

SRI VENKATESWARA UNIVERSITY
B.VOC DEGREE INFOOD PROCESSING TECHNOLOGY
III - SEMESTER
Under CBCS W.E.F.2021-22

Sl. No	Skill/ Gen. Edu	Courses	Title of the Paper/course And code	Credits Per Courses	Hours/ Weeks	Total Hours/ weeks	Marks		
							Internal	External	Total
1	General Education Component Gen.Edu	Language	General English	3	3	45	25	75	100
2		Life skills	Health and Hygiene	2	2	30	-	50	50
			Environmental Education	2	2	30	-	50	50
3		Skill Dev Courses	Environmenta(Audit	2	2	30	-	50	50
4	Domain Skills component	Core-1	Bakery and confectionery	4	4	60	25	75	100
5		Practical-I	Bakery and confectionery Practical	2	3	30	-	50	50
6		Core-II	Cereals pulses oil and seed processing	4	4	60	25	50	100
7		Practical-II	Cereals pulses and oil seed processing Practical	2	2	30	-	50	50
8		Core-III	Technology of Meat,Poultry and Sea foods	4	4	60	25	75	100
		Practical-III	Technology of Meat,Poultry and Sea foods Practical	2	3	30	-	50	50
9		Industrial Internship	Industrial Training for 30 days	3	36	144	-	50	50
Total Credits				30	Total Marks				750

SRI VENKATESWARA UNIVERSITY
B.A. / B.Com. / B.Sc. / B.Voc. DEGREE COURSE IN ENGLISH
SEMESTER-III
(Revised Syllabus Under CBCS W.E.F. 2021-22)
ENGLISH PRAXIS COURSE - III
A COURSE IN CONVERSATIONAL SKILLS

I. UNIT		
Speech Skills	: 1. Tryst with Destiny : 2. Greetings : 3. Introductions	Jawaharlal Nehru
II. UNIT		
Speech Interview Skills	: 1. Yes, We Can : 2. A Leader Should Know How to Manage Failure : 3. Requests	Barack Obama Dr.A.P.J.Abdul Kalam/ India Knowledge at Wharton
III. UNIT		
Interview Skills	: 1. Nelson Mandela's Interview : 2. Asking and Giving Information : 3. Agreeing and Disagreeing	With Larry King
IV. UNIT		
Interview Skills	: 1. JRD Tata's Interview : 2. Dialogue Building : 3. Giving Instructions/Directions	With T.N.Ninan
V. UNIT		
1. Speech Skills	: 1. You've Got to Find What You Love : 2. Debates : 3. Descriptions : 4. Role Play	Steve Jobs

Approved by BOS (PASS)

w.e.f. 2020-2021

M. S. S. S. S.
31/9/2020
Chairperson
BOS in English
(PASS)

SRI VENKATESWARA UNIVERSITY
B.A./B.Com./B.Sc. B.Voc./DEGREE EXAMINATION
III SEMESTER
(Revised Syllabus under CBCS w.e.f. 2021-22)
ENGLISH PRAXIS COURSE – III
A COURSE IN CONVERSATIONAL SKILLS
MODEL QUESTION PAPER

Time: 3 Hours

Max. Marks: 75

- I Answer any THREE of the following questions. (3x5=15)
- a. What according to Pandit Nehru, the tryst with destiny that Indian made?
 - b. How do you greet people in formal, informal and semi-formal ways?
 - c. Who according to the author is "The greatest man of our generation". What is his ambition?
 - d. Imagine that you are working at S.V. Degree College as a Lecturer. How do you introduce your friend to the Principal ?
 - e. How do you introduce yourself to your Lecturer on the first day of your college?
- II Answer any THREE of the following questions. (3x5=15)
- a. Summarize Obama's speech "Yes, We can".
 - b. What did A.P.J. Abdul Kalam say about success?
 - c. Write a critical analysis of Obama's Victory Speech.
 - d. How did A.P.J. Abdul Kalam handle failure?
 - e. Imagine that you have to pay the college tuition fee. How do you make a request with your parents to pay your tuition fee?

III Answer any THREE of the following questions. (3x5=15)

- a. Summarize Nelson Mandela's Interview with Larry King.
- b. Imagine that you are leaving for Mumbai. You seek information on the arrival of the train.
- c. Write a note on Nelson Mandela.
- d. How do you give information when a stranger approaches you to help him for the admission in your college?
- e. Give two phrases for agreeing and two phrases for disagreeing.

IV Answer any THREE of the following questions. (3x5=15)

- a. Is Mr. Ratan Tata an angry person? What has been the greatest frustration of him?
- b. Construct a dialogue between two friends about their career.
- c. What is the opinion of Mr. Ratan Tata on Reliance Industries?
- d. Write instructions to prepare coffee.
- e. How do you direct when your junior requests you to show the way to Tirumala bus stand?

V Answer any THREE of the following questions. (3x5=15)

- a. What was the message of you've got to find what you love?
- b. What is a debate? How does it help students?
- c. What did Steve Jobs love to do?
- d. Describe your native place.
- e. What are the benefits of Role plays?



