NOTE:Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question.

Which drug is a ca (A) Morphine	rdiotonic? (B) Digitalis		81 8 10 8 1		
*	(D) Digitalia				
3371 - 5 - 4 - 1 - 1 41	(b) Digitalis	(C)	Aspirin	(D) Diazepam	
wno introduced ti	ne method of single cel	l prot	tein?		
(A) Pasteur	(B) Joseph Lister	(C)	Scrimshow	(D) Ian Wilmut	
Which product is	formed during industr	ial ni	trogen fixation?	i mari 1	
(A) Urea	(B) Ammonia	(C)	Nitrite	(D) Carbon dioxide	
Cytosine always p	airs with.				
(A) Guanine	(B) Thymine	(C)	Adenine	(D) Uracil	
In artificial selecti	on, the bred animals a	re cal	lled:		
(A) Cultivars	(B) Hybrids	(C)	Breeds	(D) Varieties	
Regeneration is co	mmon in:	. 46			
(A) Anneledes	(B) Mammals	(C)	Echinoderms	(D) Arthropods	
The exmaple of sto	em tuber is:		An 2550-15 JE		
(A) Potato	(B) Dasheen	(C)	Onion	(D) Water lilly	
The cells of cartila	ge are called:				
(A) Oxteocytes	(B) Monocytes	(C)	Lymphocytes	(D) Chondrocytes	
The tympanum be	longs to which part of	ear?		* * * * * *	
(A) External ear	(B) Middle ear	(C)	Internal ear	(D) Vestibule	
Testes and ovaries	are called:	2003			
(A) Glands	(B) Gonads	(C)	Gametes	(D) Embryo	38 65
The example of xe	rophytes is:		4.4.4.4		
(A) Water lilly	(B) Funaria	(C)	Sea grass	(D) Cactus	
Percentage of oxygen in the inspired air is:					
	(A) Urea Cytosine always p (A) Guanine In artificial selecti (A) Cultivars Regeneration is co (A) Anneledes The exmaple of sto (A) Potato The cells of cartila (A) Oxteocytes The tympanum be (A) External ear Testes and ovaries (A) Glands The example of xe (A) Water lilly Percentage of oxys	(A) Urea (B) Ammonia Cytosine always pairs with. (A) Guanine (B) Thymine In artificial selection, the bred animals at (A) Cultivars (B) Hybrids Regeneration is common in: (A) Anneledes (B) Mammals The exmaple of stem tuber is: (A) Potato (B) Dasheen The cells of cartilage are called: (A) Oxteocytes (B) Monocytes The tympanum belongs to which part of (A) External ear (B) Middle ear Testes and ovaries are called: (A) Glands (B) Gonads The example of xerophytes is: (A) Water lilly (B) Funaria Percentage of oxygen in the inspired air	(A) Urea (B) Ammonia (C) Cytosine always pairs with. (A) Guanine (B) Thymine (C) In artificial selection, the bred animals are call. (A) Cultivars (B) Hybrids (C) Regeneration is common in: (A) Anneledes (B) Mammals (C) The exmaple of stem tuber is: (A) Potato (B) Dasheen (C) The cells of cartilage are called: (A) Oxteocytes (B) Monocytes (C) The tympanum belongs to which part of ear? (A) External ear (B) Middle ear (C) Testes and ovaries are called: (A) Glands (B) Gonads (C) The example of xerophytes is: (A) Water lilly (B) Funaria (C) Percentage of oxygen in the inspired air is:	Cytosine always pairs with. (A) Guanine (B) Thymine (C) Adenine In artificial selection, the bred animals are called: (A) Cultivars (B) Hybrids (C) Breeds Regeneration is common in: (A) Anneledes (B) Mammals (C) Echinoderms The exmaple of stem tuber is: (A) Potato (B) Dasheen (C) Onion The cells of cartilage are called: (A) Oxteocytes (B) Monocytes (C) Lymphocytes The tympanum belongs to which part of ear? (A) External ear (B) Middle ear (C) Internal ear Testes and ovaries are called: (A) Glands (B) Gonads (C) Gametes The example of xerophytes is: (A) Water lilly (B) Funaria (C) Sea grass Percentage of oxygen in the inspired air is:	(A) Urea (B) Ammonia (C) Nitrite (D) Carbon dioxide Cytosine always pairs with. (A) Guanine (B) Thymine (C) Adenine (D) Uracil In artificial selection, the bred animals are called: (A) Cultivars (B) Hybrids (C) Breeds (D) Varieties Regeneration is common in: (A) Anneledes (B) Mammals (C) Echinoderms (D) Arthropods The exmaple of stem tuber is: (A) Potato (B) Dasheen (C) Onion (D) Water lilly The cells of cartilage are called: (A) Oxteocytes (B) Monocytes (C) Lymphocytes (D) Chondrocytes The tympanum belongs to which part of ear? (A) External ear (B) Middle ear (C) Internal ear (D) Vestibule Testes and ovaries are called: (A) Glands (B) Gonads (C) Gametes (D) Embryo The example of xerophytes is: (A) Water lilly (B) Funaria (C) Sea grass (D) Cactus

