

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: BENGALI

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BBNGSEHT-305 (SEC – 1)

Title:

ANUBAD O PROOF SANGSODHAN অনুবদ ও প্ৰূফ সংশোধন

Syllabus:

- ১) অনুবদ - বংল থেকে ইংরেজি
- ২) অনুবদ - ইংরেজি থেকে বংল
- ৩) প্ৰূফ সংশোধন - সংশোধন প্ৰক্ৰিয়
- ৪) প্ৰূফ সংশোধন - সংশোধিত শূদ্ষুপ

SEMESTER – IV

COURSE CODE: BBNGSEHT-405 (SEC – 2)

Title:

AMANTRAN PATRA, PRATISTHANIK CHITHI O PRABANDHA RACHANA
আমনন্না পত্ৰ প্ৰতিষ্ঠানিক চিঠি ও প্ৰবন্ধ বিদেন - প্ৰবন্ধ রচন

Syllabus:

- ১) আমন্না পত্ৰ রচন
- ২) প্ৰতিষ্ঠানিক চিঠি রচন
- ৩) প্ৰবন্ধ বিদেন রচন, ব্জ্জগন রচন
- ৪) প্ৰবন্ধ রচন

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ENGLISH

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BENGSEHT-305 (SEC – 1)

Title: English Language Teaching

Syllabus:

1. Knowing the Learner
2. Structures of English Language
3. Methods of teaching English Language and Literature
4. Materials for Language Teaching
5. Assessing Language Skills
6. Using Technology in Language Teaching

Reading References:

1. Penny Ur: *A Course in Language Teaching: Practice and Theory* (Cambridge: CUP, 1996).
2. Marianne Celce-Murcia, Donna M. Brinton, and Marguerite Ann Snow: *Teaching English as a Second or Foreign Language* (Delhi: Cengage Learning, 4th edn, 2014).
3. Adrian Doff: *Teach English: A Training Course For Teachers (Teacher's Workbook)* (Cambridge: CUP, 1988).
4. *Business English* (New Delhi: Pearson, 2008).
5. R.K. Bansal and J.B. Harrison: *Spoken English: A Manual of Speech and Phonetics* (New Delhi: Orient BlackSwan, 4th edn, 2013).
6. Mohammad Aslam: *Teaching of English* (New Delhi: CUP, 2nd edn, 2009).

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ENGLISH

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BENGSEHT-405 (SEC – 2)

Title: Business Communication

Syllabus:

1. Introduction to the essentials of Business Communication: Theory and practice
2. Citing references, and using bibliographical and research tools
3. Writing a project report
4. Writing reports on field work/visits to industries, business concerns etc. /business negotiations.
5. Summarizing annual report of companies
6. Writing minutes of meetings
7. E-correspondence

Reading References:

1. Scot, O.: *Contemporary Business Communication*. Biztantra, New Delhi.
2. Lesikar, R.V. & Flatley, M.E.: *Basic Business Communication Skills for Empowering the Internet Generation*, Tata McGraw Hill Publishing Company Ltd. New Delhi.
3. Ludlow, R. & Panton, F.: *The Essence of Effective Communications*, Prentice Hall of India Pvt. Ltd., New Delhi.
4. R. C. Bhatia: *Business Communication*, Ane Books Pvt Ltd, New Delhi

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHILOSOPHY

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BPHISEHT-305 (SEC – 1)

Title: Method of Induction & probability:

Syllabus: SEC-1, Credit—2.

Text: I.M Copi : Introduction to logic: chapters 11 to 14(Classes 12+12)

Reading References:

Books:

1. I.M Copi : Introduction to logic
2. Ramaprasad Das: Yuktividya

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHILOSOPHY

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BPHISEHT-405 (SEC – 2)

Title: Practical Ethics.

Syllabus: Credit—2

Environmental ethics, Feminism, Euthanasia.(8+8+8)

Reading References:

Peter Singer: Environmental ethics

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: POLITICAL SCIENCE

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BPLSSEHT-305 (SEC – 1)

Title: Legislative Process in India

Syllabus:

1. The Union Legislature –The Rajya Sabha or the Council of States—its

Composition, power and functions. The Lok Sabha of the House of People-Its composition, power and functions. Speaker of Lok Sabha-His Election, Tenure of office, Power and Functions; Relations between the Rajya Sabha and the Lok Sabha.

1. Classification of Bills: a) Public Bill or Govt. Bill

b) Private Members' Bill

Types of Public Bill: i) Ordinary Bill, (ii) Money Bill and (iii) Financial Bill,

(iv) Budget, (v) Vote on Account.

1. Procedure of Passing bills and role of President.

2. Role of Opposition in Parliament.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: POLITICAL SCIENCE

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BPLSSEHT-405 (SEC – 2)

Title:

Parliamentary Procedures in India

Syllabus:

1. Parliamentary Procedure when the House is in session: Question Hour, Zero Hour, Starred and Unstarred question.
2. Various Motions: Adjournment motion, Calling Attention, Casting vote, No-confidence motion, Resolutions, Cut motion.
3. Committee system in Indian Parliament; Different Committees.
4. Privileges of the Members of the Parliament.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: HISTORY

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BHISSEHT-305 (SEC – 1)

Title: Archives and Museum

Syllabus:

1. Archives and Museum: history of development with special reference to India – 15 classes

Museums, archives and society: education and communicative Outreach activities – 15 classes

Reading References:

1. Saloni Mathur, *India By Design: Colonial History and Cultural Display*, University of California
2. S. Sengupta, *Experiencing History Through Archives*, Munshiram Manoharlal
3. T. Guha Thakurta, *Monuments, Objects, Histories: Institution of Art in Colonial Colonial India*, New York
4. Y. P. Kathpalia, *Conservation and Restoration of Archive Materials*, UNESCO
5. R.D. Houdhary, *Museums of India and their maladies*, Calcutta
6. S.M. Nair, *Bio-Deterioration of Museum Materials*
7. O.P. Agrawal, *Essentials of Conservation and Museology*, Delhi

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: HISTORY

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BHISSEHT-405 (SEC – 2)

Title: Indian Art and Architecture

Syllabus:

1. Indian art (C. 600 BC – 1800 CE): major developments in *Stupa*, cave, and temple art and architecture; temple forms and their architectural features, Sultanate and Mughal art and architecture – 15 classes

Modern and contemporary Indian art: the colonial period; Art movements: Bengal School of Art; major artists and their art work – 15 classes

Reading References:

1. Erwin Neumayer, *Lines of Stone: The pre-historic rock-art of India*, South Asia Books
2. B.N. Goswamy, *Essence of Indian Art*, Asian Art Museum of San Francisco
3. Susan Huntington, *The Art of Ancient India: Hindu, Buddhist, Jain*, Weatherhill
4. T. Guha-Thakurta, *The making of a new modern Indian art: Aesthetics and nationalism in Bengal, 1850-1920*, CUP
5. Partha Mitter, *Indian Art, Oxford History of Art series*, OUP
6. Parul Pandya Dhar (ed), *Indian Art History Changing Perspectives*, New Delhi.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: GEOGRAPHY

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BGEOSEHT-305 (SEC – 1)

Title: SE 1 – Disaster Management

Syllabus:

1. Hazards and disasters: Concept
2. Classification of Hazard and Disaster
3. Approaches to hazard study: Risk perception and vulnerability assessment.
Hazard paradigms

Responses to hazards: Preparedness, trauma and aftermath. Resilience and capacity building

Reading References:

- Government of India. (1997) Vulnerability Atlas of India. New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
- Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
- Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
- Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi. Chapter 1, 2 and 3
- Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi. \
- Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
- Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: GEOGRAPHY

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BGEOSEHT-405 (SEC – 2)

Title: SE 2- Advanced Spatial Statistical Techniques

Syllabus:

Concepts in Theory

Probability theory, probability density functions with respect to Normal, Binomial and Poisson distributions and their geographical applications.

1. Sampling: Sampling plans for spatial and non-spatial data, sampling distributions. Sampling estimates for large and small samples tests involving means and proportions.
2. Correlation and Regression Analysis: Rank order correlation and product moment correlation; linear regression, residuals from regression, and simple curvilinear regression. Introduction to multi-variate analysis.
3. Time Series Analysis: Time Series processes; Smoothing time series; Time series components.

Any statistical Software Package (e.g., SPSS, MS Excel, R, etc.) may be used for practice. A project file consisting of four exercises on the above themes is to be submitted.