(Dr M. Sreelatha),
Chairperson,
BOS in English (PASS).

SRI VENKATESWARA UNIVERSITY
B.VoC. Degree course in Food Processing Technology
Life Skill Course
HEALTH & HYGIENE
III-SEMESTER-W.E.F.2021-22

(Total teaching hours – 30 Hrs. @ 02 Hrs. per Week)

The course is designed to provide a complete guidance on health and hygiene systems, guidelines for implementing and role of government and public in maintaining a healthy life. At the end of the course the student shall be able to understand –

- the importance of health and hygiene in life
- the importance of nutrition for a healthy life
- different health care programmes of India
- basic concept of health impact assessment as a means of assessing the policies, plans and projects using quantitative and qualitative techniques
- importance of community and personal health & hygiene measures
- Importance of food, social tenets, mental condition, physical activity on health

Learning Objectives:

- To provide knowledge on different health indicators and types of hygiene methods
- To impart knowledge on different health care programmes taken up by India
- To make student understand the latest concepts of health such as HIA, EIA, SIA and SEA
- To enable student with disaster mitigation strategies
- To create awareness on community health and hygiene
- To enrich knowledge on communicable and non-communicable diseases and their control
- To aware the student on the importance of food, social strategies, mental status and physical activities on health
- To introduce different community-based mobile apps on health to student and thereby to the community

Learning / Course Outcomes: On completion of this course, the students will be able to understand -

- What is a healthy diet
- How can we use available information to optimize our diet?
- Can nutrition be used for a healthy life?
- Is there a one-size-fits-all “good” diet or should we individualize our dietary goals?
- Disaster management and responsiveness of public in pandemic and epidemic diseases
- Assess the impact of policies on health and hygiene Health measures to consider while travelling
- Awareness in public through digital media viz., mobile apps

Life Skill Course
HEALTH & HYGIENE
III-SEMESTER-W.E.F.2021-22

Unit I: Basics of Nutrition

10 Hrs.

1. Nutrition – definition, importance, Good nutrition and mal nutrition; Balanced Diet:
Basics of Meal Planning
2. Carbohydrates –functions, dietary sources, effects of deficiency.
3. Lipids –functions, dietary sources, effects of deficiency.
4. Proteins –functions, dietary sources, effects of deficiency.
5. Brief account of Vitamins- functions, food sources, effects of deficiency,
6. Macro and micro minerals –functions, effects of deficiency; food sources of Calcium, Potassium and Sodium; food sources of Iron, Iodine and Zinc
7. Importance of water– functions, sources, requirement and effects of deficiency.

Unit II: Health

10 Hrs.

8. Health - Determinants of health, Key Health Indicators, Environment health & Public health; Health-Education: Principles and Strategies
9. Health Policy & Health Organizations: Health Indicators and National Health Policy of Govt. of India-2017; Functioning of various nutrition and health organizations in India viz., NIN (National Institution of Nutrition), FNB (Food and Nutrition Board), ICMR (Indian Council of Medical Research), IDA (Indian Dietetics Association), WHO-India, UNICEF-India
10. National Health Mission: National Rural Health Mission (NRHM) Framework, National Urban Health Mission (NUHM) Framework
11. Women & Child Health Care Schemes: Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+); Janani Shishu Suraksha Karyakaram (JSSK); Rashtriya Bal Swasthya Karyakram(RBSK); India Newborn Action Plan (INAP); Adolescent Health- Rashtriya Kishor Swasthya Karyakram (RKSK)
12. Disaster Management – Containment, Control and Prevention of Epidemics and Pandemics – Acts, Guidelines and Role of Government and Public

Unit III: Hygiene

10 Hrs.

13. Hygiene – Definition; Personal, Community, Medical and Culinary hygiene; WASH (WAter, Sanitation and Hygiene) programme
14. Rural Community Health: Village health sanitation & Nutritional committee (Roles & Responsibilities); About Accredited Social Health Activist (ASHA); Village Health Nutrition Day, Rogi Kalyan Samitis
15. Community & Personal Hygiene: Environmental Sanitation and Sanitation in Public places
16. Public Awareness through Digital Media - An Introduction to Mobile Apps of Government of India: NHP, Swasth Bharat, No More Tension, Pradhan Mantri Surakshit Mantritva Abhiyan (PM Suman Yojana), My Hospital (Mera aspataal), India fights Dengue, JSK Helpline, Ayushman Bhava, Arogya Setu, Covid 19AP

REFERENCES

- **Bamji, M.S., K. Krishnaswamy & G.N.V. Brahmam (2009)** *Textbook of Human Nutrition(3rd edition)* Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi
- **Swaminathan (1995)***Food & Nutrition*(Vol I, Second Edition) The Bangalore Printing &Publishing Co Ltd., , Bangalore
- **Vijaya Khader (2000)***Food, nutrition & health*, Kalyan Publishers, New Delhi
- **Srilakshmi, B., (2010)***Food Science, (5th Edition)* New Age International Ltd., New Delhi
- Weblinks: <https://nhm.gov.in/>
 - National Rural Health Scheme:
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=969&lid=49>
 - National Urban Health Scheme:
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=970&lid=137>
 - Village health sanitation & Nutritional committee
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=149&lid=225>
 - About Accredited Social Health Activist (ASHA)
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=150&lid=226>
 - Village Health Nutrition Day
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=152&lid=228>

