



GOVERNMENT OF KARNATAKA
KARNATAKA STATE PRE-UNIVERSITY EDUCATION EXAMINATION BOARD
II YEAR PUC EXAMINATION
SCHEME OF VALUATION

(OS)

Subject Code : 36

Subject : BIOLOGY

Qn. No.		Marks
	Part - 1 Botany	
	Section - A	
1	Reverse transcriptase	1
2	central xylem - peripheral phloem	1
3	plasmolysis (Exosmosis)	1
4	Ribulose Biphosphate (RubiSo)	1
5	oxidative phosphorylation	1.
	Section - B	
6	codons which terminates the process of protein synthesis	1
	UAA, UAG, UGA, ochre, amber, opal any two $\frac{1}{2}$ each	1.
7	Lac Z gene - β -galactosidase Lac Y gene β -galactosidase permease Lac A gene β -galactosidase transacetylase	
	Mentoring $\frac{1}{2}$ Marks	
	Function each $\frac{1}{2}$ Marks	02

Qn. No.		Marks
8	REN - Cleaving DNA molecules near the palindromic sites	1
	DNA ligase - Join the fragments of DNA	1.
9	Diagram with four labels each label $\frac{1}{2}$ mark $\times 4$	02.
10	any two differences. each 1 mark Exosmosis - flaccidity Endosmosis - turgidity	1 1.
11	1) root formation 2) Weed control 3) tissue culture 4) induce flowering 5) parthenocarp each $\frac{1}{2}$ mark	2.
	Section - C:	
12	Diagrammatic representation Explanation with role of enzymes DNA polymerase I, II, III, RNA polymerase Nucleosides, leading strand Lagging strand	2 3.

Qn. No.		Marks
13	Genus interest from daffodil plant Narcissus pseudonarcissus Bacterium Erwinia ureidwora T ₁ plasmid - Agrobacterium tumefaciens Hosts culturing: Mutating genes of Source Host and culturing	 3 2
14	Passanger DNA Selection vector, pBR322 or pUC18 Chimera (rDNA) Selection Host } Transformation } Cloning	 05
15	$\text{Starch} \xrightarrow[\text{pH 7}]{\text{Starch phosphorylase}} \text{Glucose 1-phosphate}$ $\text{Glucose 1-phosphate} \xrightarrow{\text{Phosphoglucomutase}} \text{Glucose 6-phosphate}$ $\text{Glucose 6-phosphate} \xrightarrow{\text{Phosphatase}} \text{Glucose phosphate}$ Target - Endosmosis Stomata opening	 2 1/2

Qn. No.		Marks
	Glucose + ATP $\xrightarrow{\text{Hexokinase}}$ Glucose-1-phosphate Glucose-1-phosphate $\xrightarrow{\text{Starch phosphorylase}}$ Starch-phosphate $\xrightarrow{\text{FADP}}$	
	EXOSMOSIS. Halidite Stomach closes	2 1/2
16	periderm diagram	2
	Explanation - phellogen phellogen phellum formation with Banker/central	3
17		
	Pyruvic acid to oxaloacetic acid, Citric acid with all steps @ NADH ₂ , FADH ₂ ATP generation	5
	Section D	
18	Schematic representation 2 marks	2
	Explanation with ATP generation 3	3
19		
a	a postthoracic developed - postthoracic	1
b	Catabolism not take place	1
c	bleaching of chloroplast	1
	denaturation of enzymes	
d	to compensate heat developed by (2)	
e	can not absorb water (humid)	

Qn. No.		Marks
20	Neat diagram (neatness) 1 8 labels each $\frac{1}{2}$ Mark 4	0.5
21	Osmoscope diagram 2 marks principle 1 mark	0.5
	procedure & observation 2 marks	0.5
Part - II (zoology)		
Section E		
22	Shipin from Shunka } Peodar grove Khasi hills Meghalaya } Morphology & Mammals any one	1.
23	It is the process of dividing the land into number of strips (held untilled)	1
24	Hypoglycemia	1
25	Sterilization - 1 mark Tubectomy } vasectomy } $\frac{1}{2}$ each	1.
26	placenta.	
Section F.		
27	When a single gene for a character occurs in more than two alternative forms, occupying the same locus on chromosome ABO, coat colour gene pig any one	1 1

Qn. No.		Marks
	Section G	
33	Urbanisation Expanding agriculture Deforestation Pollution Acidification Mining activities Description mentions any one $\frac{1}{2}$ each with explanation $\frac{1}{2}$ each	 $2\frac{1}{2}$ $2\frac{1}{2}$
34	Labelled diagram 6 labels $\frac{1}{2}$ each Brief explanation	 3 2
35	Neatness 1 Mark any 8 labels each $\frac{1}{2}$ mark	1 4
36	List enzymes with reactions Pepsin Renin, Trypsinogen Chymotrypsin, Carboxypeptidase Aminopeptidase, Tripeptidase dipeptidase (All enzymes)	 5

Qn. No.		Marks
37	<p>only diagrammatic representation → 2 marks</p> <p>Approximate gametes .</p> <p>Acrosomal reaction</p> <p>Cortical changes</p> <p>Amphimixis - Explain briefly</p>	05-
38	<p>GH or STH</p> <p>FSH</p> <p>LH</p> <p>LTH</p> <p>TSH</p> <p>ACTH</p> <p>MSH, marking each by mark</p> <p>with explanation 1 mark</p>	5-
39	<p>Neat diagram 2 mark</p> <p>sketch & explain 2 marks</p>	5
40	a	
	ADH - Antidiuretic hormone	1
	b	
	Electrical impulses not generated in AVN.	1
	c	
	person cannot walk properly (muscular equilibrium)	1
	d	
	Specific gametes (andro-guno)	
	e	
	HIV virus filter through the barrier placenta	1

