

UNIVERSITY OF THE PUNJAB

Third Semester – 2019

<u>Examination: B.S. 4 Years Program</u>

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PAPER: Botany-III (Cell Biology, Genetics and Evolution)

Course Code: BOT-201/21300 Part - II

MAX. TIME: 2 Hrs. 45 Min. MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2	. A	nswer the short questions.	$(10 \times 2 = 20)$
	i. ii. iv. v. vi. vii. viii. ix.	Define Cell theory. What is the difference between Simple and Facilitated diffusion? What are Leucoplasts? Mention their functions. Differentiate between Prokaryotic and Eukaryotic ribosomes. What are Peroxisomes? What is their function? What are the different types of RNA and their functions? What is Transduction? What are Cytoplasmic inclusions? Differentiate between Population and Community. What is Synapsis?	
Q.3.	A	nswer the long questions.	$(3 \times 10 = 30)$
	1. a. b.	the enemical composition of Cen memorane?	(7)
4	2. a.	Write a short note on Lac operon.	(6)
	b.	Explain the Transduction in bacteria in detail.	(9)
3	3. a.	Differentiate between Test cross and Back Cross and their important	ce. (7)
	b.	Explain with examples Duplication and Deletion.	(8)

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PAPER: Botany-III (Cell Biology, Genetics and Evolution)
Course Code: BOT-201/21300 Part-I (Compulsory)

MAX. TIME: 15 Min.\
MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

a. Car	bohydrates are	present in	n plasm			form of:		
i. iii.	Starch Hemicellu	lose		ii. iv.	Cellulose Glycolipid	S		
b. Th	e main function	n of Golgi	comple	ex is				
i.	Translocation	on		ii.	Fermentati	on		
iii.	Glycosylatio	on		iv.	Phosphory	lation		
c. Prot	ein essential fo	or chromat	in form	ation i	s:			
i.	Actin			ii.	Tubulin			
iii.	Histone			iv.	Myosin			
d. The f	unctions of per	roxisomes	are:					
ii. Synt iii. Prot	thesis of glycin thesis of serine ection from tox of the these		of hyd	rogen p	peroxide			
	vo organelle res			oplasm	ic inheritance	e among e	ukaryote	es are:
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