"Dissemination of Education for Knowledge, Science and Culture"
-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur (An Empowered Autonomous Institute) Department of Zoology

Academic Year: 2024-25

Date: 13/03/2025

Notice

All the students of **B. Sc. II (Major)** are hereby informed that Continuous Internal Evaluation (CIE) Examination of Semester-IV, 2025 is held on **Thursday**, 20th March, 2025 at 12:00 pm in Zoology Department. Attendance is mandatory to all the students. Students who remain absent for examination will be responsible for their own loss.

Topics: B.Sc. II Semester-IV syllabus

Type of Examination: MCQs

Total Marks: 20 Marks (Each Paper)

Dr. G. K. Sontakke

DEPARTMENT OF ZOOLOGY
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)

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Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur (An Empowered Autonomous Institute) Department of Zoology

B.Sc. Part- II Semester-IV- ZOOLOGY (Major)

Continuous Internal Evaluation (CIE) March, 2025

Paper VII & VIII- Principles of Biochemistry (DSC03ZOO41) and Histology (DSC03ZOO42)

Attendance

Total Marks: 20 (Each paper)

Sr. Roll			Signature		
No.	No.	Name of the Student	Principles of Biochemistry	Histology	
1	7849	Adagale Paras Charudatta	DARAS	DARAS	
2	7850	Baraskar Aditi Satish	Velebor Ab	Visto Ab	
3	7851	Khot Vira Sachin	vscebor	Viglebolt	
4	7852	Mane Pranoti Prakash	epo-	els-	
5	7853	Momin Shireen Sajid	Smarin	monun	
6	7854	More Sanika Sanjay	Sections	Samos.	
7	7855	Nadaf Muskan Mohammad Rafiq	Mishan	Hughan	
8	7856	Navale Rutuja Pradeep	Revade.	Rapale.	
9	7857	Patil Anushka Rajgonda	Angah	Regalis	
10	7858	Patil Gouri Vijay	G.V. Pati)	G. V. Podil	
11	7859	Patil Madhuri Sanjay	- Cetto	Detto	
12	7860	Patil Sayali Ashok	SARtil	SPALIL	
13	7861	Patil Suhani Suraj	(madil	motil	
14	7862	Shirgave Rutuja Bajarang	lautuja.	Buting.	
15	7863	Todkar Shravani Sanjay	Stedkoz.	Stocker.	
16	7864	Bariya Avinaben Vinodbhai	Juna.	Auma.	
17	7865	Kamble Ketan Keraba	flets	- Kets	
18	7866	Kamble Ratndip Rajaram	-Saturable.	Setto/colse.	
19	7867	Patil Dhananjay Anandrao	Sun	Pho	
20	7868	Powar Yash Mahadev	Jul.	da	
21	7956	Chavan Sakshi Madhav	pochovan.	Chavan	
22	7957	Mane Sangramsingh Sandip	BAA-	av_	
23	7958	Mahekar Pruthviraj Tatoba	A5	Ab	
24	7962	Kadre Dnyaneshwari Balaso	Dok.	DBk.	

Dr. G. K. Sontakke

DEPARTMENT OF ZOOLOGY VIVEKANAND COLLEGE, KOLHAPUR (EMPOWERED AUTONOMOUS)



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Vivekanand College, Kolhapur (An Empowered Autonomous Institute) Department of Zoology

Continuous Internal Evaluation (CIE) March, 2025

B.Sc. Part- II Semester Day & Date: Thursday, 20/03/		SC03ZOO41 – Principles	s of Biochemistry (NEP 1.0) Marks: 20
Name: Vigo Sachin		and the second second	Roll No: 7851
Q. 1. Select the Correct Alt	ernative		[20]
1, bond joins 1	nonosaccharides to	form disaccharides	
A) Peptide	B) Hydrogen	C) Glycosidic	D) Phosphodiester
2 is the final elec	tron acceptor in the	ETC	
A) NADH	B) FADH ₂	C) Oxygen	D) ATP
3 complex in the	ETC is responsible	for ATP synthesis	
A) Complex I	B) Complex II	C) Complex III	D)ATP synthase (Complex V
4is the main p	ourpose of the pento	ose phosphate pathway	
A) ATP production			ose-5-phosphate production
C)Lactate formation		D) Urea synthesis	
5is the primary en	zyme responsible f	or glycogen breakdown	in glycogenolysis
A) Glycogen synthaso		B) Glycogen phosp	
C) Phosphoglucomut	ase	D) Glucose-6-phosp	phatase
6of the fe		function of lipids.	
A) Energy storage			onent of membranes
C) Enzyme catalysis		D) Hormone synthe	esis
7. Lipids that contain both hy	drophilic and hydr	ophobic regions are call	ed
		C) Hydrophilic	
8. Fatty acid synthesis prima			
A) Mitochondria		C) Cytoplasm	D) Endoplasmic reticulum
N.C.	y enzyme in fatty a	cid synthesis.	
A) Acetyl-CoA carbo		B) HMG-CoA redu	ictase
C) Lipase		D) Carnitine acyltr	ansferase
	ule provides the ca	rbon atoms for fatty acid	l biosynthesis.
A) Acetyl-CoA		C) Pyruvate	D) ATP
		sfers an amino group to	a ketoacid to form new amino
acids.			
	B) Deamination	C) Ubiquitination	D) Analokination

