

Class XI : Bioogy Practical : Half-yearly/ Annual Exam : 2022-23 : Marks 30

Class XI : Biology Practical : Half-yearly Exam : 2022-23 : Marks 30

Time : 3 hrs.

Sl. No.	Evaluation Scheme	Marks
1.	One Major Experiment : Part A : Expt. No.1,3 [Procedure 2, Observation 2, Inference 1]	5
2	One Minor Experiment Part A : Expt. No.6.9.10 [Procedure 1, Observation 2, Inference 1]	4
3	Slide Preparation Part A : Expt. No.2 [Preparation 2, Drawing 1, Labeling 1]	4
4	Spotting. Part B 2,4,6 [any two : 2.5x2] [for each, correct identification 1, 3 characteristics 0.5x3=1.5]	5
5	Laboratory Note Book	5
6	Viva voce	2
7	Attendance	5
Total Marks		-30

Class XI : Biology Practical : Annual Exam : 2022-23 : Marks 30

Time : 3 hrs.

Sl. No.	Evaluation Scheme	Marks
1.	One Major Experiment : Part A : Expt. No.7,8 [Procedure 2, Observation 2, Inference 1]	5
2	One Minor Experiment Part A : Expt. No11,12,13 [Procedure 1, Observation 2, Inference 1]	4
3	Slide Preparation Part A : Expt. No.4,5 [Preparation 2, Drawing 1, Labeling 1]	4
4	Spotting. Part B 3,5 [any two : 2.5x2] [for each, correct identification 1, 3 characteristics 0.5x3=1.5]	5
5	Laboratory Note Book	5
6	Viva voce	2
7	Attendance	5
Total Marks		-30

List of Major/ Minor Experiments and Specimen

Half-yearly Examination, 2022-23

1. Major Experiment : A1 : To study and describe locally available common flowering plants from Solanaceae including dissection and display of floral whorls, anthers and ovary to show number of chambers [floral formulae and floral diagrams], type of root [tap and adventitious], type of stem [herbaceous and woody], leaf [arrangement, shape, venation, simple and compound].

A 3. To study osmosis by potato Osmometer.

2. Minor Experiment : A.6 : Comparative study of rates of transportation in the upper and lower surface of leaves.

A.9 : Study of rate of respiration in flower buds/ Leaf tissue and germinating seeds.

A.10 : Test for presence of Urea in Urine.

3. Slide Preparation : A.2 : Preparation and study of TS of dicot and monocot root and stem (primary).

4. Spotting : B.2 : Specimens/ Slides/ Models and identification with reasons – Bacteria, Oscillatoria, Spirogyra, Rhizopus, Mushroom, Yeast, Liverwort, Moss, Fern, Pine, one monocot plant, one dicot plant and one lichen

B.4 : Mitosis in onion root tip cells and animal cells (grasshopper) from permanent slides.

B.6 : Human skeleton and different types of joints with the help of virtual images/ models only.

Annual Examination, 2022-23

1. Major Experiment A.7 : Test for presence of sugar, starch, proteins and fats in suitable plant and animal materials.

A.8. Separation of Plant pigments through Paper Chromatography

2. Minor Experiment : A.11 : Test for presence of sugar in urine.

A.12. Test for presence of albumin in urine

A.13. Test for presence of bile salt in urine.

3. Slide Preparation : A.4 : Study of Plasmolysis in epidermal peels [e.g., Rhoeo/Lily leaves or fleshy scale leaves of onion bulb.

A.5. Study of distribution of stomata on the upper and lower surface of leaves.

4. Spotting : B.3. Virtual specimens/Slides/Models : Identifying features of amoeba, Hydra, Liver fluke, Silkworm, Honey bee, Snail, Star fish, Shark, Rohu, Frog, Lizard, Pigeon and rabbit.

B.5. Different types of inflorescence [Cymose and racemose].

