

DESIGN OF QUESTION PAPER

Subject : BIOLOGY
Unit/Paper : Theory
Class : XI
Time : 3 Hours
Full Marks : 70

WEIGHTAGE TO OBJECTIVES					
I	Objectives		Marks	Percentage	
	Knowledge(K)		14	20	
	Understanding(U)		28	40	
	Application(A)		21	30	
	Skill(S)		07	10	
	Total :		70	100	
WEIGHTAGE TO FORM OF QUESTIONS:					
II	Form of Questions	No. of question	Time (in minute)	Marks	Percentage
	Essay/Long Answer(E/LA)	3	60	15	21
	Short Answer(SA-I)	7	56	21	30
	Short Answer(SA-II)	10	40	20	29
	Very Short Answer(VSA)	10	20	10	14
	MCQ	4	4	4	6
	Total:	34	180 m	70	100
WEIGHTAGE TO CONTENT:					
III	Unit	CONTENTS		Marks	Percentage
	I	Diversity of Living Organisms		07	10
	II	Structural Organisation in Plants and Animal		12	17
	III	Cell : Structure and Function		15	21
	IV	Plant Physiology		18	26
	V	Human Physiology		18	26
Total :				70	100
IV	SCHEME OF SECTIONS : NIL				
V	SCHEME OF OPTIONS : NIL				
VI	DIFFICULTY LEVEL:				
	Difficulty:	20%			
	Average	50%			
	Easy:	30%			

Abbreviation : K(Knowledge), U(Understanding), A(Application), S(Skill), E(Essay Type), SA (Short Answer Type), VSA (Very Short Answer Type), O(Objective Type), MCQ (Multiple Choice Question).

DESIGN OF QUESTION PAPER

Subject : BIOLOGY
Unit/Paper : Practical
Class : XI
Time : 3 Hours
Full Marks : 30

MARKING SCHEME :

SECTION - A (Any one)

4 marks

Q. 1

(a) Item 1 : Description of a flowering plant.

(i) Dissect and Display	–	1
(ii) Diagram and labelling	–	2
(iii) Comments on Floral Characters	–	1
	<u>–</u>	<u>1</u>
	Total =	4

(b) Item 2 and 5 : Preparation of Slide of Transverse Section of dicot and monocot roots and stems (primary) and observation of distribution Stomata

(i) Preparation of slide	–	1
(ii) Diagram and labelling	–	2
(iii) Comments - 2 points	–	1
	<u>–</u>	<u>1</u>
	Total =	4

SECTION - B (Any two)

4+4 = 8 marks

Q.2

(a) Item 3,4,6 & 9 : Plant Physiology experiments : Potato Osmometer, Plasmolysis, Transpiration and Respiration.

(i) Experimentation/Setting of experiment	–	1
(ii) Observations	–	1
(iii) Inference and Result	–	1
(iv) Precautions	–	1
	<u>–</u>	<u>1</u>
	Total =	4

(b) Items 7 & 8 : Tests for presence of Sugar, Starch, Proteins and Fats in suitable plant materials, paper chromatography of plant pigments.

(i) Experimentation/Setting of experiment	–	1
(ii) Observations	–	1
(iii) Inference and result	–	1
(iv) Precautions	–	1
	<u>–</u>	<u>1</u>
	Total =	4

(c) Item 7,10,11,12&13 : Test for presence of sugar, starch, proteins and fats in animal materials, urine test for urea, presence of sugar in urine/blood, presence of albumin and bile salts in urine.

(i)	Experimentation	–	1
(ii)	Observations	–	1
(iii)	Inference and Result	–	1
(iv)	Precautions	–	1
		<u>–</u>	<u>1</u>
		Total =	4

SECTION - C (Spotting)

4+4 = 8 marks

Q.3 Item 1-11 : (Two spots each from plants and animals)

(i)	Identification	–	1
(ii)	Comments - 2 points	–	1
		<u>–</u>	<u>1</u>
		Total =	2

SECTION - D

5 marks

Q.4 Investigatory Project :

(i)	Aim and object	–	1
(ii)	Materials and Methods	–	1
(iii)	Summary of the project	–	1
(iv)	Viva Voce on record	–	2
		<u>–</u>	<u>2</u>
		Total =	5

Q.5 Laboratory Record

5 Marks

(i)	Completeness of practical work	–	1
(ii)	Regularity in submitting record	–	1
(iii)	Neatness and accuracy of record	–	1
(iv)	Viva Voce on record	–	2
		<u>–</u>	<u>2</u>
		Total =	5
