				
15 h	as four stamens dis	sposed in pairs of	unequal length.	
a) druse	b) didynamous	c) dicoty	rledon d) fil	oril
16 h	as the form of a fu	nnel or cone.		
a) funnelform	b) rhizome	c) bulb	d) branch	
17 a	are internal buds fo	ound in sponges an	d are involved	in asexual
reproduction.				
a) glossy black b	perries b) glycog	en c) gemm	d) fu	nnelforms
18 are a g	roup of seed-produ	icing plants.		
a) halophytes	b) hesperidium	c) intern	ode d) gy	omnosperms
19 is a gr	roup or cluster of f	lowers arranged o	n a stem that is	composed of a main
branch or a com	nlicated arrangeme	ent of branches		

a) sliming	b) perennial plan	at c) plasmoo	desma d) raceme			
30	is a plant that lives me	ore than two years.				
a) sieve tube	b) spadix	c) pedicle	d) silique			
with a pedic	e on an adjacent verteb	ra.				
29	has a superior and in	aferior notch that for	orms an intervertebral foramen			
a) palmatipa	ertite b) receptacle	c) root cap	d) fibrilla			
28 has lobes with incisions that extend over half-way toward the petiole.						
a) xylem	b) thyrsus	c) stamen	d) ovoid			
27	has the same shape as a	n egg, or of a simi	lar shape.			
a) ocrea	b) ovoid	c) palmatipartite	d) pedicle			
stem.						
26 is	a plant structure forme	ed of stipules fused	into a sheath surrounding the			
a) monoadel	phous b) perigonium	c) monocotyledo	ons d) cynarodium			
25 h	ave four distinct structu	ural features: leave	es, stems, roots and flowers.			
a) monocoty	ledon <i>b) monoadelpho</i>	us c) multilayer pa	lisade d) microfilaments			
style of the c	earpel.					
24. It is so –	called when the	e stamens of a flow	ver are united as a tube around the			
a) halophyte	b) chlorenhyma	c) paracytic	d) ligulate			
grasses.						
23	is a thin outgrowth	at the junction of	leaf and leafstalk of many			
a) pedicle	b) legume	c) ocrea	d) phloem			
of such a pla	nt.					
22 is	a plant in the family Fa	abaceae (or Legum	ninosae), either the fruit or a seed			
a) legumes	b) lateral roots	c) mesode	erms d) ovoids			
the plant sec	urely into the soil.					
21	extend horizontally	from the primary	root (radicle) and serve to anchor			
a) intercalar	y meristems b) inulins	c) cynarodium	d) lateral meristems			
20	are the completely und	differentiated meri	stems in a plant.			
a) bud	b) inflorenscence	c) stem	d) branch			

31 is the s	sterile parts of a flo	wer.				
a) perigonium	b) vine	c) meristem	d) radial bu	ındle		
32 are all the veins are present in the form of a net work.						
a) tendrils	b) stem	c) bud	d) pinnate	– reticulates		
33 is the f	female reproductive	e part of a flowe	r.			
a) .tubular	b) pistil	c) wound meris	stem d) rh	izome		
34 are a	very heterogeneou	is group of extin	ect plants with r	mostly fern-like		
foliage but with re	al seeds.					
a) pteridosperms	b) plasmodesma	c) endoderm	d) angiospe	erms		
35 is an	unbranched, indete	erminate type of	inflorescence	bearing pedicellate		
flowers along its a	xis.					
a) rhizome	b) bulb	c) raceme	d) fern			
36 i	s the first part of a	seedling (a grow	ving plant embr	ryo) to emerge from		
the seed during the	e process of germin	ation.				
a) inulin	b) radicle	c) cynarodium	d) black be	erry		
37 is an org	gan or structure wh	ich receives a se	ecretion, eggs, s	sperm.		
a) receptacle	b) tracheids	c) tendrils	d) fern			
38 is	the only stem of th	e plant.				
a) addition root	b) anisocytic	c) bast fiber	d) rhizome	of fern		
39 are elo	ongated living cells	(sieve-tube eler	nents) of the ph	nloem, the nuclei of		
which have fragme	ented and disappea	red and the trans	sverse end wall	s of which are		
pierced by sievelik	te groups of pores.					
a) biennial plants	b) sieve tube	es c) annual	l plants	d) plants		
40 is a t	ype of fruit (seed c	apsule) having t	two fused carpe	els with the length		
being more than th	aree times the width	1.				
a) silique	b) spadix	c) legum	e	d) mesoderm		
41 is	a type of spike inf	lorescence havin	ng small flower	rs borne on a fleshy		
stem.						
a) stem	b) paracytic	c) spadix	, V	d) glycogen		

