(20516)

B. Sc. (Micro.)-II-Year

3503

B. Sc. (Micro.) Examination, May 2016

BIOLOGY-IV

(B-210)

'Time' Three Hours] [Maximum Marks: 50

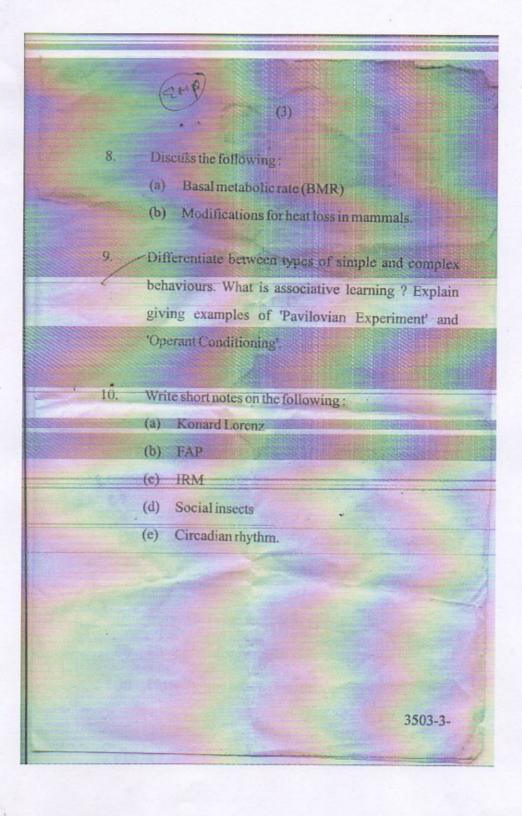
Note: Attempt any five questions. All questions carry equal marks.

> What is growth? Explain cell growth with reference to auxetic and multiplicative growth.

- Differentiate between the following:
 - (a) Photoperiodism and Photomorphogenesis
 - (b) Phytochrome and Phytohormone.

- Discuss the discovery, structure and mode of action of two plant hormones stimulating plant growth in height/length.
- 4. Write short notes on the following:
 - (a) Antiauxins
 - (b) MCPA
 - (c) Auxanometer
 - (d) Apical dominance.
- Describe the structure of neuron and explain the nature and conduction of nerve impulses.
- 6. Explain the following hormonal irregularities:
 - (a) Hashimoto's disease
 - (b) Addison's disease
 - (c) Acromegaly
 - (d) Diabetes mellitus.
- 7. What is intermediary metabolism? With the help of flow-chart only, explain the Embden-Meyerhoff-Parnas pathway, along with energy yield in terms of ATP molecules.

3503



(Printed Pages 3) Roll No. (20517) B.Sc. (Micro.) II Yr. 3503 B.Sc. (Micro.) Examination, May 2017 BIOLOGY-IV (B-216) Tione: Three Hours | Maximum Marks: 50 Note: Attempt any five questions. Each question carries equal marks. What are the various parameters of growth in plants? Discuss the various methods of measuring growth in length of a plant or organ. 2 Differentiate between: (b) Allometric and Isometric growths.

the various experiments to bioassay the aux-				
ins, phiberedias and cytokinas.				
4. Write short notes on the following:				
(a) Mensterns				
(b) Absdission zone				
(c) Discovery of GA				
(d) Richmond-Lang Effect.				
5/ Describe the structure and function of the				
following				
(a) Thyrhid gland				
(b) Pancreas.				
Explain the following with reference to con-				
duction of nerve impulse :				
(a) Resting membrane potential				
(b) Action potential				
(c) Saltatory transmission				
(d) Synapse				
(d) Synapse 3503(2				

What are polkrothe the and homelotherms? Explain the mechanism of temperature regulation in them. 8. Compare the following (a) Glycogenesis and Glycogenalysis (b) Gluconeogenesis and Glycolysis. 9. What is concept of 'drive'? Discuss primary and secondary aspects of motivation. 10. Write short notes on the following : (a) Karl Von Frisch (b) MAP (c) Habituation (d). Social life in termites (e) Circannual rhythm. 350313

(20518)

Roll No.

B. Sc. (Micro.)-II Year

B. Sc. (Micro.) Examination, May 2018

BIOLOGY-IV

(B-210)

(b) Ivan Paylow Excess

Time: Three Hours [Maximum Marks: 50

Note: Answer any Five questions. Each question carries equal marks.

- Define Endocrine gland. Explain Adrenal gland with its secretion and hormonal disorders.
- Explain the structure and function of ear in mammals. 10

3.	Write short notes on the following:	5×2=10		
	(a) Circadian Rhythm			
	(b) Allosteric and Isometric growt	h.		
4.	Write short notes on the following:	5×2=10		
	(a) Cytokinine			
	(b) Abscisic acid.			
5.	Write short notes on the following:	2½×4=10		
	(a) Dormancy			
	(b) Grave's disease			
	(c) Ethylene			
	(d) Phototropism.			
	docrine gland. Explain Adrenal gland v			
6. 1	Explain metabolism. Describe glycolysis in detail. 10			
7.	Explain the structure of Neuron	n and describe		
	transmission of impulse in them.	elamman 10		

8.	Writ	5×2=10	
	(a)	Auxetic growth	
	(b)	Innate behaviour.	
9.	Wri	te short notes on the following:	5×2=10
	(a)	Homeostatis	
	(b)	Basal metabolic rate.	
10.	Write short notes on the following:		5×2=10
	(a)	Imprinting	
	(b)	Ivan Pavlov Experiment.	