Faisalabad Board 2019 (First Group) (in Words): Roll No.(in Figures): SUBJECTIVE TYPE Time Allowed :1.45 Hours Maximum Marks: 48 (PART - I) Q2. Write short answers to any FIVE (5) questions: $(5 \times 2 = 10)$ What is the importance of C-shaped cartilagenous rings in the wall of trachea? (i) (ii) What is the location of stomata? Write their function. (iii) Write two effects of smoking on circulatory system. (iv) What is meant by metabolic waste? (v) Write two problems after kidney transplant. (vi) Define nerve impulse. (vii) What are the two functions of meninges? (viii) What is meant by hypermetropia? Q3. Write short answers to any FIVE (5) questions: $(5 \times 2 = 10)$ (i) What is meant by antagonism? (ii) Differentiate between compact bone and spongy bone. (iii) Define vegetative propagation. Also write the names of its two methods. (iv) Define alternation of generation. (v) Differentiate between spermatogenesis and oogenesis. (vi) Define the term genotype. Also write the names of its two types. (vii) What is meant by Punnett square? (viii) Differentiate between dominant allele and recessive allele. Q4. Write short answers to any FIVE (5) questions: $(5 \times 2 = 10)$ Define food chain and give example. (ii) Write the difference between biotic and abiotic. (iii) Write the names of two carnivorous plants. (iv) Write any two uses of fermentation. (v) Define fermentation. Also write names of its two types. (vi) Name two narcotics obtained from poppy plant. (vii) What are the uses of carbolic acid in surgery? (viii) Write the losses of taking heavy amount of Marijuana. (PART - II) $(2 \times 9 = 18)$ Note: Attempt any TWO questions. Q5. (a) Write the osmoregulatory function of kidney in detail. (b) Explain coordinators and effectors. Q6. (a) Write a detailed note on arthritis. (b) Discuss artificial propagation in detail. Q7. (a) Write a detailed note on nitrogen cycle.

(b) What is fermenter? Discuss on batch fermentation and continuous fermentation.

_	think is correct, fill filling two or more	circles will result in ze	ro mark in that questio	n.			
Q1.	A read to a contract of the co		Si .	*1			
1.	The male and female gametes are produced in specialized organs are called:						
8	(A) Gametogenesis	(B) Zygote	(C) Placenta	(D) Gonads			
2.	The matrix of cartilage also contains fibers:						
	(A) Glucagon	(B) Insulin	(C) Collagen	(D) Lacuna			
3.	The union of several axons that enveloped by a covering made of lipids is called:						
	(A) Meninges	(B) Nerve	(C) Cerebrum	(D) Dendrites			
4.	The unit of nervous system is:						
	(A) Nephron	(B) Receptors	(C) Neuron	(D) Nucleus			
5.	Waste material that	t are secreted by rubl	er plant:				
8	(A) Gums	(B) Latex	(C) Resins	(D) Mucilage			
6.	Larynx is made up of:						
	(A) Glottis	(B) Trachea	(C) Cartilage	(D) Alveoli			
7.	Which inhibits or kills bacteria within or on the body?						
	(A) Disinfectants	(B) Antibodies	(C) Antiseptics	(D) Antibiotics			
8.	Organisms with modified genetic set up are called:						
	(A) Fermentation	10 th 10th (b)	(B) Transition organ	nism			
	(C) Transgenic organism		(D) Transmitter organism				
).	Formation of nitrite	s and nitrates from a		#			
ď,	(A) Denitrification		(C) Nitrification	(D) Nitrogen fixation			
0.	The genotype in wh	ich the gene pair cont					
	(A) Locus	(B) Mutations	(C) Homozygous	(D) Heterozygous			
1,	Hydrogen bonds pro	esent between adenin		(D) Helelozygous			
	(A) 1	mi a	(C) 3	(D) 4			
2.	Some cells of ovary	prepare structures ca) CMY 108 CCCCCC.) 118	(D) 4			
500	(A) Follicles	(B) Seminal vesicles (- (D) 1/ 1 c			

Faisalabad Board 2019 (Second Group) (in Words): toll No.(in Figures): SUBJECTIVE TYPE Time Allowed :1.45 Hours Maximum Marks: 48 (PART - I) $(5 \times 2 = 10)$ 12. Write short answers to any FIVE (5) questions: Define epiglotis. Also write its function. ii) Differentiate between stomata and air spaces. iii) What is inspiration and expiration? (iv) What is kidney transplant? (v) What is hydrophytes? Give an example. (vi) Differentiate between aqueous humour and vitreous humour. (vii) Define coordination. (viii) Differentiate between stimuli and response. $(5 \times 2 = 10)$ Q3. Write short answers to any FIVE (5) questions: Compare compact bone with spongy bone. (ii) What is meant by arthritis? How it can be treated? (iii) Define suckers and give example. (iv) What is double fertilization? In which plants it occurs? (v) What is germination? Give its types. (vi) What are varieties or cultivars? (vii) Define incomplete dominance and give example. (viii) Write advantages of artificial selection. $(5 \times 2 = 10)$ Q4. Write short answers to any FIVE (5) questions: What is meant by biosphere? (ii) Differentiate between primary consumers and secondary consumers. (iii) Define commensalism. Also write an example. (iv) Write two uses of biotechnology in the field of medicine. (v) Write the names of two vectors used in genetic enginering. (vi) What are addictive drugs? (vii) What is the use of sedatives? Write an example of sedatives. (viii) Differentiate between bactericidal and bacteriostatic antibiotics. (PART - II) $(2 \times 9 = 18)$ Note: Attempt any TWO questions. Q5. (a) How plants remove extra carbon dioxide and water? (b) Write a note on Paraylysis and Epilepsy. Q6. (a) Explain muscles and movement. (b) Describe development and structure of seed. Q7. (a) What are consumers? Explain their different groups.

(b) Define fermenter. Also explain its ways.