42 is th	ne pollen-producing repr	oductive orga	n of a flower.	
a) corymb	b) creeping stem	c) cystolith	d) sta	ımen
43 is	s a specialized stem, leav	es or petiole	with a threadlike sh	nape.
a) tendril	b) pedicle	c) ocrea	d) ge	mmule
	MICRO	BIOLOGY		
	Pr	ractice		
1. Choose the cor	rect variant.			
1 includ	le many types of cancer,	particularly t	hose of the bone m	arrow and
blood cells (leuker	mia, lymphoma, multiple	e myeloma), a	nd certain chronic	infections.
a) acquired immu	nodeficiencies b) il	lnesses c) dis	eases d) dis	sorder
2 is a so	erious infectious disease	caused by gr	am-positive, rod-sh	naped bacteria
known as Bacillus	anthracis.			
a) hives	b) ulcer c) an	nthrax	d) pollution	
3 is a	medication made up of	antibodies ag	ainst the tetanus.	
a) artificial active	immunity b) antiteta	nus immunog	<i>lobulin</i> c) anti – vi	iral drug
d) autoclaving				
4 cau	ses gastroenteritis, an in	flammation o	f the gastrointesting	al tract
involving both of	the stomach and the sma	ll intestine.		
a) allergen	b) antibiotic c) ac	cute intestinal	<i>infection</i> d) an	noebic
dysentery				
5 is a	laboratory method to ch	eck for certain	n antibodies or anti	gens in a
variety of body flu	iids including saliva, uri	ne, cerebrospi	nal fluid, or blood.	
a) blood tellurium	agar b) bactericidal	c) anaerobio	e wound infection	<i>d</i>)
agglutination test				
6 is a	disorder of sight due to	the eye and b	rain not working w	vell together.
a) ambiopia	b) coli – index	c) capsular	bacteria	d) bismuth
sulfite agar				

7 inhibits the synthesis of mycolic acid, resulting in disruption of the	
bacterial cell walls.	
a) penicillin b) antitetanus immunoglobulin c) anti – TB action d)	
blue - green pigment	
8 are germs. They are different in size and shape.	
a) illnesses b) bacteria and fungi c) disorders d) contamination	
9 is a type of asexual reproduction in which a new organism develops from	1
an outgrowth or bud due to cell division at one particular site.	
a) budding reproduction b) colienteritis c) capsular bacteria d) amoebi	c
dysentery	
10 is an infection caused by the bacterium Corynebacterium diphtheriae.	
a) autoclaving b) allergens c) immunity d) causative agent of difteria	
11 refers to the contamination of our environment and or food source	
with microscopic organisms, like viruses, bacteria, fungi, and parasites.	
a) drying b) degree of biological contamination c) disinfection of	f
air d) elective medium	
12 indicates, utilizes hot air that is either free from water vapor, or has ve	ry
little of it, and where this moisture plays a minimal or no role in the process of	
sterilization.	
a) dry heat b) enrichment medium c) evaluation of the general d)	
infection	
13 based on a physical exam, medical and immunization history, and the	
signs and symptoms of muscle spasms, stiffness and pain.	
a) temperature b) diagnosis of fever c) diagnosis of tetanus d) diagnosis of	
infection	
14 is used for the estimation of coliform bacteria in water samples using the	<u>,</u>
membrane filtration technique.	

15 indicates that the v	vater has been cont	aminated w	ith the fecal m	aterial of
humans or other animals.				
a) faecal contamination of wa	ter b) bacteria	and fungi	c) pollution	d)
contamination				
16 is a lash-like ap	pendage that protru	ides from th	ne cell body of	certain
bacterial and eukaryotic cells a	and whose primary	function is	locomotion.	
a) mechanism of infection	b) flagellum	n c) st	treptobacilli	d) microbial
number				
17 have square end	s and are arranged	in long chai	ins.	
a) gram – positive streptobaci	<i>lli</i> b) gram – n	egative mic	croorganisms	c) gram –
positive rods with chopped end	ds d) general p	ollution of	water	
18 is a spectrum of co	onditions caused by	infection v	with the human	ı
immunodeficiency virus (HIV)).			
a) hemolytic streptococci	b) infectious mone	onucleosis	c) isolation	of pure
cultures d) HIV infection				
19 contains antibo	odies.			
a) immune serum b) immunol	ogy c) liquid prepa	ration d) s	yrup	
20 was based on s	pores from the Ster	ne strain of	B. anthracis.	
a) live attenuated vaccine	b) serial dilution	c) live vac	cine STI	d)
antibiotics				
21 is a complex pro-	cess ultimately dep	endent on t	umor cells.	
a) membrane filter method	b) tumor growth	c) drugs	d) live atten	uated
vaccine				
22 is defined as the	e lowest concentrat	ion of an ar	nti- microbial t	hat will
inhibit the visible growth of a	microorganism afte	r overnight	incubation.	
a) microorganisms resistance	b) identification o	f a selective	e culture c) pse	eudomonas
d) minimum inhibitory concer	ntration of the anti	biotic		
23recognizes the	presence of microc	organisms ir	n general and s	pecific
pathogenic microorganisms.				