Reading References:

- Bart James E and Gerld M.Barber, 1996: Elementary Statistics for Geographers, The Guieford Press, London.
- Eldon, D., 1983: Statistics in Geography: A Practical Approach, Blackwell, London.
- Cressie, N.A.C., 1991: Statistics for Spatial Analysis, Wiley, New York.
- Gregory, S., 1978: Statistical Methods and the Geographer (4th Edition), Longman, London.
- Haining, R.P., 1990: Spatial Data Analysis in the Social and Environmental Science, Cambridge University Press, Cambridge.

- Mc Grew, Jr. and Cahrls, B. M., 1993: An Introduction to Statistical Problem Solving in Geography, W.C. Brocan Publishers, New Jersey.
- Mathews, J.A., 1987: Quantitative and Statistical Approaches to Geography: A Practical Manual Pergamon, Oxford.
- S.K., 1998: Statistics for Geoscientists: Techniques and Applications, Concept Publishing Company, New Delhi.
- Wei, W.S., 1990: Time Series Analysis: Variate and Multivariate Methods, Addison Wesley Publishing.
- Yeates, Mauris, 1974: An Introduction to Quantitative Analysis in Human Geography, Mc Grawhill, New York

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: SANSKRIT

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BSNSSEHT-305 (SEC – 1)

Title: Indian System of Debate भारतीयतर्कविज्ञानम्

Syllabus:

[A] Prescribed Course:

Section ‘A’ **To be answered** (MCQ –5 X 2 = 10)

Fundamentals of Science of Debate:

Science of inquiry (ānvīkṣikī) & its importance, Growth of ānvīkṣikī into art of debate, The council of debate (pariṣad) & its kinds, Discussant (vādī), Opponent (prativādī), Judge (madhyastha/prāśnika). The Method of debate (sambhāṣāvidhi/vādaavidhi) & its utility, Types of debate - congenial debate (anuloma sambhāṣā) & hostile debate (vigrhya sambhāṣā), The expedience of debate (vādopāya), The limits of debate (vādamaryādā). Note : The definitions and concepts are to be taken only from the Nyāyasūtra, Nyāyakośa by Bhimacharya Jhalkikar and A History of Indian Logic by S. C. Vidyabhushan, Chapter III of Section I. The illustrations and examples must be taken from day to day life and philosophical examples must be abandoned

Section ‘B’ **To be answered** (MCQ –5 X 2 = 10)

Theory of Debate:

Basic understanding of the following terms: Example (drṣṭānta), Tenet (siddhānta), Ascertainment (nirṇaya), Dialouge (kathā) and its kinds, Discussion (vāda), Wrangling (jalpa), Cavil (vitaṇḍā). Quibble (chala) & its kinds; Analogue (jāti) and its important kinds (only first four, i.e. sādharmyasama, vaidharmyasama, utkarṣasama & apakarṣasama); Point of defeat (nigrahasthāna) & its kinds – Hurting the proposition (pratijñāhāni), Shifting of proposition (pratijñāntara), Opposing the proposition (pratijñāvirodha), Renouncing the proposition (pratijñāsannyāsa), Admission of an opinion (matānujñā).

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: SANSKRIT

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BSNSSEHT-405 (SEC – 2)

Title:

Tradition and History of Indian Dramaturgy भारतीयनाट्यशास्त्रस्य परम्परा इतिहासश्च

Syllabus:

[A] Prescribed Course:

Section ‘A’

Drama : vastu (subject-matter), netā (Hero) and rasa:

Definition of drama and its various names - dṛśya, rūpa,rūpaka , abhineya; abhinaya and its types: āngika (gestures), vācika(oral), sāttvika (representation of the sattva), āhārya (dresses and make-up). Vastu: (subject-matter) : ādhikārika (principal), prāsaṅgika (subsidiary), Five kinds of arthaprakṛti, kāryāvasthā (stages of the action of actor) and sandhi (segments), arthopakṣepaka (interludes), kinds of dialogue:1. sarvaśrāvya or prakāśa (aloud) 2. śrāvya or svagata (aside) 3. niyataśrāvya : janāntika (personal address), apavārita (confidence) 4. ākāśabhāṣita (conversation with imaginary person). Netā: Four kinds of heroes, Three kinds of heroines,sūtradhāra (stage manager), pāripārśvika (assistant of sūtradhāra), vidūṣaka (jester), kañcukī (chamberlain), pratināyaka (villain). Rasa: definition and constituents, ingredients of rasa-niṣpatti: - bhāva (emotions), vibhāva (determinant), anubhāva (consequent), sāttvikabhāva (involuntary state), sthāyibhāva (permanent states), vyabhicāribhāva (complementary psychological states), svāda (pleasure), Four kinds of mental levels : vikāsa (cheerfulness), vistāra (exaltation), kṣobha (agitation), vikṣepa (perturbation).

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ECONOMICS

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BECOSEHT-305 (SEC – 1)

Title: Data Analysis

Syllabus:

Unit 1

1. Sources of data. Population census versus sample surveys. Random sampling.

2. Frequency distribution and summary Statistics. Unit 2

Analysis of Indian Data: Economic Survey, RBI Bulletin on currency and finance, ASI DATA, Foreign Trade Statistics, NSS Consumer surveys.

Reading References:

P.H. Karmel and M. Polasek (1978), Applied Statistics for Economists, 4th edition, Pitman.

► M.R. Spiegel (2003), Theory and Problems of Probability and Statistics (Schaum Series).

► Official websites of RBI, Government of India, NSS, ASI.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ECONOMICS

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BECOSEHT-405 (SEC – 2)

Title: Research Methodology

Syllabus:

Unit 1

1. Understanding the nature of research.
2. Formulating the research topic
3. Review of Literature

Unit 2

1. Approaches to research and research strategy
2. Research Ethics
3. Using Secondary data
4. Using Primary data- collecting data through observations/ interviews/ questionnaire

Unit 3

1. Sample Selection Methods
2. Analyzing Data
3. Writing Project Report – Referencing Styles

Reading References:

Ranjit Kumar (2014), Research Methodology: A Step by Step Guide for beginners, 4th Edition, Sage Publications.

► Uwe Flick (2012), Introducing Research Methodology: A Beginner's Guide to Doing a Research Project, Sage Publications.

► Bethlehem, J.(2009), Applied Survey Methods: A Statistical Perspective, Wiley.

► Cochran, William G. (2008), Sampling Techniques, Third Edition, Wiley India, ISBN 978-81-265-1524-0. Reprint: 2008.

► Groves, R. M., Fowler, F.J., Couper, M.P., Lepkowski, J.M., Singer, E. and Tourangeau, R. (2009). Survey Methodology, Wiley.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: EDUCATION

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BEDCSEHT-305 (SEC – 1)

Title: Educational Guidance and Counselling

Syllabus:

Course Objectives: After completion of the course the students shall be able to: 1. Know the concept, meaning, nature and importance of guidance. 2. Know, understand and explain the meaning, purposes and functions of different types of guidance. 3. Understand and explain the necessities of guidance at different stages of education. 4. Know the concept, meaning, nature and importance of counselling. 5. Know, understand and explain the meaning, purposes and functions of different types of counselling. 6. Know and understand the characteristics of a good Counsellor. 7. Know and understand the different Tools and Techniques of Guidance and Counselling. 8. Distinguish between guidance, counselling and teaching. Course Contents: Unit-I: Concept of Guidance a) Meaning, Nature and Importance of Guidance. b) Different Types of Guidance- i) Educational: Meaning, Characteristics, Purpose & Functions. ii) Vocational: Meaning, Characteristics, Purpose & Functions. iii) Personal: Meaning, Characteristics, Purpose & Functions. c) Guidance at different stages of Education with special emphasis on Secondary stage of Education. Unit-II: Concept of Counselling a) Meaning, Nature and Importance of Counselling b) Types of Counselling- i) Directive: Meaning, Characteristics, Purpose & Functions. ii) Non-directive: Meaning, Characteristics, Purpose & Functions. iii) Eclectic: Meaning, Characteristics, Purpose & Functions. c) Steps of Counselling; Characteristics of good Counsellor. Unit-III: Tools and Techniques of Guidance and Counselling a) Basic data necessary for Educational Guidance- Pupils abilities, Aptitudes, Interests and Attitudes, Educational Attainments and Personality Traits. b) Measurement of Intelligence, Personality and Motivation c) Difference between Guidance, Counselling and Teaching.

Reading References:

Suggested Books: • Adams, James F. (1986). Counseling and Guidance: A Summary View, (6th printing) New York: McMillan. • Anastasi, A. (1982). Psychological Testing, New York: Macmillan Publishing Co. (5th Ed.) • Barik, Narayan- Fundamentals of Guidance and Counselling. Kunal Publication. • Beride, R.F. et. al. (1963). Testing in Guidance and Counseling, New York: McGraw Hill.