12. Amino acids that must be obtained from the diet in mammals are termed

B) inactive

C) essential

D) non-essential

acids.

A) active

13.	Urea cycle converts	A CONTRACTOR OF THE CONTRACTOR			
1/	A) Keto acids into	amino acids	B) Amino acids into keto acids		
	C) Ammonia into a	a less toxic form	D) Ammonia into a more toxic form		
14.	is not	an essential amino acid	100g Internal Exalu		
-	A) Glycine	B) Leucine	C) Methionine	Histidine	
15.				at are essential for maintaining	
var	ious life processes			t. r. relect the Correct Missins	
	A) Enzymes	B) Proteins	C) Hormones		
16.	enzy	mes add water, carbon o		across double bonds or eliminate	
	se to create double bon				
	A) Transferases	B) Oxidoreductase			
17.	The temperature at wh	ich an enzyme shows it	s highest activity is	called temperature	
	A) Optimum	B) Minimun	C) Minor	D) Maximum	
18.				bits its catalytic activity is called	
an					
	A) Activators		C) Inhibitor	D) Enhancers	
19.	Urea cycle occurs in	and the second second		Service from it affect	
<	A) liver	B) muscle	C) kidney	D) Brain	
20.	In competitive inhibiti	on, the inhibitor			
	A) binds to active	site of an enzyme	B) binds to an al	losteric site of an enzyme	
	C) denatures the en	nzyme	D) enhance the e	nzyme activity	
		Hormone synthusis.	G		
		******	*********	******	
		EC	> 3taoudorp.f		

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute) Department of Zoology

inuous Internal Evaluation (CIE) March, 2025

Day & Date: Thursday, 20/03/2025		Marks: 20
Name: Suhani suraj Patil		Roll No: +861.
Q. 1. Select the Correct Alternative		[20]
1 bond joins monosaccharides to	form disaccharides	
A) Peptide B) Hydrogen	C) Glycosidic	D) Phosphodiester
2 is the final electron acceptor in the	ETC	
A) NADH B) FADH ₂	C) Oxygen	D) ATP
3 complex in the ETC is responsible	for ATP synthesis	
A) Complex I B) Complex II		D)ATP synthase (Complex V
4is the main purpose of the pentor		
A) ATP production	B) NADPH and ribe	ose-5-phosphate production
C)Lactate formation	D) Urea synthesis	
5is the primary enzyme responsible for	or glycogen breakdown	in glycogenolysis
A) Glycogen synthase	B) Glycogen phospl	horylase
C) Phosphoglucomutase	D) Glucose-6-phosp	bhatase
6of the following is NOT a fu	unction of lipids.	
A) Energy storage	B) Structural compo	onent of membranes
C) Enzyme catalysis	D) Hormone synthe	sis
7. Lipids that contain both hydrophilic and hydro	phobic regions are calle	ed
A) Amphipathic B) Hydrophobic	C) Hydrophilic	D) Saturated
8. Fatty acid synthesis primarily occur in		
A) Mitochondria B) Nucleus	C) Cytoplasm	D) Endoplasmic reticulum
9is the key enzyme in fatty aci	id synthesis.	
A) Acetyl-CoA carboxylase	B) HMG-CoA reductase	
C) Lipase	D) Carnitine acyltra	insferase
10 molecule provides the carb	oon atoms for fatty acid	biosynthesis.
A Acetyl-CoA B) NADPH	C) Pyruvate	D) ATP
11a chemical reaction that transf	fers an amino group to a	a ketoacid to form new amino
acids.		
A) Transamination B) Deamination	C) Ubiquitination	D) Analokination

(essential

B) inactive

D) non-essential

acids.

