



Controller of Examinations
SAMBALPUR UNIVERSITY
JYOTI VIHAR, BURLA
Sambalpur (Odisha), PIN-768 019

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By Post & e-mail.

No.
To

5825 /Acd-I

Date,

27/09/18

The Principals.

(All affiliated Colleges having Three Year Degree Courses).

Sub:

Approval of SEC-B and GE Syllabus.

Sir,

I am directed to intimate you that, the Vice-Chancellor has been pleased to approve –

(1) Banking & Insurance as GE-4 for Commerce Hons. Students, (2) Mushroom Culture Technology as SEC-B for Botany, (3) Graph Theory as SEC-B for Mathematics Hons. Students under 6 (15) of Odisha Universities Act, 1989 giving it effect for the academic session 2016-17 only. This approval will not be extended to the students admitted after 2016-17 academic session.

Further, the Vice-Chancellor has been pleased to approve to include Odisha Economy and Odisha Budget as SEC-B for Hons. Students. The detail syllabus for the said course will be as approved by the Academic Council from time to time and that are communicated to all concerned in routine manner. This has been given with effect from the academic session 2016-17.

The detail syllabus for the Banking and Insurance will be same as prescribed in UGC Model syllabus for B.Com (Hons.) courses. The detail syllabus for Mushroom Culture Technology and Graph Theory are enclosed herewith as Enclosure-I & Enclosure-II respectively.

This is for your kind information and necessary action.

Yours faithfully,

Encl:- As above.

S. Nayak
27/9/18
Controller of Examinations

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Cont'd....2/p.

Memo No. 5826 /Acad.I

Date: 27/09/18

Copy forwarded with enclosure for information and necessary action to:-

1. Asst. Registrar (Exams.), Sambalpur University.
2. The Programmer, Computer Unit, Sambalpur University.
3. P.A. to Controller of Examinations, Sambalpur University.
4. Section Officers, EG-I/EG-II/EC-I/EC-II/EC-VI/Computer Unit, Sambalpur University.
5. Dealing Assistant, Regulation Seat, Academic-I Section for needful to incorporate It in the CBCS-UG Regulation.
6. The System-in-Charge, e-Governance to notify it in offered website.
7. 05 (five) spare copies to Academic-I Section.

/bkb/c-1/

S. Nayak
28/9/18
Controller of Examinations

Blair

SEC-MATH-H-2A

Graph theory

Math (Hons)

Theory- 2 Credits

Unit-I

Definition, examples and basic properties of graphs, pseudo graphs, complete graphs, bi-partite graphs, isomorphism of graphs

Unit-II

Paths and circuits, Eulerian circuits, Hamiltonian cycles, the adjacency matrix.

Unit-III

Weighted graph, travelling salesman's problem, shortest path, Dijkstra's algorithm, Floyd-Warshall algorithm.

<https://mail.google.com/mail/u/0/#inbox/FMfcgxvzKQrNxHDwzcXVtRcGVIGxZNnL?projector=1&messagePartId=0.2>

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Skill Enhancement Course
Mushroom Culture Technology

(Credits 2)

Lectures: 30

Unit 1: Introduction, history. Nutritional and medicinal value of edible mushrooms; Poisonous mushrooms. Types of edible mushrooms available in India - *Volvariella volvacea*, *Pleurotus*, *citrinopileatus*, *Agaricus bisporus*. (5 Lectures)

Unit 2: Cultivation Technology : Infrastructure: substrates (locally available) Polythene bag, vessels, Inoculation hook, inoculation loop, low cost stove, sieves, culture rack, mushroom unit (Thatched house) water sprayer, tray, small polythene bag Pure culture: Medium, sterilization, preparation of spawn, multiplication. Mushroom bed preparation - paddy straw, sugarcane trash, maize straw, banana leaves. Factors affecting the mushroom bed preparation - Low cost technology, Composting technology in mushroom production. (12 Lectures)

Unit 3: Storage and nutrition : Short-term storage (Refrigeration - upto 24 hours) Long term Storage (canning, pickles, papads), drying, storage in salt solutions. Nutrition - Proteins - amino acids, mineral elements nutrition - Carbohydrates, Crude fibre content - Vitamins.

(8 Lectures)

Unit 4: Food Preparation : Types of foods prepared from mushroom Research Centres - National level and Regional level. Cost benefit ratio - Marketing in India and abroad, Export Value. (5 lectures)

Suggested Readings

1. Marimuthu, T. Krishnamoorthy, A.S. Sivaprakasam, K. and Jayarajan. R (1991) Oyster Mushrooms, Department of Plant Pathology, Tamil Nadu Agricultural University, Coimbatore.
2. Swaminathan, M. (1990) Food and Nutrition. Bappco, The Bangalore Printing and Publishing Co. Ltd., No. 88, Mysore Road, Bangalore - 560018.
3. Tewari, Pankaj Kapoor, S.C., (1988). Mushroom cultivation, Mittal Publications, Delhi.
4. Nita Bahl (1984-1988) Hand book of Mushrooms, II Edition, Vol. I & Vol. II.

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