Class XI : Chemistry Practical : Half-yearly/ Annual Exam : 2022-23 : Marks 30

Sl. No.	Items	Marks
01.	Volumetric Analysis [Acid-Base Titration]	10
02.	Inorganic Salt Analysis	8
03	Laboratory Note Book	5
04	Viva voce	2
05	Attendance	5
Total		30

A. Determination of concentration/ molarity of an acid solution by titrating it against a standard solution of sodium hydroxide {~ 0.1 N}

(Standard Solution will be Supplied)

B. Salt analysis

(i) Determination of one cation in a given salt.

Cations : Pb^{2+} , Cu^{2+} , Al^{3+} , Fe^{3+} , Mn^{2+} , Ni^{2+} , Zn^{2+} , Co^{2+} , Ca^{2+} , Sr^{2+} , Ba^{2+} , Mg^{2+} , $[\text{NH}_4]^+$

(ii) Determination of one anion in a given salt.

S^{2-} , SO_3^{2-} , SO_4^{2-} , NO_2^- , NO_3^- , Cl^- , Br^- , I^- , PO_4^{3-} ,

Note : Only water soluble salts are to be supplied)

Class XI : Geography Practical : Half-yearly/ Annual Exam : 2022-23 : Marks 30

1. Maps – Classification, types of scale, construction of simple linear scale [মানচিত্র -
শ্রেণীবিভাগ, স্কেলের শ্রেণীবিভাগ, সরল রৈখিক স্কেল অংকন] ৬
2. Map Projection – construction and properties of simple conical projection, Mercator’s projection [
মানচিত্র অভিক্ষেপ - গঠন ও বৈশিষ্ট্য - সরল শাঙ্কব অভিক্ষেপ মার্কটারের অভিক্ষেপ] ৬
3. Topographical maps – Conventional signs and symbols, cross section of contours and identification of
Land forms. [ভূ-বৈচিত্র্য সূচক মানচিত্র - প্রচলিত চিহ্ন ও প্রতীক সমূহ, সমুন্নতি রেখার
প্রস্থচ্ছেদ এবং ভূমিরূপ চিহ্নিতকরণ] ৬
4. Laboratory Note Book -----5
5. Viva voce-----2
6. Attendance.....5

Total Marks

30

Class XI : Physics Practical : Half-yearly/ Annual Exam : 2022-23 : Marks30

Distribution of Marks (30)

1. Experiments (2).....9x2=18
2. Lab Note Book.....5
3. Viva voce..... 2
4. Attendance.....5

*Two experiments are to be performed taking one from each section

Section -A

1. To measure diameter of a given wire and thickness of a given sheet of material using Screw Gauge.
2. To determine radius of curvature of a given spherical surface by a spherometer.
3. To find the weight of a given body using parallelogram law of vectors.
4. Using a simple pendulum, plot its $L-T^2$ graph and use it to find the effective length of second's pendulum.
5. To study the relationship between force of limiting friction and normal reaction and to find the co-efficient of friction between a block and a horizontal surface.

Section – B

1. To determine Young's modulus of elasticity of the material of a given wire.
2. To find the force constant of a helical spring by plotting a graph between load and extension.
3. To study the variation in volume with pressure for a sample of air at constant temperature by plotting graphs between P and V, and between P and $1/V$.
4. To determine the surface tension of water by capillary rise method.
5. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.

Class XI : Psychology Practical : Half-yearly/ Annual Exam : 2022-2023 : Marks 30

One Experiment is to be performed

Experiments:

1. Determine the Negative After Image of the subjects using primary colours.
2. Determine the Span of Memory of the subject using Auditory or Visual stimulus.

Marks Distribution (30):

Total marks:	30 Marks
Actual Experiment	18 marks
Viva voce	02 Marks
Laboratory note book	05
<u>Attendance</u>	<u>05</u>

Experiment (18)

1. Problem: 01 Mark
2. Basic Concept: 03 Marks
3. Preliminaries: 01 Mark
4. Materials Required :01 Mark
5. Instruction to the subject: 01 Mark
6. Precaution: 01 Mark
7. Procedure: 03 Marks
8. Data and Result: 04 Marks
9. Discussion and Conclusion: 03 Marks