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# Cbse Class 12 Biology Practical Lab Manual

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With newly introduced 2 Term Examination Pattern, CBSE has eased out the pressure of preparation of subjects and cope up with lengthy syllabus. Introducing, Arihant's CBSE TERM II - 2022 Series, the first of its kind that gives complete emphasize on the rationalize syllabus of Class 10th & 12th. The all new "CBSE Term II 2022 - Biology" of Class 12th provides explanation and guidance to the syllabus required to study efficiently and succeed in

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An Excellent Book in Accordance with the latest syllabus for Class-11 Prescribed by CBSE/NCERT and Adopted by Various State Education Boards  
Introduction : (1. Necessary equipments, chemicals and other things for practical work, 2. General Instructions for practical work, 3. Special Instructions for practical note-book, Drawing and Recording, 4. Special Instructions for spotting.)  
EXPERIMENTS 1. To study and describe the flowering plant belonging

to family (one from each of the families) (a) Solanaceae(b)Fabaceae(c) Liliaceae. 2.To prepare temporary slide of transverse section of dicot/monocot stem/dicot/ monocot root. 3. To study osmosis by potato-osmometer. 4. To study of plasmolysis in epidermal peel of Tradescantial or Rhoeo leaf. 5. To study the distribution of stomata on the upper and lower surface of a leaf. 6.To compare the rate of transpiration in upper and lower surface of the leaf. 7. To test the presence of

sugars (Glucose, Sucrose and Starch), proteins and fats and to detect their presence in suitable plant and animal materials. 8. To study the separation of plant pigments by paper chromatography. 9. To study the rate of respiration in flower buds/leaf tissue and germinating seeds. 10A. To test presence of urea in urine. 10B. To test presence of sugar in urine. 10C. To detect presence of albumin in urine. 10D. To test urine for presence of bile salt. SPOTTING 1. Study of

compound microscope. 2. To study the plant specimen and identification with reasons : Bacteria, Oscillatoria, Spirogyra, Rhizopus, Mushroom, Yeast, Liverwort, Moss, Fern, Pine, One Monocotyledonous plant, One dicotyledonous plant and one Lichen. 3. Study of animal specimens 1. Amoeba 2. Hydra 3. Fasciola Hepatica (Liver fluke) 4. Ascaris Lumbricoides 5. Hirudinaria Granulosa 6. Pheretima Posthuma 7. Palaemon 8. Bombyx Mori

9. Apis Indica (Honeybee) 10. Pila Globasa (Snail) 11. Asterias (Starfish) 12. Scoliodon (Dogfish/Shark) 13. Labeo Rohita (Rohu) 14. Rana Tigrina (Frog) 15. Hemidactylus (Lizard) 16. Columba Livia (Pigeon) 17. Orytolagus Cuniculus (Rabbit). 4A. To study the plant tissues—Palisade cells, Guard cells, Parenchyma, Collenchyma, Sclerenchyma, Xylem and Phloem through prepared slide. 4B. To study the animal tissue squamous epithelium, muscles fibres



through prepared slide. 4C. To study mammalian blood smear by temporary/permanent slide. 5. Study of mitosis in root tip of onion. 6. Study of different modification in root, stem and leaves. 7. To study and identify different types of inflorescence (Racemose and Cymose). 8. To study imbibition in seed/raisins. 9. To demonstrate that anaerobic respiration take place in the absence of air. 10. To study human skeleton and joints. 11. To study the external

features of cockroach with help of model or chart Oswaal CBSE MCQs Chapterwise For Term I & II, Class 12 (Set of 3 Books) Physics, Chemistry, Biology (With the largest MCQ Question Pool for 2021-22 Exam) Oswaal Books and Learning Private Limited • Strictly as per the new term wise syllabus for Board Examinations to be held in the academic session 2021-22 for classes 11 & 12 • Multiple Choice Questions based on new typologies introduced by the board-

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A. List of Experiments

1. Study pollen germination on a slide, 2. Collect and study soil from at least two different sites and study them for texture, moisture content, pH and water holding capacity. Correlate with the kinds of plants found in them, 3. Collect water from two different water bodies around you and study them for pH, clarity and presence of any living organism, 4. Study the presence of suspended particulate matter in air at two widely different sites, 5. Study the plant population density by

quadrant method, 6. Study the plant population frequency by quadrant method, 7. Prepare a temporary mount of onion root tip to study mitosis. 8. Study the effect of different temperatures and three different pH on the activity of salivary amylase on starch. 9. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc. B. Study/observation of the following (Spotting) 1. Flowers adapted to pollination by different agencies (wind, insects,

birds). 2. Pollen germination on stigma through a permanent slide. 3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice). 4. Meiosis in onion bud cell or grasshopper testis through permanent slides. 5. T.S. of blastula through permanent slides (Mammalian). 6. Mendelian inheritance using seeds of different colour/sizes of any plant. 7. Prepare pedigree charts of any one of the

genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness. 8. Controlled pollination-emasculatation, tagging and bagging. 9. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides or specimens. Comment on symptoms of diseases that they cause. 10. Two plants and two animals (model/virtual images) found in xeric conditions. Comment upon their

morphological adaptations. 11. Two plants and two animals (models/virtual images) found in aquatic conditions. Comment  
Content EXPERIMENTS  
1. To study pollen germination on slide. 2. To study the texture moisture content pH and waterHolding Capacity of soils collected from different sites. 3. To collect water from different water bodies and study them for pH Clarity and presence of living organisms. 4. To study the presence of suspended particulate

matter in air at different sites. 5. To study plant population density by quadrat method. 6. To study plant population frequency by quadrat method. 7. To study various stages of mitosis in root tip of onion by preparing slide in acetocarmine. 8. To study effect of different temperature and three different pH on the activity of salivary amylase. 9. To study the isolation of DNA from available plant material such as spinach green pea, seeds, papaya etc. SPOTTING

1. Pollination in flowers. 2. Pollen germination. 3. Slides of mammal tissues. 4. Meiosis cell division. 5. T. S. of Blastula. 6. Mendel's inheritance laws. 7. Pedigree chart. 8. Controlled pollination. 9. Common disease causing organisms. 10. Xerophytic adaptation. 11. Aquatic adaptation.

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The CBSE has made certain changes in the assessment structure from the session 2019-20 onwards. In the new scheme of examination, CCE and term system has

been replaced with the Internal Assessment & Single Annual Exam by CBSE itself. Single exam conducted by CBSE will carry 80 marks whereas 20 marks are left to the schools for internal assessment. CBSE has issued detailed guidelines on how the internal marks will be divided among different activities. From 2019 onwards, there will be internal choices in board examinations with increased internal options in the question paper. Considering this change, now a student has to

prepare accordingly for board examinations. The new assessment format brought with it excitement as well as anxiety. And to help them prepare and excel in their CBSE board examination, Career Point Kota has developed a series of 10 Most Likely Question Papers with Solutions. The Key Features of Most Likely Question Papers with Solutions Series : New OBJECTIVE TYPE question in each paper. Syllabus of CBSE 2019-20. Based on the latest CBSE Syllabus & Pattern. Mind map of each

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members of the Content Development team for their efforts to create this wonderful book.  
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