• Bernard, H. W. (1977). Principles of Guidance, (2nd Ed.) New York: Harper and RWO. • Burkes, H. M., and Steffir B. (1979). Theories of Counseling, (3rd Ed.) New York: McGraw Hill. • Crow, L.d. and Crow A. (1962). An Introduction to Guidance, New Delhi: Eurisia. • Farwell, G. F., and Paters H.J. (1959) : Guidance Reading for Councillors, Chicago : Rand McNally. • Freeman, F. S. (1972). Theory and Practice of Psychological Testing, New Delhi: Oxford and IBH Co. • George, R. L., and Cristiani, T. S. (1981). Theories, Methods and Processes of Counseling and Psychotherapy, Englewood Cliffs, N.J.: Prentice Hall. • Holland, J. L. (1966). The Psychology of Vocational Choice, Waltham Mass: Blaisdell. • Jones, Arthur, J. (1970). Principles of Guidance (6th Ed.), New Delhi: Tata McGraw Hill Publishing Co. • Pasricha P. (1976). Guidance and Counseling in Indian Education, New Delhi; N.C.E.R.T. • Shertger, B., and Stone S. (1976). Fundamentals of Guidance, (3rd Ed.), Boston: Houghton Miffilin Co. • Super, B.E. (1957). The Psychology of Carrees, New York: Harper. • Tiwari, R. K. - Guidance and Counselling. Kunal Publication. • Traxler, A.E. and Worth R.D. (1964). Techniques of Counseling (2nd Ed.), New York: McGraw Hill.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: EDUCATION

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BEDCSEHT-405 (SEC – 2)

Title: Education to Include the Excluded

Syllabus:

Course Objectives: After completion of the course the students shall be able to: 1. Know the concept, meaning and need of Inclusive Education. 2. Explain the causes of inequality in education and role of education to remove inequality in education. 3. Know and understand the importance of students' prior knowledge, life experiences, and interests in achieving learning goals. 4. Know and understand of how to create and maintain effective environments in classroom as well as in school. a) Know and understand of how to plan instruction and design learning experiences for learners. Course Contents: UNIT-I: Inclusive Education and Standard for Engaging all Students in Learning a) Inclusive Education: Meaning, Need and Programme b) Equality and Equity in Education: Meaning, importance, causes of inequality, Role of education to remove inequality in education c) Connecting students' prior knowledge, life experiences, and interests with learning goals UNIT-II: Standard for Creating and Maintaining Effective Environments a) Creating a physical environment that engages all students; b) Establishing a climate that promotes fairness and respect behaviours in a fair, equitable way c) Promoting social development and group responsibility UNIT-III: Standard for Planning Instruction and Designing Learning Experiences a) Drawing on and valuing students' backgrounds, interests, and developmental learning needs b) Establishing and articulating goals for student learning c) Developing and sequencing instructional activities and materials for student learning

Reading References:

Suggested Books: • Agarwal, Rashmi (2010). Learning Disabilities. Shipra Publication. • Bhave, Asawari, et al. (2015). Inclusive Education. Success Publications. • Chowdhury, Piku (2015). Inclusive Education; Policy, Practice and Prospects. Authorspress. • Das, A. - Inclusive Education: A Contextual Working Model. Concepts Publication. • Dash, Neena (2006). Inclusive Education for Children with Special Needs. Atlantic. • Farrell, Peter (2008). Psychology for Inclusive Education: New Directions in Theory and Practice. Taylor & Francis Ltd. • Goel, Sushil Kumar (2015). Inclusive Education For Special Children. Pointer Publishers, Jaipur. • Goel, Sushil Kumar (2015). Teaching Children with Learning

Disabilities. Aavishkar Publishers, Distributors, Jaipur. • Hallahan, D., Kauffman, J., & Lyod, J. (1985). Introduction to Learning Disabilities (2nd Edition). Englewood Cliffs, NJ: Prentice Hall. • Mangal, S. K. (2009). Educating Exceptional Children: An Introduction to Special Education (1st Edition). Phi Learning. • Menon (2010). Learning Disabilities. Aph Publishing Corp. • Prakash, Prem (2006). Educational of Exceptional Children. Kaniska Publication. • Ranganathan, Namita (2012). Education for Mental Health. Shipra Prakashan. • Samuel A. Kirk, Nicholas J. Anastasiow, James J. Gallagher, Mary Ruth Coleman (2012). Educating Exceptional Children (13th Edition). Wadsworth. • Sharma, Shashi Prabha (2006). Fundamental of Mental Health Education. Kaniska Publication. • Shankar, U. (1976). Exceptional Children. New Delhi: Sterling Publishers. • Singh, Udai Veer (2010). Exceptional Children, RvS Books. • Tannenbaum, I. M. (1983). Gifted Children: Psychological and Educational Perspectives. New York: Macmillan. • Tewari, Rajshree, and Tewari, Aradhana (2015). Learning Disabilities. Pointer Publishers, Jaipur. • Tripathy, S. N.- Education for the Excluded Children. Abhijeet Pub.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: MATHEMATICS

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BMTMSEHT-305 (SEC – 1)

Title: Logic and Sets

Syllabus:

Introduction, propositions, truth table, negation, conjunction and disjunction. Implications, biconditional propositions, converse, contra positive and inverse propositions and precedence of logical operators. Propositional equivalence: Logical equivalences. Predicates and quantifiers: Introduction, Quantifiers, Binding variables and Negations.

Sets, subsets, Set operations and the laws of set theory and Venn diagrams. Examples of finite and infinite sets. Finite sets and counting principle. Empty set, properties of empty set. Standard set operations. Classes of sets. Power set of a set.

Difference and Symmetric difference of two sets. Set identities, Generalized union and intersections. Relation: Product set. Composition of relations, Types of relations, Partitions, Equivalence Relations with example of congruence modulo relation. Partial ordering relations, n- ary relations.

Reading References:

1. R.P. Grimaldi, Discrete Mathematics and Combinatorial Mathematics, Pearson Education, 1998.
2. P.R. Halmos, Naive Set Theory, Springer, 1974.
3. E. Kamke, Theory of Sets, Dover Publishers, 1950.
4. S. Santha, Discrete Mathematics (Cengage Learning).

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: MATHEMATICS

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BMTMSEHT-405 (SEC – 2)

Title: Graph Theory

Syllabus:

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

Eulerian circuits, Eulerian graph, semi-Eulerian graph, theorems, Hamiltonian cycles, theorems

Representation of a graph by matrix, the adjacency matrix, incidence matrix, weighted graph,

Travelling salesman's problem, shortest path, Tree and their properties, spanning tree, Dijkstra's algorithm, Warshall algorithm.

Reading References:

1. B.A. Davey and H.A. Priestley, Introduction to Lattices and Order, Cambridge University Press, Cambridge, 1990.
2. Edgar G. Goodaire and Michael M. Parmenter, Discrete Mathematics with Graph Theory, 2nd Edition, Pearson Education (Singapore) P. Ltd., Indian Reprint 2003.
3. Rudolf Lidl and Gunter Pilz, Applied Abstract Algebra, 2nd Ed., Undergraduate Texts in Mathematics, Springer (SIE), Indian reprint, 2004.
4. S. Santha, Discrete Mathematics (Cengage Learning).
5. S Pirzada, An Introduction to Graph Theory, Universities Press.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHYSICS

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BPHSSEHT-305 (SEC – 1)

Title: Renewable Energy and Energy harvesting

Syllabus:

Fossil fuels and Alternate Sources of energy

Fossil fuels and nuclear energy, their limitation, need of renewable energy, non-conventional energy sources. An overview of developments in Offshore Wind Energy, Tidal Energy, Wave energy systems, Ocean Thermal Energy Conversion, solar energy, biomass, biochemical conversion, biogas generation, geothermal energy tidal energy, Hydroelectricity. **(3 Lectures)**

Solar energy

Solar energy, its importance, storage of solar energy, solar pond, non-convective solar pond, applications of solar pond and solar energy, solar water heater, flat plate collector, solar distillation, solar cooker, solar green houses, solar cell, absorption air conditioning. Need and characteristics of photovoltaic (PV) systems, PV models and equivalent circuits, and sun tracking systems. **(6 Lectures)**

Wind Energy harvesting

Fundamentals of Wind energy, Wind Turbines and different electrical machines in wind turbines, Power electronic interfaces, and grid interconnection topologies. **(3 Lectures)**

Ocean Energy

Ocean Energy Potential against Wind and Solar, Wave Characteristics and Statistics, Wave Energy Devices. **(3 Lectures)**

Tide characteristics and Statistics, Tide Energy Technologies, Ocean Thermal Energy, Osmotic Power, Ocean Bio-mass. **(2 Lectures)**

Geothermal Energy

Geothermal Resources, Geothermal Technologies. **(2 Lectures)**

Hydro Energy

Hydropower resources, hydropower technologies, environmental impact of hydro power sources. **(2 Lectures)**

Piezoelectric Energy harvesting

Introduction, Physics and characteristics of piezoelectric effect, materials and mathematical description of piezoelectricity, Piezoelectric parameters and modeling piezoelectric generators, Piezoelectric energy harvesting applications, Human power. **(4 Lectures)**

Electromagnetic Energy Harvesting

1. Linear generators, physics mathematical models, recent applications . **(2 Lectures)**
2. Carbon captured technologies, cell, batteries, power consumption **(2 Lectures)**
3. Environmental issues and Renewable sources of energy, sustainability. **(1 Lectures)**

Demonstrations and Experiments

1. Demonstration of Training modules on Solar energy, wind energy, etc.
2. Conversion of vibration to voltage using piezoelectric materials
3. Conversion of thermal energy into voltage using thermoelectric modules.