a) microbiologica	l purity	b) non – sewn filament	s of a micelle c)
penetration into ti	ssue d) pro	ecipitate reaction in gel	
24 car	not reproduce outs	side their host cell, mean	ing that
the parasite's repre	oduction is entirely	reliant on intracellular r	esources.
a) picornaviruses	b) assessment	c) obligatory intracellu	lar parasitism d)
organisms			
25	has antibodies for	protection against respin	ratory infection with
Francisella tul	larensis.		
a) injections	b) prophylactic ar	nd therapeutic serum	c) liquid preparations
d) syrup			
26 d	lepends on antibioti	ics which must be active	against the offending
pathogen(s) ar	nd must reach suffi	cient concentrations at th	ne site of infection where
microorganism	ns have induced se	vere inflammation.	
a) diseases	b) vaccines	c) penetration into tissa	ue d)
toxigenicity			
27 is	a method widely u	used in molecular biology	to make many copies of a
specific DNA			
a) polymerase cho	ain reaction b) qu	ick reaction c) seconda	ry immune response
d) specific heredit	ary immunity		
28 ar	re types of bacteria	used to detect and estim	ate the level of faecal
contamination	of water.		
a) trichomoniasis	b) ulcer	c) sanitary – ind	icative microorganisms
d) Seitz filter			
29 is	a member of the p	hylum Spirochaetes wh	ich contains distinctive
diderm (doubl	le-membrane) bact	eria.	

a) Treponema pa	allidium	b) yeast fungi	c) restoration of normal
microflora			
d) spirochaete ba	icterium		
30	is a member of the	e coagulase-negativ	ve staphylococci (CoNS).
a) S. haemolytici	b) endo bro	oth c) dry heat	d) drying
31 is	an infection in any	part of urinary sy	stem.
a) infection contamination	•	nfection	c) treatment of infection d)
	is a discontinuity or inue its normal fund	•	membrane that impedes the
a) liver cirrhosis	b) leukemia	c) ulcer d) to	imor
33 are of the fungus ki	· ·	elled microorganis	ems classified as members of
a) difteria of the	throat b) vi	ruses c) disinfec	tion of air d) yeast fungi
	РН	ARMACOLOGY	7
		Practice	
1. Choose the co	rrect variant.		
1. The diagnosis	of thes	should be made by	measuring quantitative PBG
before starting sp	ecific treatment for	porphyria.	
a) acute attack	b) alopecia	c) allergen	d) afferent nerves
2	are a diverse gro	up of pharmacolog	gical agents used in the treatment
of epileptic seizu	res.		
a) amenorrhea	b) anticonvulsant	ts c) antiepile	eptic d) antivirals
3	are steroidal andro	gens that include	natural androgens like
testosterone and	so on.		

a) anxiolytics	b) antitussives	c) anti – ulo	cer effect	d) anabolic
steroids				
4 are	substances that red	uce fever.		
a) antitussives	b) atony	c) antipyretics	d) ato	pen
5 a	re medecines that s	uppress coughing.		
a) alopecia	b) antitussives	c) allergen	d) agonist	
6 is the	e cessation of breatl	ning.		
a) apnoea	b) asthenia	c) antiviral	d) allergy	
7 is the	feeling of body fati	gue, or tiredness.		
a) acidosis	b) alopecia	c) asthenia	d) afferent n	erves
8 are u	sed as a short-term	treatment for bipo	lar disorder to	control psychotic
symptoms such as	hallucinations, del	usions, or mania s	ymptoms.	
a) asphyxia	b) antipsychotic n	nedications c) atr	rioventricular	node d) atony
9	controls the heart r	ate.		
a) agonist	b) allergen	c) antipyretic	d) atriovent	icular node
10 i	s a proliferative ph	ysiological process	s in which the	body facilitates
the repair of a bon	e fracture.			
a) bone healing	b) cachexia	c) catabolism	d) carotid si	nus
11 is lo	ss of weight, musc	le atrophy, fatigue,	weakness and	significant loss of
appetite in someon	ne.			
a) colitis	b) endometriosis	c) cachexia	d) col	lapse
12 is	s a dilated area at th	ne base of the inter	nal carotid art	ery just superior to
the bifurcation of	the internal carotid	and external carot	id at the level	of the superior
border of thyroid	cartilage.			
a) cognitive functi	ion b) can	rotid sinus	c) diarrhea	d) dyspnea
13 is	a condition of the c	ligestive system ch	aracterized by	y hard feces that
are difficult to pas	SS.			
a) hypotension	b) hyperten	sion c) hii	rsutism	d) constipation

