PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions choosing either (a) or (b). Each answer should not exceed 600 words.

16. (a) Expound the function of viruses.

On

- (b) Elucidate the reproduction of Bacteria.
- 17. (a) Interpret the structure of Eukaryotic cell.
 - (b) Describe the ultrastructure of prokaryotic cell wall.
- 18. (a) Explain Adventitious root modifications.

Or

- (b) Explain the different types of cymose inflorescence.
- 19. (a) Explain, the phenotypic ratio of F2 generation in pea seeds after crosses with round yellow (RRYY) and wrinkled green (rryy).

Or

- (b) Sex-linked inheritance Explain.
- 20. (a) Explain diffusion theory.

Or

(b) Expound the mechanisms of stormatal movement.

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B.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2024.

First Semester

Botany — Foundation Course

BASICS OF BOTANY

(For those who joined in July 2024 onwards)

Time: Three hours

Maximum: 75 marks

PART A $-(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- 1. Nostoc is a type of
 - (a) Blue green algae (b) Green algae
 - (c) Brown algae
- (d) Red algae
- 2. In cycas, this type of root present is called as
 - (a) Tap root
- (b) Fibrous root
- (c) Coralloid root
- (d) Mycorrhiza
- 3. What is the component of prokaryotic cell in this list?
 - (a) Ribosomes
- b) Cell wall
- c) Plasma membrane (d) Nucleoid

4.	Which among these, stroma is ground material?								
	(a)	Ribosomes	(b)	Lysosomes					
	(c)	Mitochondria	(d)	Chloroplast					
5.	Photosynthetic assimilatory roots are present in								
	(a)	Tinospora	(b)	Trapa					
	(c)	Taeniophyllum	(d)	All of these					
6.	Leaves are modified into tendrils in it								
	(a)	Parkinsonia	(b)	Pea					
	(c)	Rananculus	(d)	Oxalis					
7.	Which of the following characters was not choosen by Mendel?								
	(a)	Pods shaped	(b)	Pods colour					
	(c)	Pods location	(d)	Flower location					
8.	A to		r and	l hide another trait is					
	(a)	Over powering trait							
	(b)	Complex trait							
	(c)	Recessive trait							
	(d) Dominant trait								
9.	Which one is osmosis type?								
	(a)	a) Imbibition of solution							
	(b)	b) Diffusion of solvent							
	(c)	(c) Evaporation of water							
	(d)) Diffusion of solute							
		Pag	e 2	Code No. : 11020 E					

The highly concentrated solution is called as Hypotonic Isotonic (a) Hypertonic (d) None of these (c) PART B — $(5 \times 5 = 25 \text{ marks})$ Answer ALL questions choosing either (a) or (b). Each answer should not exceed 250 words. 11. (a) Write the general characters of Bryophytes. Or Write the salient features of pteriodphyte. 12. (a) Discuss the ultrastructure of prokaryotic cell. Or Write about the plant cell wall. Comment about palmately compound leaves. 13. Or Underground stern modification - Discuss. Write the Mendel's law of Dominance. 14. Or Give a comment about genetic variation.

Or

Describe - Osmosis.

15.

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