Reading References:

- ▶ Non-conventional energy sources - G.D Rai - Khanna Publishers, New Delhi
- ▶ Solar energy - M P Agarwal - S Chand and Co. Ltd.
- ▶ Solar energy - Suhas P Sukhative Tata McGraw - Hill Publishing Company Ltd.
- ▶ Godfrey Boyle, “Renewable Energy, Power for a sustainable future”, 2004, Oxford University Press, in association with The Open University.
- ▶ Dr. P Jayakumar, Solar Energy: Resource Assesment Handbook, 2009
- ▶ J.Balfour, M.Shaw and S. Jarosek, Photovoltaics, Lawrence J Goodrich (USA).

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHYSICS

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BPHSSEHT-405 (SEC – 2)

Title: Computational Physics Skills

Syllabus:

Introduction

Importance of computers in Physics, paradigm for solving physics problems for solution. Usage of linux as an Editor. Algorithms and Flowcharts: Algorithm: Definition, properties and development. Flowchart: Concept of flowchart, symbols, guidelines, types. Examples: Cartesian to Spherical Polar Coordinates, Roots of Quadratic Equation, Sum of two matrices, Sum and Product of a finite series, calculation of $\sin(x)$ as a series, algorithm for plotting (1) Lissajous figures and (2) trajectory of a projectile thrown at an angle with the horizontal. **(3 Lectures)**

Scientific Programming

Some fundamental Linux Commands (Internal and External commands). **(2 Lectures)**

Basic elements of C programming:

UNIT-I (3 Lectures)

1. Fundamentals of C language: C character set-Identifiers and Keywords- Constants -Variables-Data types-Declarations of variables-Declaration of storage class-Defining symbolic constants- Assignment statement.

2. Operators: Arithmetic operators-Relational operators-Logic operators- Assignment operators- Increment and decrement operators-Conditional operators.

UNIT-II (8 Lectures)

3. Expressions and I/O Statements: Arithmetic expressions-Precedence of arithmetic operators-Type converters in expressions-Mathematical (Library) functions - Data input and output-The getchar and putchar functions-Scanf-Printf simple programs.

4. Control statements:If -Else statements -Switch statements - The operators - GO TO - While, Do - While, FOR statements - BREAK and CONTINUE statements.

UNIT-III (6 Lectures)

5. Arrays: One dimensional and two dimensional arrays - Initialization - Type declaration - Inputting and outputting of data for arrays - Programs of matrices addition, subtraction and multiplication

6. Structure, Disk I/O Statements, open a file, writing in a file, reading from a file

Visualization

Introduction to graphical analysis and its limitations. Introduction to Gnuplot. importance of visualization of computational and computational data, basic Gnuplot commands: simple plots, plotting data from a file, saving and exporting, multiple data sets per file, physics with Gnuplot (equations, building functions, user defined variables and functions), Understanding data with Gnuplot. (4 Lectures)

Scientific word processing: Introduction to LaTeX

TeX/LaTeX word processor, preparing a basic LaTeX file, Document classes, Preparing an input file for LaTeX, Compiling LaTeX File, LaTeX tags for creating different environments, Defining LaTeX commands and environments, Changing the type style, Symbols from other languages. Equation representation: Formulae and equations, Figures and other floating bodies, Lining in columns- Tabbing and tabular environment, Generating table of contents, bibliography and citation, Making an index and glossary, List making environments, Fonts, Picture environment and colors, errors. (4 Lectures)

Hands on exercises

1. Write a program that reads an alphabet from keyboard and display in the reverse order.
2. Write a program for converting centigrade to Fahrenheit temperature and Fahrenheit temperature centigrade.
3. To print out all natural even/ odd numbers between given limits.
4. To find maximum, minimum and range of a given set of numbers.
5. Write a program for generation of even and odd numbers up to 100 using while, do-while and for loop.
6. To find a set of prime numbers and Fibonacci series.
7. Write a program to find the largest element in an array.
8. To compile a frequency distribution and evaluate mean, standard deviation etc.
9. To evaluate sum of finite series and the area under a curve.
10. Motion of a projectile using simulation and plot the output for visualization.
11. To write program to open a file and generate data for plotting using Gnuplot.
12. Plotting trajectory of a projectile projected horizontally.

13. Plotting trajectory of a projectile projected making an angle with the horizontally.
14. Creating an input Gnuplot file for plotting a data and saving the output for seeing on the screen. Saving it as an eps file and as a pdf file.
15. Motion of a projectile using simulation and plot the output for visualization.
16. Numerical solution of equation of motion of simple harmonic oscillator and plot the outputs for visualization.
17. Motion of particle in a central force field and plot the output for visualization.
18. To find the roots of a quadratic equation.
19. Write a program to solve the quadratic equation using Bisection method.
20. Write a program for integration of function using Trapezoidal rule.
21. Write a program for solving the differential equation using Simpson's 1/3 rule

Reading References:

- ▶ Programming in ANSI C, Balaguruswamy, McGrawhill
- ▶ C Programming Absolute Beginners guide, Perry, Pearson
- ▶ The C Programming Language, Brian W. Kernighan, Denis Ritchie, Pearson
- ▶ Latex wiki book: <https://en.wikibooks.org/wiki/LaTeX>
- ▶ Other Latex online Docementation
- ▶ LaTeX–A Document Preparation System”, Leslie Lamport (Second Edition, Addison-Wesley)
- ▶ Gnuplot wiki book (online Document): <https://en.wikibooks.org/wiki/Gnuplot>
- ▶ Gnuplot in action: understanding data with graphs, Philip K Janert, (Manning 2010)
- ▶ Other Gnuplot online Docementation
- ▶ Computational Physics: An Introduction, R.C. Verma, et al. New Age International Publishers, New Delhi(1999)

DEPARTMENT: CHEMISTRY

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BCEMSEHT-305 (SEC – 1)

Title: Basic Analytical Chemistry

Syllabus:

Theory (30L)

Introduction

Introduction to Analytical Chemistry and its interdisciplinary nature. Concept of sampling. Importance of accuracy, precision and sources of error in analytical measurements. Presentation of experimental data and results, from the point of view of significant figures.

Analysis of soil

Composition of soil, Concept of pH and pH measurement, Complexometric titrations, Chelation, Chelating agents, use of indicators

1. Determination of pH of soil samples.
2. Estimation of Calcium and Magnesium ions as Calcium carbonate by complexometric titration.

Analysis of water

Definition of pure water, sources responsible for contaminating water, water sampling methods, water purification methods.

1. Determination of pH, acidity and alkalinity of a water sample.
2. Determination of dissolved oxygen (DO) of a water sample.

Analysis of food products

Nutritional value of foods, idea about food processing and food preservations and adulteration.

1. Identification of adulterants in some common food items like coffee powder, asafoetida, chilli powder, turmeric powder, coriander powder and pulses, etc.
2. Analysis of preservatives and colouring matter.

Chromatography

Definition, general introduction on principles of chromatography, paper chromatography, TLC etc.

1. Paper chromatographic separation of mixture of metal ion (Fe^{3+} and Al^{3+}).
2. To compare paint samples by TLC method.

Ion-exchange

1. Column, ion-exchange chromatography etc.
2. Determination of ion exchange capacity of anion / cation exchange resin (using batch procedure if use of column is not feasible).

Analysis of cosmetics

Major and minor constituents and their function

1. Analysis of deodorants and antiperspirants, Al, Zn, boric acid, chloride, sulphate.
2. Determination of constituents of talcum powder: Magnesium oxide, Calcium oxide, Zinc oxide and Calcium carbonate by complexometric titration

Suggested Applications (Any one)

1. To study the use of phenolphthalein in trap cases.
2. To analyse arson accelerants.
3. To carry out analysis of gasoline.

