



Established by Govt. of Arunachal Pradesh vide Act 9 of 2012, the Arunachal University of Studies Act, 2012 Recognized as

per u/s 2(f) of University Grants Commission Act, 1956 NH-52, Namsai, Arunachal Pradesh -792103

DIPLOMA (HEALTH AND SANITARY) – PART TWO

Optional Early Certificate: - N/A

Syllabus:-

Sr. No.	Module Code	Name of Module	Credits	Total Marks
1	DHS-121	Food & Nutrition	5	100
2	DHS-122	Environmental Sanitation and Sanitary Engineering	4	100
3	DHS-123	Entrepreneurship Development	5	100
4	DHS-124	Fundamental of Information Technology	4	100
5	DHS-125	Practical & Project Work	6	100

Module Name: FOOD & NUTRITION

1. Introduction to Nutrition, Health & Disease. Classification and function of food: Body building, Energy yielding, Protective food.
2. Nutrient: Carbohydrates, Proteins, fats, Vitamins, & Minerals, function, source and diatic requirement of each. Nutritive value of different locally available foodstuffs. Cereals, Pulse, Fats & Nuts, Vegetables, Milk, Sugar, Fruits, Eggs, Meat & Fish. Condiments, Spices, Beverages.
3. Balanced Diet: Definition, factors to be considered on planning meals. Nutritional requirements of special groups. Prescription of diet Menu for Hypertensive persons, Nephritis patients, Diabetic patients, Heart patients. Malnutrition: Causes of Malnutrition, Precaution for malnutrition.
4. Preparation & Preservation of food. General principles of refrigeration of food. Preservation of food-household method. Inspection of cooked food / food ingredients household & commercial.
5. Cultural factors on Nutrition.
6. Introduction to Nutrition and its importance.
7. Dietary survey.

Module Name: ENVIRONMENTAL SANITATION AND SANITARY ENGINEERING

- 1. Water:** Sources of water, various uses of water and its need. Physical, chemical and biological standard for potable water. Sources and nature of pollution of water. Process of purification of water in large scale and small scale. Process of disinfections of water in large and small scale, provisions for sanitary wells and tube wells, plumbing system and its maintenance. Water supply and storage system at the community and domestic level.
- 2. Air:** Composition of air, sources of air pollution and nature of pollutants, estimation of level of pollutants. Process air purification and disinfections. Greenhouse effect, types of ventilation, thermal comfort, air temperature, humidity, radiation, evaporation and their measurements.
- 3. Solid Waste Disposal:** Classification of solid waste in the community. Polluting effects of different types of solid waste, system of collection of solid waste from the houses and street, sanitary transportation of solid waste, sanitary process of disposal of solid waste such as composting, sanitary land filling, incineration.
- 4. Liquid Waste Disposal:** Classification of liquid waste, Physical, Chemical and bacteriological quality of different types of liquid waste. Health hazard related to accumulation of liquid waste or in sanitary drainage system. Construction and maintenance of sanitary sewerage system. Use of different types of traps, pollution of water sources from sewerage and its disinfection.
- 5. Night Soil Disposal:** Prevalent practices of defecation and its effect on community health, different types of latrines in use. Principles of construction of sanitary latrines and their use, especially berg hole, dug well, RCA and septic tank latrine. Common causes of non-use of latrines and process of disinfections of the latrines. Sanitation of the trenching ground and its maintenance. Effect of sewage on the eco-system especially in the aquatic life process. Methods and process of treatment of sewage and various types of treatment plants. Methods of disinfections of sewage. Sanitary practices of sewage farming.
- 6. Burial and Cremation Ground and Mass Casualty Disposal:** Traditional practices of disposal of dead bodies of various sects. Health hazards associated with the Un-sanitary disposal of dead bodies. Enforcement of legal provisions for disposal of dead bodies and maintenance of their records.
- 7. Soil Sanitation:** Types of soil, water retention properties of different types of soil, natural drainage of soil, sources of pollution of soil, health hazards associated with soil, pollution, prevention of soil pollution and treatment of soil. Study on insecticides, pesticides and disinfections. Sterilisation & disinfections of different articles. Various spraying equipment's. Uses of rodenticides & larvaecidals.
- 8. Housing:** Requisites of satisfactory and safe housing, sanitary standards for construction of houses and provision of utility services. Assessment of overcrowding.
- 9. Sanitation Measures in Fairs, Festivals and Natural calamities –Mass Casualty Disposal:** Sanitary problems associated with human gatherings and temporary settlements. Sanitary problems associated with natural calamities, common health problems in unsanitary state of fair, festival, human gathering, planning and anticipatory extra sanitary measures in fairs, festivals and temporary settlements and natural calamities. Alternate emergency sanitary provisions to prevent sanitation

