` <u>P-446 (H/E)</u>

### **BIOLOGY 2015**

Time: 3 Hours |

Class: 12th

| M. M.: 75

Instructions-(i) All questions are compulsory. (ii) There are two Sections in Question paper. 'Section-A' and 'Section-B'. (iii ) In Section-A O.Nos. 1 to 4 are objective type Questions which contain Fill in blanks. Multiple choice, one word/one sentence answer, Match the column. Each question carries 5 marks. (iv ) In section 'B' there are question nos 5 to 18 Internal options are given in each question. (v) Q. Nos. 5 to 8 are very short answer type questions. Each carries 2 marks. Write answers of these questions approximately in 30 words each. (vi) Q.Nos. 9 to 13 are short answer type questions. Each carries 4 marks. Write answers of these questions approximately in 75 words each. (vii ) Q.Nos. 14 to 16 are long answer type questions. Each carries 5 marks. Write answers of these questions approximately in 120 words each. (viii) Q. Nos. 17 and 18 are long answer type questions. Each carries 6 marks. Write answers of these questions approximately in 150 words each. (ix) Start answering of the objective type questions from first page of the answer sheet. (x) Draw neat and labelled diagram wherever necessary.

		Section - A ( Object	ive Type Questions )		
Q.1. ~	Fill	n the blanks-			
	(1)	NH <sup>+</sup> <sub>4</sub> + 202 Nitrosomo	$\xrightarrow{\text{nas}}$ + 2H <sub>2</sub> O + Energy.		
	(2)		and gastric Juice is controlled by		
		Harmone.			
	(3)	Pollination takes place	by the agency of bird is called		
	(4)		plant.		
	(5)	Bacterium is	found in the roots of leguminous plants		
Q2.	Choo	se the correct options a	nd write it-		
	(a)	Night blindness is cau	ised due to deficiency of		
	1001	(i) Vitamin - C	(ii) Vitamin - A		
		(iii) Vitamin - D	(iv) Vitamin - E		
	(b)	Transpiration Highe	r among the following plant.		
		(i) Mesophytes	(ii) Hydrophytes		
		(iii) Xerophytes	(iv) Algae cells		
(			s is not naturally occurring plant		
		ormone.			
	(	i) 2, 4-D	(ii) GA 2		
	(	iii) Gibberellin	(iv) IAA		
(	(d) Term ecosystem was used far the first time by.				
	(	(i) Tansley	(ii) Odum		
	(	(iii) Ritar	(iv) Mishra and puri		
	(e) l	Useful vaccination is pro	otection from Polio, Diphtheria and		
		Tetanus.			
		(i) BCG	(ii) DPT		
		(iii) MMR	(iv) STD		

Q3.	Answe	r in one word/one	sentence each.	5			
ųs.	(1)	What is net gain of	energy from oxidation of one mole glu	ıcose			
			nd unoxirespiration.				
	(2)						
	(3)						
	(4)	(4) In which animals Ranikhet disease occur.					
	(5) Write any two causes of uncontrolled population growth.						
Q.4.		the column		5			
	Column - A		Column - B				
	(1) L	ichen	Glomerulus				
	(2) Earthworm		Mangrove plant				
	(3) Ultrafiltration		Papaver somniferum				
	(4) Rhizophora		Cutaneous Respiration	ŝ			
	(5) Opium		Symbiotic				
	Se	ction - B ( Very sh	ort Answer type questions )				
Q5.	Draw a labelled diagram of the cardiac muscles.						
(Or)	Draw	Draw a labelled diagram of the Malpighian tubules Transfer section.					
Q.6.	Draw	Draw a labelled diagram of the pollen grain.					
(Or)	Write any two differece between Epigeal and Hypogeal Germination						
Q.7.	Write the Two types of mimicry.						
(Or)	Write is succession, what are its type. Write any two stages.						
Q.8.	Wirte	Wirte any two important difference between short day plants and					
	long	day plants.		2			
(Or)	What	is death. Write ma	in reason of death.				

### ( Short Answer type Questions )

Q.9.	Write the classification of Animales on the basis of excretor				
	substance.				
(Or)	Write the name of excretory organs and draw a labeled diagram of excretory system in humans.				
Q.10.	Write four important difference between Arobic and Anarobic				
	Respiration. •				
(Or)	Write four main difference between Bone and Cartilage.				
Q.11.	Write only the name of male Reproductive organs and female				
	Reproductive organs of Humans. 4				
(Or)	Write only the name of different stages Mechanism of human Reproduction.				
Q.12.	Write only the name of classification of the plants on the basis of				
	temperature. 4				
(Or)	Explain the four Adaptation of xerophyte.				
Q.13.	What is Adiction and its type. Write the harmful effect of Alcohol				
	Adiction				

(Or)	Explain the four car	uses of Adiction.			
Q.14.	Measure the rate of Transpiration with the help of Ganong's				
	potometer.		5		
(Or)	Explain the factors affecting the rate of photosynthesis.				
Q.15.	Describe the internal structure of human ear with labelled diagram.				
(Or)	Draw a labelled diagram of T.S. of spinal card ad describe its function				
Q.16.	Write the four causes of water pollution and explain the control of water pollution.				
(Or)	Write the four causes of noise pollution and explain the control on noise pollution.				
Q.17.	Describe the calvin cycle with Ray diagram.				
(Or)	Explain the starch-sugar interconversion hypothesis of stor				
	opening and closing	and draw a labelled diagram.			
Q.18.	Write the Botanical	6			
	(1) Potato	(2) Brinjal			
	(3) Chilli	(4) Onion			
	(5) Gram	(6) Wheat			
(Or)	Write the difference	between manure and Biofertilizers.			