Suggested Instrumental demonstrations

1. Estimation of macro nutrients: Potassium, Calcium, Magnesium in soil samples by flame photometry.
2. Spectrophotometric determination of Iron in Vitamin / Dietary Tablets.

3. Spectrophotometric Identification and Determination of Caffeine and Benzoic Acid in Soft Drinks

Reading References:

- ▶ Willard, H.H., Merritt, L.L., Dean, J. & Settoe, F.A. Instrumental Methods of Analysis, 7th Ed. Wadsworth Publishing Company Ltd., Belmont, California, USA, 1988.
- ▶ Skoog, D.A., Holler, F.J. & Crouch, S. Principles of Instrumental Analysis, Cengage Learning India Edition, 2007.
- ▶ Skoog, D.A.; West, D.M. & Holler, F.J. Analytical Chemistry: An Introduction 6th Ed., Saunders College Publishing, Fort Worth, Philadelphia (1994).
- ▶ Harris, D. C. Quantitative Chemical Analysis, 9th ed. Macmillan Education, 2016.
- ▶ Dean, J. A. Analytical Chemistry Handbook, McGraw Hill, 2004.
- ▶ Day, R. A. & Underwood, A. L. Quantitative Analysis, Prentice Hall of India, 1992.
- ▶ Freifelder, D.M. Physical Biochemistry 2nd Ed., W.H. Freeman & Co., N.Y. USA (1982).
- ▶ Cooper, T.G. The Tools of Biochemistry, John Wiley & Sons, N.Y. USA. 16 (1977).
- ▶ Vogel, A. I. Vogel's Qualitative Inorganic Analysis 7th Ed., Prentice Hall, 1996.
- ▶ Mendham, J., A. I. Vogel's Quantitative Chemical Analysis 6th Ed., Pearson, 2009.
- ▶ Robinson, J.W. Undergraduate Instrumental Analysis 5th Ed., Marcel Dekker, Inc., New York (1995).
- ▶ Christian, G.D. Analytical Chemistry, 6th Ed. John Wiley & Sons, New York, 2004.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: CHEMISTRY

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BSEMSEHT-405 (SEC – 2)

Title: Analytical Clinical Biochemistry

Syllabus:

Theory (30L)

Review of Concepts from Core Course

1. Carbohydrates: Biological importance of carbohydrates, Metabolism, Cellular currency of energy (ATP), Glycolysis, Alcoholic and Lactic acid fermentations, Krebs cycle. Isolation and characterization of polysachharides.
2. Proteins: Classification, biological importance; Primary and secondary and tertiary structures of proteins: α -helix and β -pleated sheets, Isolation, characterization, denaturation of proteins.
3. Enzymes: Nomenclature, Characteristics (mention of Ribozymes), and Classification; Active site, Mechanism of enzyme action, Stereospecificity of enzymes, Coenzymes and cofactors, Enzyme inhibitors, Introduction to Biocatalysis: Importance in “Green Chemistry” and Chemical Industry.
4. Lipids: Classification. Biological importance of triglycerides and phosphoglycerides and cholesterol; Lipid membrane, Liposomes and their biological functions and underlying applications. Lipoproteins. Properties, functions and biochemical functions of steroid hormones. Biochemistry of peptide hormones.
5. Structure of DNA (Watson-Crick model) and RNA, Genetic Code, Biological roles of DNA and RNA: Replication, Transcription and Translation, Introduction to Gene therapy.
6. Enzymes: Nomenclature, classification, effect of pH, temperature on enzyme activity, enzyme inhibition.

Biochemistry of disease: A diagnostic approach by blood/ urine analysis.

1. Blood: Composition and functions of blood, blood coagulation. Blood collection and preservation of samples. Anaemia, Regulation, estimation and interpretation of data for blood sugar, urea, creatinine, cholesterol and bilirubin.

2. Urine: Collection and preservation of samples. Formation of urine. Composition and estimation of constituents of normal and pathological urine.

Hands On Practical

Identification and estimation of the following:

1. Carbohydrates – qualitative and quantitative.
2. Lipids – qualitative.
3. Determination of the iodine number of oil.
4. Determination of the saponification number of oil.
5. Determination of cholesterol using Liebermann- Burchard reaction.
6. Proteins – qualitative.
7. Isolation of protein.
8. Determination of protein by the Biuret reaction.
9. Determination of nucleic acids

Reading References:

- ▶ Cooper, T.G. Tool of Biochemistry. Wiley-Blackwell (1977).
- ▶ Wilson, K. & Walker, J. Practical Biochemistry. Cambridge University Press (2009).
- ▶ Varley, H., Gowenlock, A.H & Bell, M.: Practical Clinical Biochemistry, Heinemann, London(1980).
- ▶ Devlin, T.M., Textbook of Biochemistry with Clinical Correlations, John Wiley & Sons,2010.
- ▶ Berg, J.M., Tymoczko, J.L. & Stryer, L. Biochemistry, W.H. Freeman, 2002.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: BOTANY

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BBOTSEHT-305 (SEC – 1)

Title: Biofertilizers

Syllabus:

Unit 1: General account about the microbes used as biofertilizer – Rhizobium – isolation, identification, mass multiplication, carrier based inoculants, Actinorrhizal symbiosis.
(4 lectures)

Unit 2: Azospirillum: isolation and mass multiplication – carrier based inoculant, associative effect of different microorganisms. Azotobacter: classification, characteristics – crop response to Azotobacter inoculum, maintenance and mass multiplication. (8 lectures)

Unit 3: Cyanobacteria (blue green algae), Azolla and Anabaena azollae association, nitrogen fixation, factors affecting growth, blue green algae and Azolla in rice cultivation. (4 lectures)

Unit 4: Mycorrhizal association, types of mycorrhizal association, taxonomy, occurrence and distribution, phosphorus nutrition, growth and yield – colonization of VAM – isolation and inoculum production of VAM, and its influence on growth and yield of crop plants.
(8 lectures)

Unit 5: Organic farming – Green manuring and organic fertilizers, Recycling of biodegradable municipal, agricultural and Industrial wastes – biocompost making methods, types and method of vermicomposting – field Application. (6 lectures)

Reading References:

1. Dubey, R.C., 2005 A Text book of Biotechnology S.Chand & Co, New Delhi.
2. Kumaresan, V. 2005, Biotechnology, Saras Publications, New Delhi.
3. John Jothi Prakash, E. 2004. Outlines of Plant Biotechnology. Emkay Publication, New Delhi.
4. Sathe, T.V. 2004 Vermiculture and Organic Farming. Daya publishers.
5. Subha Rao, N.S. 2000, Soil Microbiology, Oxford & IBH Publishers, New

Delhi.

6. Vayas, S.C, Vayas, S. and Modi, H.A. 1998 Bio-fertilizers and organic Farming. Akta Prakashan, Nadiad.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: BOTANY

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BBOTSEHT-405 (SEC – 2)

Title: Herbal Technology

Syllabus:

Unit 1: Herbal medicines: history and scope - definition of medical terms - role of medicinal plants in Siddha systems of medicine; cultivation - harvesting - processing - storage - marketing and utilization of medicinal plants. (6 Lectures)

Unit 2: Pharmacognosy - systematic position and medicinal uses of the following herbs in curing various ailments; Tulsi, Ginger, Fenugreek, Indian Goose berry and Ashoka. (6 Lectures)

Unit 3: Phytochemistry - active principles and methods of their testing - identification and utilization of the medicinal herbs; *Catharanthus roseus* (cardiotonic), *Withania somnifera* (drugs acting on nervous system), *Clerodendron phlomoides* (anti-rheumatic) and *Centella asiatica* (memory booster). (6 Lectures)

Unit 4: Analytical pharmacognosy: Drug adulteration - types, methods of drug evaluation - Biological testing of herbal drugs - Phytochemical screening tests for secondary metabolites (alkaloids, flavonoids, steroids, triterpenoids, phenolic compounds) (8 Lectures)

Unit 5: Medicinal plant banks micro propagation of important species (*Withania somnifera*, neem and tulsi- Herbal foods-future of pharmacognosy) (4 Lectures)

Reading References:

1. Glossary of Indian medicinal plants, R.N.Chopra, S.L.Nayar and I.C.Chopra, 1956. C.S.I.R, New Delhi.
2. The indigenous drugs of India, Kanny, Lall, Dey and Raj Bahadur, 1984.

InternationalBook Distributors.