14 is th	ne condition of havin	g at least three loose	or liquid bowel movements
each day.			
a) diarrhea	b) constipation	c) rectum	d) feces
15 is	the feeling that one o	cannot breathe well en	nough.
a) exstrasystole	b) epilepsy attack	c) glaucoma	d) dyspnea
16 is som	ething that helps loo	sen mucus so you ca	n cough it up.
a) heart attack	b) expectorant	c) erythropoieti	n d) fainting
17 is a los	s of consciousness a	nd muscle strength cl	naracterized by a fast onset,
short duration, and	d spontaneous recove	ery.	
a) fainting	b) consciousness	c) loss	d) termination
18 i	s common name for	myocardial infarction	n, when the blood supply to
a part of the heart	is interrupted.		
a) epilepsy attack	b) fainting	c) heart attack d)	hirsutism
19 is	excessive body hair	in men and women o	on parts of the body where
hair is normally at	osent or minimal.		
a) infarction	b) hirsutism	e) hair d)	diarrhea
20 is a	measurement of the	pressure of brain tis	sue and the cerebrospinal
fluid that cushions	s and surrounds the b	rain and spinal cord.	
a) cachexia	b) catabolism	c) colitis d)	intracranial pressure
21 is	the fluid pressure in	side the eye.	
a) intraocular pre	essure b) hypotensic	on c) hypert	ension d) hirsutism
22 is an	y technique to induc	e the absence of sens	ation in a specific part of the
body, generally fo	or the aim of inducing	g local analgesia, that	is, local insensitivity to
pain, although oth	er local senses may l	be affected as well.	
a) meningitis	b) metabolism	c) local anesth	esia d) migraine
23 is a se	mi-solid tissue which	n may be found withi	n the spongy or cancellous
portions of bones	in birds and mamma	ls.	
a) mvofibril	b) bone marrow	c) myasthenia	d) ovulation

24 can cau	use severe throbbing	g pain or a pulsing	sensation, usually on just one
side of the head.			
a) migraine	b) headache	c) brain	d) bone marrow
25 is a medi	cal condition in wh	nich excess body far	t has accumulated to the extent
that it may have a	negative effect on l	health.	
a) proctitis	b) sedative	c) sepsis	d) obesity
26 is a	n abnormal conditi	on of the mind that	results in difficulties
determining what	is real and what is a	not.	
a) probiotics	b) prebiotics	c) psychosis	d) stomatitis
27 is re	ecovery from illness	s or injury.	
a) symbiotics	b) reconvalescenc	e c) scorbutus	d) surfactant
28 is a cl	nronic and severe m	nental disorder that	affects how a person thinks,
feels, and behaves			
a) schizophrenia	b) nerve	c) disorder	d) mental
29 is a	disease resulting fr	om a lack of vitam	in C (ascorbic acid).
a) tetany	b) toxic goiter	c) stroke	d) scorbutus
30 is a	medical condition is	n which poor blood	flow to the brain results in cell
death.			
a) sulphonamides	b) stroke	c) sedative	d) proctitis
31 is	a medical sign cons	sisting of the involu	intary contraction of muscles,
which may be cau	sed by disease or of	ther conditions.	
a) sepsis	b) psychosis	c) tetany	d) probiotics
32 is a t	thyroid gland that c	ontains autonomou	sly functioning thyroid nodules
with resulting hyp	erthyroidism.		
a) toxic goiter	b) goiter	c) gland	d) contamination
33 is a res	sult of untreated leg	g vein problems.	
a) tuberculosis	b) cancer	c) ulcer	d) trophic ulcer
34 is a	medicine taken or	given to counteract	a particular poison.
a) tumor	b) antidote	c) tranquilizer	d) ventricular fibrillation

35 is when	the heart quivers in	nstead of pumping due to disorganized	electrica
activity in the ven	tricles.		
a) stomatitis	b) sedative	c) ventricular fibrillation	d)
tranquilizer			

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Навчальне видання

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