A) active

13. Urea cycle converts					
A) Keto acids into	amino acids	B) Amino acids into keto acids			
Ammonia into	C) Ammonia into a less toxic form		D) Ammonia into a more toxic form		
14is not	an essential amino acid				
A) Glycine	B) Leucine	C) Methionine D) Histidine			
15. The majority of	having cata		are essential for maintaining		
various life processes			t.) .: elect the Correct Alberta		
A) Enzymes	B) Proteins		D) Metals		
16 enzy	mes add water, carbon d	ioxide or ammonia a	cross double bonds or eliminate		
these to create double bon	ids.				
A) Transferases	B) Oxidoreductase	C) Hydrolases	D) Lyases		
17. The temperature at wh	nich an enzyme shows its	highest activity is c	alled temperature		
A) Optimum	B) Minimun	C) Minor	D) Maximum		
18. The chemical substance	ce that combines with the		its its catalytic activity is called		
an					
A) Activators	B) Inducers	C) Inhibitor	D) Enhancers		
19. Urea cycle occurs in					
A) liver		E kidney	D) Brain		
20. In competitive inhibiti	on, the inhibitor	****			
A binds to active	site of an enzyme	B) binds to an allosteric site of an enzyme			
C) denatures the enzyme		D) enhance the enzyme activity			
The state of the s					

[20]

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Vivekanand College, Kolhapur (An Empowered Autonomous Institute) Department of Zoology

Continuous Internal Evaluation (CIE) March, 2025

B.Sc. Part- II Semester-IV- ZOOI

Day & Date: Thursday, 20/			- Histology (NEP 1.0) Marks: 20
Shireen	Sqjid m	omin	Roll No: 7
Q. 1. Select the Correct	Alternative		
1the study of th	e structure and function	n of tissues and cells	at a microscopic level.
A) Histology		C) Physiology	D) Pathology
2. Cartilage and bone are		, , , , , , , , , , , , , , , , , , , ,	D) I athology
A) muscular tissue	B) connective tissue	C) meristematic ti	issue D) epithelial tissue
Brunners gland is the cha	aracteristic feature of		b) epithenai tissue
A) Oesophagus	B) Duodenum	C) Stomach	D) Rectum
. The following cells are for	ound in gastric glands I		15 The Column
A) Parietal cells	B) Goblet cells	C) Chief cells	Q) Argentaffine cells.
. The region of the kidney	where artery, vein and		s called the
A) cortex	B) medulla	C) calyx	D) hilus.
Macula densa is a collect	ion of densely packed		
A) Alveoli	B) Kidney	C) DCT	D) Loop of Henle
Type II Pneumocytes pre	sent in the		= / Euop of Freme
A) Heart	B) kidney	C) DCT	D) Alveoli
is phagocytic cell pres	sent in liver.	ortes a 21	The state of the state of
A) Goblet cells		C) Kupffer cells	D) hepatocytes
Islets of Langerhans is gro	oup of cells present in		-)
A) Heart	B) Pancreas	C) Liver	D) Alveoli
. Inner lining of PCT is co	mposed of epithel	ial tissue.	,
A) squamous	B) stratified	C) Cuboidal	D) columnar
Leydig cells are present	*******		
A) inside seminiferou	is tubules	B) between seminif	ferous tubules
C) in epididymis		D) in vas deferens	
. The mature follicle that l	holds the secondary oo		rom the ovary is called
A) primary follicle	B) secondary follicle	C) graafian follicle	D) Tertiary follicle

A) Adenohypophysis B) Pars distalis C) Neurohypophysis D) Pars intermedia

13, Posterior pituitary gland is also called as

14. Pineal	ocytes are presen	t in		
A)	Pituitary gland	B) Pineal gland	C) Thyroid gland	D) Adrenal gland
			S and the set of summit	(Pag
A)	Somatostatin	B) Calcitonin	C) ACTH	Day & Date: Thursday (C. 20)
16	is the main fu			of islets of Langerhans.
		on of glucocorticoid	S	
B)	Lowering produc	ction of glucocortico	ids	Q. I. Select the Correct After L
CT	Raising blood gl	ucose level		
D)	Lowering blood	glucose level		
17medul	is the correct land is the	order of layers of co	rtex of the adrenal gland	d (from the outer surface to the
A)	Zona glomerulos	a - zona reticularis -	zona fasciculata	i. Brunners gland is the charact
B)	Zona reticularis -	zona glomerulosa -	zona fasciculata	A i Oesophagus H
CT	Zona glomerulos	a - zona fasciculata -	zona reticularis	4) The following cells are former
D)	Zona reticularis -	zona fasciculata - zo	ona glomerulosa	A Marical orlls 5. The region of the Lainey win
18. Epicar	dium, endocardiu	m and myocardium a	re layers of	
A) F		B) Lungs		D) Pituitary gland
19. Osteob	lasts and osteocla	sts are the cells of	12112	A Literalia de la connece de l
		R) Bone	C) Capillaries	D) Ligament
20	is the conn	ective tissue coverin	g that surrounds cartila	W. Type II Pacumocyles presente.
(A) P	Perimysium	B) Periosteum	C) Perichondrium	D) Perineurium
	D) hepatocytes	*****	N Parietal Calls	A) Goblet cells B
		**********	्रात स्वयुक्तमा स्थापन हैव	d laters of Cangerhans is group
	IL STATE			The second of the