3. Herbal plants and Drugs Agnes Arber, 1999. Mangal Deep Publications.
4. Ayurvedic drugs and their plant source. V.V. Sivarajan and Balachandran Indra 1994. Oxford IBH publishing Co.
5. Ayurveda and Aromatherapy. Miller, Light and Miller, Bryan, 1998. Banarsidass, Delhi.
6. Principles of Ayurveda, Anne Green, 2000. Thomsons, London.
7. Pharmacognosy, Dr.C.K.Kokate et al. 1999. Nirali Prakashan.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ZOOLOGY

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BZOOSEHT-305 (SEC – 1)

Title: Aquarium Fish Keeping

Syllabus:

Unit 1: Introduction to Aquarium Fish Keeping

The potential scope of Aquarium Fish Industry as a Cottage Industry, Exotic and Endemic species of Aquarium Fishes

Unit 2: Biology of Aquarium Fishes

Common characters and sexual dimorphism of Fresh water and Marine Aquarium fishes such as Guppy, Molly, Sword tail, Gold fish, Angel fish, Blue morph, Anemone fish and Butterfly fish

Unit 3: Food and feeding of Aquarium fishes

Use of live fish feed organisms. Preparation and composition of formulated fish feeds, Aquarium fish as larval predator

Unit 4: Fish Transportation

Live fish transport - Fish handling, packing and forwarding techniques.

Unit 5: Maintenance of Aquarium

General Aquarium maintenance – budget for setting up an Aquarium Fish Farm as a Cottage Industry

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ZOOLOGY

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BZOOSEHT-405 (SEC – 2)

Title: Sericulture

Syllabus:

Unit 1: Introduction

Sericulture: Definition, history and present status; Silk route

1. Types of silkworms, Distribution and Races
2. Exotic and indigenous races
3. Mulberry and non-mulberry Sericulture

Unit 2: Biology of Silkworm

1. Life cycle of *Bombyx mori*
2. Structure of silk gland and secretion of silk

Unit 3: Rearing of Silkworms

1. Selection of mulberry variety and establishment of mulberry garden
2. Rearing house and rearing appliances.
3. Disinfectants: Formalin, bleaching powder, RKO
4. Silkworm rearing technology: Early age and Late age rearing
5. Types of mountages
6. Spinning, harvesting and storage of cocoons

Unit 4: Pests and Diseases

1. Pests of silkworm: Uzi fly, dermestid beetles and vertebrates

2. Pathogenesis of silkworm diseases: Protozoan, viral, fungal and bacterial
3. Control and prevention of pests and diseases

Unit 5: Entrepreneurship in Sericulture

1. Prospectus of Sericulture in India: Sericulture industry in different states, employment, potential in mulberry and non-mulberry sericulture
2. Visit to various sericulture centres.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ENVIRONMENTAL SCIENCE

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BENVSEHT-305 (SEC – 1)

Title: CONSERVATION AND ECOTOURISM

Syllabus:

Ecotourism----Elementary idea of Mass tourism and it's impact on environment and culture; Concept of Ecotourism, Guideline and Policy (National and International) of Ecotourism; Planning of ecotourism; Ecotourism circuit development; Types of Alternative Tourism, Elementary idea of Rural tourism, Adventure tourism; Development, economical benefits and impacts of Ecotourism; Management of Ecotourism; Ecotourism potentiality in India- case study (Ecotourism in Kenya, India and Australia)

(NO. OF LECTURES:10)

Conservation-- Concept of wildlife conservation-Reserves Design, Survey techniques of tiger, birds, deer,bison, elephants and insect; In- situ habitat management of wild animal; Concept of zoo management; Nursery technology, plantation technique in India, Concept of Eco- development committee and FPC

(NO. OF LECTURES:10)

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: ENVIRONMENTAL SCIENCE

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BENVSEHT-405 (SEC – 2)

Title: ANALYTICAL TECHNIQUES

Syllabus:

Basic Histological and Cytological Techniques: Fixation and Fixatives; Tissue-processing & Microtomy; Staining

(5)

Microscopy: Components of microscope; magnification and illumination; Types of microscope – Light, Electron, Phase, Polarised, Fluorescence

(7)

Biological Analysis: Collection and preservation of plankton; Enumeration of net plankton, counting in Sedgwick Rafter cell

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: COMPUTER SCIENCE

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BCOSSEHC-305 (SEC – 1)

Title: Programming in Python

Syllabus:

Planning the Computer Program

Concept of Problem Solving, Problem Definition, Program Design, Debugging, Types of Errors in Programming, Documentation.

Techniques of Problem Solving

Flowcharting, Decision Table, Algorithms, Structured Programming Concepts, Programming Methodologies (Top-Down and Bottom-Up Programming).

Overview of Programming

Structure of a Python Program, Elements of Python.

Introduction to Python

Python Interpreter, Using Python as Calculator, Python Shell, Indentation. Atoms, Identifiers and Keywords, Literals, Strings, Operators (Arithmetic, Relational, Logical, Boolean, Assignment, Ternary, Bitwise, Increment, Decrement).

Creating Python Programs

Input and Output Statements, Control Statements (Branching Statements, Looping Statements, Conditional Statements, exit function, Difference among break, continue and pass), Defining Functions, Default Arguments.

Reading References:

1. T. Budd, *Exploring Python*, TMH, 1st Edition, 2011.

2. Allen Downey, Jeffrey Elkner, Chris Meyers, *How to Think Like a Computer Scientist: Learning with Python*.

3. <https://docs.python.org/3/>

4. <http://www.ibiblio.org/g2swap/byteofpython/read/>

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: COMPUTER SCIENCE

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BCOSSEHC-405 (SEC – 2)

Title:

Web Technologies

Syllabus:

Section A: HTML Programming

Introduction

Introduction to HTML, A simple HTML Document, HTML Tags, HTML Page Structure.

Basics of HTML

Head, Body, Colours, Attributes, Lists (Unordered and Ordered).

Links

Introduction to Links, Relative and Absolute Links, Link Attributes, ID Attribute.

Images

Putting an Image on a Page, Using Images as Links, Putting an Image in the Background.

Tables

Creating a Table, Table Headers, Captions, Spanning Columns, Styling Tables.

Forms

Form Elements, Input Types, Input Attributes, Styling Forms with CSS.

Section B: PHP Programming

Introduction to PHP

History of PHP, PHP with other Technologies, Scope of PHP.

Basic Syntax, Variables and Constants, Data Types, Expressions, Scope of a Variable, Operators, Operator Precedence and Associativity.

Handling HTML Form with PHP

Capturing Form Data, GET and POST Form Methods, Dealing with Multi-value Fields, Redirecting a Form after Submission.

Conditional Events and Loops

Conditional Statements (*if*, *if . . . else*, *if . . . elseif . . . else*), *switch* statement, Loops (*while*, *for*), *goto*, *break*, *continue*, *exit*.

Functions

Need of Functions, Declaration and Calling of Functions, Functions with Arguments, Default Arguments in Functions, Function Arguments with Call by Value and Call by Reference, Scope of a Function.

String Manipulation and Regular Expression

Creating and Accessing Strings, Searching and Replacing Strings, Formatting, Joining and Splitting Strings, String related Library Functions, Use and Advantage of Regular Expressions over in-built Functions, *preg_match()*, *preg_replace()*, *preg_split()* functions in Regular Expressions.

Arrays

Anatomy of an Array, Creating Index-based and Associative Arrays, Accessing Arrays, Looping with Index-based Array and Associative Array (*each()* and *foreach()*).

Database Connection with MySQL

Data Insertion, Extraction, Deletion and Update.

Reading References:

1. *Virginia DeBolt, Integrated HTML and CSS A Smarter, Faster Way to Learn Wiley/Sybex, 2006.*
2. *Cassidy Williams, Camryn Williams, Introduction to HTML and CSS, O'Reilly, 2015.*
3. *Steven Holzner, "PHP: The Complete Reference Paperback", McGraw Hill Education (India), 2007.*
4. *David Sklar, Adam Trachtenberg, "PHP Cookbook: Solutions & Examples for PHP Programmers", 2014.*

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: NUTRITION

COURSE: HONOURS

SEMESTER – III

COURSE CODE: BNUTSEHC-305 (SEC – 1)

Title: Food preservation and Food processing

Syllabus:

3rd semester SEC – 1

Food preservation and Food processing (Theory)

Credit – 1

Marks – 20

1)Principle of food preservation and food spoilage, importance of aw. Prossing of food.

2)Physical process of food preservation Dehydration, Refrigeration and Freezing, Radiation, High temperature.

3)Chemical process of food preservation – Salting, Sugar addition, Preservative chemicals.

4)Fermentation of food and its nutritional importance .

