

**Department of Botany
Jangipur College
University of Kalyani
Semester – IV**

List of topics for Project/Assignment for fulfilment of Internal Assessment

[The Candidates are instructed to submit hand written assignments with suitable diagrams within 4-5 A4 pages corresponding to maximum 3000 words]

1.0 Paper- CC-T-08- Taxonomy of Angiosperms and Plant Systematics

Topic- Identification of a local plant of Murshidabad district.

2.0 Paper- CC-T09- Plant Ecology and Phytogeography

Topics

1. Biotic and abiotic components of ecosystem
2. Level of organisation in ecosystem
3. Homeostasis in ecosystem
4. Role of climate in soil development
5. Chemical and biological components of soil
6. Types of food chains and their structures
7. Trophic organization in ecosystem
8. Principles and models of energy flow
9. Biogeochemical cycles in environment
10. Continental drift-different aspects
11. Theory of tolerance in ecosystem
12. Ecotone and edge effect in different ecosystem

3.0 Paper- CC-T- 10- Economic Botany and Pharmacognosy

Topics

1. Vegetable oil extraction and their properties
2. Timber yielding plants
3. Tea, coffee processing
4. Sugarcane processing and uses
5. Jute- anatomy processing and uses
6. Morphological characters, properties, uses, common name of clove, black pepper, fennel
7. Rubber processing and Uses
8. Vavilov's work and Crop domestication

9. Essential oils extraction method and uses
10. Wheat structure, processing, and use
11. Drug evolution and classification

4. Paper- UG-BOT SEC T 02- Mushroom Culture

Topics

1. History and benefits of Mushroom culture in India
2. Cultivation of *Volvariella volvacea*
3. Cultivation of *Agaricus bisporus*
4. Cultivation of *Pleurotus* sp
5. Nutritional and medicinal value of mushroom
6. Composting technology used in mushroom culture
7. Use of low cost technology in mushroom culture bed preparation
8. Short term storage of Mushroom and its benefit in mushroom culture

5. Paper- UG-BOT-G-CCT-04

Topics

Please choose to prepare a write up (hand written) with diagrams on ANY ONE of the following topics

1. বাষ্পমচন এবং জল সরবরাহ পদ্ধতি
2. Photosynthesis এর আলোক দশা ও ATP উৎপাদন
3. Phloem দ্বারা খাদ্য সঞ্চালন পদ্ধতি ।
4. Auxin ও Cytokinin উৎপাদন, কার্য, রাসায়নিক গঠন ।

6. Paper- UG-BOT-GE-CC- T-04

Topic- Identification of a local plant of Murshidabad district.