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Continuous Internal Evaluation (CIE) March, 2025

Day & Date: Thursday			- Histology (NEP 1.0) Marks: 20	
Name: Sanika S	Sanjay More.		Roll No: 78	54
Q. 1. Select the Corr	ect Alternative			[20]
	of the structure and functi	ion of tissues and cells	at a microscopic level	[20]
A) Histology	B) Anatomy	C) Physiology	D) Pathology	
2. Cartilage and bone	e are the types of	1 2 2	Astrodat Provide the objection	
V / 10 / 10 / 10 / 10 / 10 / 10 / 10 / 1	ssue B connective tiss	ue C) meristematic ti	ssue D) epithelial tissue	
	ne characteristic feature of		1464.00	
A) Oesophagu	s VB) Duodenum	C) Stomach	D) Rectum	
4. The following cells	are found in gastric gland	s EXCEPT		
A) Parietal cell	s B) Goblet cells	C) Chief cells	→B) Argentaffine cells.	
5. The region of the ki	dney where artery, vein ar	nd ureter are attached is	s called the	
A) cortex	B) medulla	C) calyx	VD) hilus.	
6. Macula densa is a co	ollection of densely packe	ed epithelial cells of		
A) Alveoli	B) Kidney	C) DCT	D) Loop of Henle	
7. Type II Pneumocyte	es present in the			
A) Heart	B) kidney	C) DCT	LD TAlveoli	
8 is phagocytic ce	ll present in liver.			,
A) Goblet cells	B) Parietal Cells	C) Kupffer cells	D) hepatocytes	
9. Islets of Langerhans	is group of cells present	in		
A) Heart	B) Pancreas	C) Liver	D) Alveoli	
10. Inner lining of PCT	is composed of epit	thelial tissue.		
A) squamous	B) stratified	C) Cuboidal	D) columnar	
11. Leydig cells are pro	esent			
A) inside semir	niferous tubules	LB) between semini	ferous tubules	
C) in epididym	is	D) in vas deferens		
12. The mature follicle	e that holds the secondary	oocyte before release	from the ovary is called	
	icle B) secondary follio			
A) primary foll	icle B) secondary follie	cle C) graafian follicle	D) tertiary follicle	
13. Posterior pituitary	gland is also called as			

A) Adenohypophysis B) Pars distalis C) Neurohypophysis D) Pars intermedia

14. P	inealocytes are prese	nt in		
	A) Pituitary gland	B) Pineal gland	C) Thyroid gland	D) Adrenal gland
15. P		thyroid gland produce		
	A) Somatostatin	B) Calcitonin	C) ACTH	D) PTH
16	is the main	function of glucagon	produced by alpha cells	of islets of Langerhans.
/	A) Raising produc	ction of glucocorticoic	ls	. L. Select the Correct Alter
1061	B) Lowering prod	uction of glucocortico	oids	the study of the str
	er Raising blood			A) Histology
	D) Lowering bloo			Carrilage and pone are the t
17	is the corre	ct order of layers of co		d (from the outer surface to the
n	nedulla)	J. Precit Paramorentam		fromners gland is the character
	A) Zona glomerul	osa - zona reticularis	- zona fasciculata	A) Oesophagus P
		s - zona glomerulosa	zona fasciculata	
	C) Zona glomerul	osa - zona fasciculata	- zona reticularis	
		s - zona fasciculata -	zona glomerulosa	The region of the following
18 E	picardium, endocard	ium and myocardium	are layers of	A Portos (A
L	A) Heart	B) Lungs	C) Kidney	D) Pituitary gland
19.0	steoblasts and osteo	clasts are the cells of.	······································	A Alverti
	A) Cartilage	B) Bone	C) Capillaries	D) Ligament
20	1139VIA		ng that surrounds cartila	110017171
-	A) Perimysium	B) Periosteum	C) Perichondrium	D) Perineurium
	Tepstocytes		Parietal Cells (1)	A) Goblet cells B
		*****	11 00 10 00 00 00 00 00 00 00 00 00 00 0	***** Islets of Langerhans is group