Reading References:

1. Introductory Foods – O, Hughes, M.Bennion
2. Food Commodities – S. Lavies
3. Prevention of Food Adulteration Act – Govt. of India.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: NUTRITION

COURSE: HONOURS

SEMESTER – IV

COURSE CODE: BNUTSEHC-405 (SEC – 2)

Title: Dietary Counseling and Patient Education

Syllabus:

4th Semester SEC – 2

Dietary Counseling and Patient Education (Theory)

Credit – 1

Marks – 20

- 1) Concept of counseling and types of Dietary Counseling.
- 2) Criteria of good Dietary Counselor.
- 3) Model of Dietary Counseling.
- 4) Process of Patient education – KAP Model.
- 5) Behavioral – Modification of Patient through .Patient education

Reading References:

1. Clinical Dietetics and Nutrition – F.P.Anita, P.Abraham.
2. Nutrition and Diet Therapy – S.R.Williams.
3. Text Book of Food, Nutrition and Dietetics – RehanaBegur.
4. Nutrition and Dietetics – S.A.Joshi.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: HINDI

COURSE: PROGRAM COURSE

SEMESTER – III

COURSE CODE: BHINSERT-304 (SEC – 1)

Title: karyalayi hindi SEC -1 : कार्यालयी हिन्दी

Syllabus:

SEC -1 : कार्यालयी हिन्दी

इकाई – एक

- कार्यालयी हिन्दी – अभिप्राय तथा उद्देश्य ,
- कार्यालयी हिन्दी का क्षेत्र

इकाई – दो

- सामान्य हिन्दी तथा कार्यालयी हिन्दी : सम्बन्ध तथा अंतर
- कार्यालयी हिन्दी की स्थिति और संभावनाएँ

इकाई – तीन

- कार्यालयी हिन्दी की पारिभाषिक शब्दावली
- कार्यालय से निर्गत पत्र (ज्ञापन, परिचय, अनुस्मारक, पृष्ठांकन, आदेश, सूचनाएं, निविदा आदि)

आवेदन लेखन

इकाई – चार

- टिप्पण(नोटिंग) स्वरूप, विशेषताएँ और भाषा शैली
- प्रारूपण के प्रकार, भाषा शैली, प्रारूपण की विधि
- संक्षेपण के प्रकार, विशेषता और संक्षेपण की विधि

Reading References:

सहायक ग्रंथ :

- प्रारूपण शासकीय पत्राचार और टिप्पण लेखन विधि – राजेंद्र प्रसाद श्रीवास्तव
- प्रयोजनमूलक हिन्दी की नई भूमिका – कैलाश नाथ पाण्डेय
- प्रयोजनमूलक भाषा और कार्यालयी हिन्दी – कृष्ण कुमार गोस्वामी
- प्रयोजनमूलक हिन्दी – सिद्धांत और प्रयोग – दंगल झोल्ट
- प्रशासनिक हिन्दी – डॉ. चन्द्रपाल
- कार्यालयीन हिन्दी – डॉ. केशरीलाल वर्मा
- हिन्दी भाषा का प्रयोजनमूलक स्वरूप – डॉ. कैलाश चन्द्र भाटिया
- प्रशासनिक हिन्दी : टिप्पण और प्रारूपण – डॉ. चन्द्रपाल
- कार्यालयीय हिन्दी – डॉ. विजयपल सिंह

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: HINDI

COURSE: PROGRAM COURSE

SEMESTER – IV

COURSE CODE: BHINSERT-404 (SEC – 2)

Title: chalchitra lekhan SEC -2 : चलचित्र लेखन

Syllabus:

SEC -2 : चलचित्र लेखन

इकाई – एक

- भारतीय सिनेमा का इतिहास
- हिन्दी की आरंभिक मूक और सवाक फ़िल्म

इकाई – दो

- विगत शातब्दी की लोकप्रिय हिन्दी फ़िल्म ,लोकप्रिय फ़िल्म गीत तथा प्रसिद्ध संवाद
- प्रमुख निर्देशक एवं अभिनेता (दादा साहब फाल्के पुरस्कार प्राप्त)

इकाई – तीन

- हिन्दी पटकथा लेखन (सिनेरियो) का क्रमिक विकास ,संवाद लेखन-प्रणाली या प्राविधि
- हिन्दी में निर्मित विज्ञापन फ़िल्म (एड्-फ़िल्म)

इकाई – चार

- हिन्दी की विश्व व्याप्ति में फ़िल्म की भूमिका
- हिन्दी की प्रमुख फ़िल्म के आधार पर भाषिक संरचना का व्यावाहारिक प्रशिक्षण- देवदास (तीनों निर्मितियाँ) तथा शोले

Reading References:

सहायक ग्रंथ :

- नई तकनीक और सिनेमा : संभावनाएँ और चुनौतियों
- फिल्म निर्देशन : कुलदीप सिन्हा
- हिन्दी सिनेमा का इतिहास – मनमोहन चड्ढा
- नया सिनेमा – ब्रजेश्वर मदान
- भारतीय सिने सिद्धान्त – अनुपम ओझा
- सिनेमा : कल ,आज ,कल – विनोद भारद्वाज
- हिन्दी सिनेमा के सौ वर्ष – प्रह्लाद अग्रवाल
- सिनेमा का जादुई सफ़र – प्रताप सिंह

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: HINDI

COURSE: PROGRAM COURSE

SEMESTER – V

COURSE CODE: BHINSERT-504 (SEC – 3)

Title: Bhasha shikshan SEC -3: भाषा शिक्षण

Syllabus:

SEC -2 : भाषा शिक्षण

इकाई – एक

- हिन्दी भाषा एवं शब्द भंडार – तत्सम , तद्भव ,देशज , विदेशज , कृत्रिम
- भाषिक प्रशिक्षण के विभिन्न स्तर - प्रारंभिक कक्षाओं में, उच्च शिक्षा संस्थानों में, हिंदीत्तर

भाषियों, विभाषियों - विदेशियों के बीच द्वितीय भाषा के रूप में

इकाई – दो

- भाषा विज्ञान के मूलाधार – व्याकरण बोध, मानक वर्तनी का ज्ञान, शुद्ध वाक्य विन्यास, वैज्ञानिक उच्चारण
- पर्यायवाची , समानार्थक , विलोम , गूढ़ार्थवाची , संश्रुति , अनेक शब्दों के लिए एक शब्दयुग्म

इकाई – तीन

- देवनागरी लिपि का इतिहास तथा वैशिष्ट्य ,
- देवनागरी की वैज्ञानिकता

इकाई – चार

- हिन्दी भाषा के विशिष्ट शब्दों का भारतीय भाषाओं के सन्दर्भ में तुलनात्मक अध्ययन
- हिन्दी भाषा का भविष्य

Reading References:

सहायक ग्रंथ :

- हिन्दी भाषा का विकास – धीरेन्द्र वर्मा
- भारतीय पुरालिपि – डॉ. रामबली पाण्डेय (लोकभारती प्रकाशन)
- हिन्दी भाषा का उद्भव और विकास – उदयनारायण तिवारी
- हिन्दी भाषा की पहचान से प्रतिष्ठा तक – डॉ. हनुमानप्रसाद शुक्ल
- लिपि की कहानी : गुणाकार मुले
- हिन्दी भाषा और लिपि का ऐतिहासिक विकास – डॉ. सत्यनारायण त्रिपाठी
- भाषा विज्ञान – भोलानाथ तिवारी

- भाषा विज्ञान का रसायन – कैलाशनाथ पाण्डेय हिन्दी व्याकरण – कमाताप्रसाद गुरु
- हिन्दी शब्दानुशासन – किशोरीदास वाजपेयी
- हिन्दी व्याकरण – एन. सी. ई. आर. टी.
- आधुनिक हिन्दी व्याकरण और रचना – डॉ. वासुदेव नंदन प्रसाद

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: HINDI

COURSE: PROGRAM COURSE

SEMESTER – VI

COURSE CODE: BHINSERT-604 (SEC – 4)

Title: Bhasha computing SEC -4 : भाषा कम्प्यूटिंग

Syllabus:

SEC -4 : भाषा कम्प्यूटिंग

इकाई – एक

- कम्प्यूटर का परिचय और विकास, कम्प्यूटर में हिन्दी का आरंभ एवं विकास,
- हिन्दी के विविध फॉन्ट, कम्प्यूटर में हिन्दी की चुनौतियाँ और संभावनाएँ

इकाई – दो

- मीडिया की कार्य प्रणाली
- कम्प्यूटर में डाटा प्रविष्ट , स्मृति (मेमोरी) , सूचना संग्रहण
- सूचना प्रौद्योगिकी का स्वरूप

इकाई – तीन

- संचार प्रौद्योगिकी की प्रयोजनीय शब्दावली
- संचार भाषा के रूप में हिन्दी की उपलब्धियाँ