crisis for food, housing, water supply, lighting, disposal of community waste and prevention of outbreak of epidemics.

Module Name: ENTREPRENEURSHIP DEVELOPMENT

1. ENTREPRENEURIAL BEHAVIOUR

- Programme Clarity-Sharing Expectations and Unfreezing
- Data Collection about self
- Introduction to Need System and Motivational Pattern of Entrepreneur
- Risk Taking Behavior
- Analyzing Motive Strength
- Personal Efficacy
- Conceptualizing Entrepreneurial Values
- Achievement Planning
- Tolerance to ambiguities and commitment to entrepreneurial goal
- Leadership and Influencing ability entrepreneurial confidence
- Entrepreneurial goal setting

2. ENTERPRISE LAUNCHING

- Environmental Analysis and Market Study
- Project Selection/Formulation and Presentation
- Project Appraisal
- Financial Analysis
- Forms of Enterprise
- Foreign Collaboration

3. ENTERPRISE MANAGEMENT

- Basic Management Concepts
- Production Management
- Materials Management
- Financial Management Including Costing and Accounting Practices
- Marketing Management
- Personnel Management
- Problem Solving and Innovation
- Business Laws

Module Name: FUNDAMENTAL OF INFORMATION TECHNOLOGY

- 1. Information Technology (IT) & Society:** Information, information processing & Information Technology. Evolution of IT. IT business and entrepreneurship, education, communication, entertainment, healthcare, agriculture, and its contribution to India's development. Government Initiatives: Particular initiatives – AADHAR, E-Panchayat, National Knowledge Network.
- 2. Information Handling:** Devices assisting IT with special focus on Computers and Mobiles. Components of computer: Hardware and Software. Connecting and Configuring External Devices – like Printer, scanner, projectors etc. Hardware Connectivity Options – Ports, Wi-Fi, Bluetooth etc.
- 3. Document Preparation & Presentation:** Document preparation and presentations using tables, pictures, graphs, animations, audio and video contents. Use of shortcut keys. Ways to make effective presentations. Use of references and citations. Document format and their conversion.
- 4. Internet, Security & Legal Aspects:** WWW, Basics of webpage, Social network sites. Effective Searching. Popular Online Applications - e-ticketing, e-payment. Email & internet Forums. Issues – virus, malware, spam, phishing, copyright, plagiarism, cybercrime; Protective measures: password, https; Cyber Laws – IT Act. Open source philosophy. Licensing and domain of open source technology. Open source software development. Commonly used open source technologies.
- 5. Library and Information Resource Centers:** E-Information Resources: Concept and types (e-books, e-journals, on-line databases: subscribed, free and open access databases). Institutional Repository: concepts, components. Library Systems – Introduction to library, Library and Information sciences (User and reference services , Current Awareness Service, Selective Dissemination of Information, Online Information Bulletin Board), Call Number (Class Number, Book Number, Location Number). Arrangement of Information Resources: Call Number (Class Number, Book Number, Location Number), On-line Public Access Catalogue (Data Fields and elements, search options, Reservation facilities). Bibliographic Standards for Citation – Modern Language Association Style, American Psychology Association style. Article Reference, Book Reference, Conference Reference, Web Resource Reference.

Module Name: PRACTICAL & PROJECT WORK