इकाई – चार

- कम्प्यूटर में हिन्दी के विभिन्न अनुप्रयोग
- रेडियो और टेलीविजन के कम्प्यूटर साधित कार्यक्रम

Reading References:

सहायक ग्रंथ :

- आधुनिक जनसंचार और हिन्दी – हरिमोहन
- कम्प्यूटर के भाषिक अनुप्रयोग – विजय कुमार मल्होत्रा
- कम्प्यूटर और हिन्दी – हरिमोहन
- हिन्दी भाषा और कम्प्यूटर – संतोष गोयल
- कम्प्यूटर के डाटा प्रस्तुतीकरण और भाषा-सिद्धांत – पी.के.शर्मा
- मीडिया : भूमंडलीकरण और समाज – सं. संजय द्विवेदी
- सोशल नेटवर्किंग : नए समय का संवाद – सं. संजय द्विवेदी
- नए जमाने की पत्रकारिता – सौरभ शुक्ल
- पत्रकारिता से मीडिया तक : मनोज कुमार
- जनसंचार से सामाजिक सन्दर्भ – जबरीमल्ल पारख
- जनसंचार और मास कल्चर – जगदीश्वर चतुर्वेदी

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHYSICAL EDUCATION

COURSE: PROGRAM COURSE

SEMESTER – III

COURSE CODE: BPEDSERT-304 (SEC – 1)

Title: Fitness and wellness

Syllabus:

UNIT-1

1. INTRODUCTION-Fitness

1. Meaning and definition of fitness, relation to health, Types of Fitness.
2. Health related physical fitness and its components.
3. Skill related physical fitness and its components.
4. Importance of Physical Fitness.

UNIT-2

1. INTRODUCTION-Wellness

1. Meaning, definition and components of Wellness.
2. Development of wellness.
3. Prevention of illness, Measurement & management of Wellness.
4. Importance of Wellness.

UNIT-3. Fitness and Wellness

3. Wellness – Concept, Significance with specific reference to Positive Lifestyle, Quality of Life

3.1 Relationship between Physical activities and Wellness.

3.2 Ageing: Meaning and Definition; Aging Phenomenon; Role of Exercise in Aging.

3.3. General Principles of Training for Fitness

UNIT-4. Life style and Nutrition.

4.1 Modern Lifestyle and Hypo- kinetic Diseases – Prevention and Management

4.2 First Aid and Emergency Care, Common Injuries and their Management

4.3 Nutrients and their Functions and Daily Requirements

4.4 Nutrition-Basic nutritional information, Determining caloric intake and expenditure,

Meal planning and diets

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHYSICAL EDUCATION

COURSE: PROGRAM COURSE

SEMESTER – IV

COURSE CODE: BPEDSERT-404 (SEC – 2)

Title: Yoga Skills

Syllabus:

PRACTICAL:

1. Standing Position:

1.1. Ardhashandrasana

1.2. Ardhashakrasana

1.3. Padahasthasana

1.4. Brikshasana

1.5. Natarajasana

2. Sitting Position:

2.1. Paschimothanasana

2.2. Gomukhasana

2.3. Ustrasana

2.4. Supta Vajrasana

3. Supine Position:

3.1 Halasana

3.2 Matsyasana

3.3 Setubandhasana

3.4 Naukasana

3.5 Karnapidasana

4. Prone Position:

4.1 Bhujangasana

4.2 Salavasana

4.3 Dhanurasana

4.4 Bhekasana

4.5 Mayurasana

5. Inverted Position:

5.1 Sarvangasana

5.2 Shrisana

5.3 Bhagrasana

5.4 Kopotasana

Kriya:

6.1 Pranayam

6.2 Jalaniti

6.3 bamandhouti

6.4 tratak

Reading References:

Suggested Readings: • Anand O P (2001). Yog Dawra Kaya Kalp. Sewasth Sahitya Perkashan. Kanpur.

- Sarin N (2003) Yoga Dawara Rogon Ka Upchhar.Khel Sahitya Kendra
- Sri Swami Ramas (2001). Breathing. Sadhana Mandir Trust.Rishikesh.
- Swami Ram (2000) Yoga & Married Life Sadhana Mandir Trust. Rishikesh.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHYSICAL EDUCATION

COURSE: PROGRAM COURSE

SEMESTER – V

COURSE CODE: BPEDSERT-504 (SEC – 3)

Title: Test, Measurement and Evaluation in Physical Education

Syllabus:

Unit- I: Introduction

1.1. Concept of test, measurement & Evaluation.

1.2. Criteria of good test.

1.3. Principles of Evaluation.

1.4. Importance of Test, Measurement and Evaluation in Physical Education and Sports.

Unit- II: Measurement of Body Compositions and Somatotype Assessment

2.1. Body Mass Index (BMI) - Concept and method of measurement.

2.2. Body Fat- Concept and method of measurement.

2.3. Lean Body Mass (LBM) - Concept and method of measurement.

2.4. Somatotype- Concept and method of measurement.

Unit- III: Fitness Test

3.1 Kraus-Weber Muscular Strength Test

3.2 AAHPER Health Related Fitness Test

3.3 Queens College Step Test

3.4 J.C.R. Test

Unit- IV: Sports Skill Test

4.1 Lockhart and McPherson Badminton Skill Test

4.2 Johnson Basketball Test Battery

4.3 McDonald Soccer Test

4.4 Brady Volleyball Test

Reading References:

1. Authors Guide. ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications.

2. Collins, R.D., & Hodges P.B. A Comprehensive Guide to Sports Skills Tests and Measurement, Lanham: Scarecrow Press.

3. Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company.

4. Kansal, D.K. (1996), Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications.

5. Krishnamurthy, Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication.

6. Yobu, A, Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: PHYSICAL EDUCATION

COURSE: PROGRAM COURSE

SEMESTER – VI

COURSE CODE: BPEDSERT-604 (SEC – 4)

Title: POSTURAL DEFORMITIES & REMEDIAL MEASURES

Syllabus:

UNIT-I

1.
 1. Meaning and definition of Posture and Postural Deformities
 2. Role of posture in sports and physical education.
 3. Yoga and posture

UNIT-II

2.1 Postural deformities and their causes:

a. Kyphosis

b. Lordosis

c. Scoliosis

d. Bow legs

e. Knock knee

f. Flat foot

2.2. Preventive and remedial measures for postural defects:

a. Psychological and habitual consideration in preventing and correcting postural defects.

b. Corrective exercises for various postural defects. c. Physiotherapist treatment in correcting postural defects

2.3 Role of yoga in preventing and correcting postural defects.

UNIT-III

3.1 Nutrition- Nutritional requirements for daily living.

3.2 Preparation of Balance Diet chart. Health disorders due to deficiency of Protein, Vitamins and Minerals.

3.3 Role of nutrition in preventing postural defects.

DEPARTMENT: MUSIC

COURSE: PROGRAM COURSE

SEMESTER – III

COURSE CODE: BMUSSERT-304 (SEC – 1)

Title: knowledge of basic instruments

Syllabus:

SEC 1 – (Those who have music in their first preference)

Syllabus: Tanpura, Harmonium & Tabla

Ability development course:- Harmonium

Course 1 Sem to 3rd semester syllabus choose an item and perform it with Harmonium

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: MUSIC

COURSE: PROGRAM COURSE

SEMESTER – IV

COURSE CODE: BMUSSERT-404 (SEC – 2)

Title: Ability development course – Tanpura

Syllabus:

(Those who have their first preference music)

Sing a song from any semester with Tanpura.

- a) Basic knowledge of Tanpura
- b) Knowledge of Basic Ragas:- Yaman, Bhupali, Bhairo, Bharabi

c) Bhanjan sing with Tanpura

(SEC student র ক বলম ত্রএই দুট Sem SEC 1 & 2 পড়বেন)

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: MUSIC

COURSE: PROGRAM COURSE

SEMESTER – V

COURSE CODE: BMUSSERT-504 (SEC – 3)

Title: Digital Sound & Audio (Theory and application course)

Syllabus:

1. Basic concept and knowledge of different formats of digital music files like AAC, FLAC,MP3 etc and their digital storage
2. Basic concept and knowledge of music- related digital terminology
3. Operating projectors
4. Conversion of different formats of digital music files like AAC,FLAC,MP3, etc among themselves
5. Music editing in free software like Audacity, Godfather etc
6. Music recording in mobile handsets using different mobile apps.

SIDHO-KANHO-BIRSHA UNIVERSITY SKILL ENHANCEMENT COURSE SYLLABUS

DEPARTMENT: MUSIC

COURSE: PROGRAM COURSE

SEMESTER – VI

COURSE CODE: BMUSSERT-604 (SEC – 4)

Title:

Stage performance

Syllabus:

Stage performance with accompanist