- Rogi Kalyan Samitis
<https://nhm.gov.in/index1.php?lang=1&level=1&sublinkid=153&lid=229>
- Health Impact Assessment - <https://www.who.int/hia/about/faq/en/>
(suggested information only)
http://www.euro.who.int/_data/assets/pdf_file/0011/261929/Health-in-Impact-Assessments-final-version.pdf?ua=1
- WASH <https://www.unicef.org/wash/> and
https://www.unicef.org/wash/files/UNICEF_Strategy_for_WASH_2016_2030.PDF
- Healthy Living <https://www.nhp.gov.in/healthylivingViewall>

Note: The above web links are from MoHFW, GoI. Teachers can prepare their notes from other resources also.

SRI VENKATESWARA UNIVERSITY
B.VoC. Degree course in Food Processing Technology
Revised Syllabus under CBCS Pattern
(w.e.f. 2021-22 Academic Year)

LIFESKILLCOURSE

III-SEMESTER-

ENVIRONMENTAL EDUCATION

(Total hours of Teaching – 30 Hrs. @ 02 Hrs. per Week)

Course objective: A Generic Course intended to create awareness that the life of human beings is an integral part of environment and to inculcate the skills required to protect environment from all sides.

Learning outcomes: On completion of this course the students will be able to

1. Understand the nature, components of an ecosystem and that humans are an integral part of nature.
2. Realize the importance of environment, the goods and services of a healthy biodiversity, dependence of humans on environment.
3. Evaluate the ways and ill effects of destruction of environment, population explosion on ecosystems and global problems consequent to anthropogenic activities.
4. Discuss the laws/ acts made by government to prevent pollution, to protect biodiversity and environment as a whole.
5. Acquaint with international agreements and national movements, and realize citizen's role in protecting environment and nature.

Unit 1: Environment and Natural Resources

06 Hrs.

1. Multidisciplinary nature of environmental education; scope and importance.
2. Man as an integral product and part of the Nature.
3. A brief account of land, forest and water resources in India and their importance.

4. Biodiversity : Definition; importance of Biodiversity - ecological,consumptive, productive, social, ethical and moral, aesthetic, and option value.
5. Levels of Biodiversity: genetic, species and ecosystem diversity.

Unit-2: Environmental degradation and impacts

10Hrs

1. Human population growth and its impacts on environment; land use change, land degradation, soil erosion and desertification.
2. Use and over-exploitation of surface and ground water, construction of dams, floods, conflicts over water (within India).
3. Deforestation: Causes and effects due to expansion of agriculture, firewood, mining, forest fires and building of new habitats.
4. Non-renewable energy resources, their utilization and influences.
5. A brief account of air, water, soil and noise pollutions; Biological, industrial and solid wastes in urban areas. Human health and economic risks.
6. Green house effect - global warming; ocean acidification, ozone layer depletion, acid rains and impacts on human communities and agriculture.
7. Threats to biodiversity: Natural calamities, habitat destruction and fragmentation, over exploitation, hunting and poaching, introduction of exotic species, pollution, predator and pest control.

Unit 3: Conservation of Environment

10 Hrs

1. Concept of sustainability and sustainable development with judicious use of land, water and forest resources; afforestation.
2. Control measures for various types of pollution; use of renewable and alternate sources of energy.
3. Solid waste management: Control measures of urban and industrial waste.
4. Conservation of biodiversity: In-situ and ex-situ conservation of biodiversity.
5. Environment Laws: Environment Protection Act; Act; Wildlife Protection Act; Forest Conservation Act.
6. International agreements: Montreal and Kyoto protocols; Environmental movements: Bishnois of Rajasthan, Chipko, Silent valley.

Suggested activities to learner: (4 hours)

1. Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc
2. Visit to a local polluted site-Urban/Rural/Industrial/Agricultural site.
3. Study of common plants, insects, birds and basic principles of identification.
4. Study of simple ecosystems-forest, tank, pond, lake, mangroves etc.
5. Case study of a Forest ecosystem or a pond ecosystem.

Suggested text book :

- ErachBarucha (2004) *Text book of Environmental Studies for Undergraduate courses* (Prepared for University Grants Commission) Universities Press.
- PurnimaSmarath (2018) *Environmental studies* Kalyani Publishers, Ludhiana

Reference books :

- Odum, E.P., Odum, H.T. & Andrews, J. (1971) *Fundamentals of Ecology*. Philadelphia: Saunders.
- Pepper, I.L., Gerba, C.P. & Brusseau, M.L. (2011). *Environmental and Pollution Science*. Academic Press.
- Raven, P.H., Hassenzahl, D.M. & Berg, L.R. (2012) *Environment. 8th edition*. John Wiley & Sons.
- Singh, J.S., Singh, S.P. and Gupta, S.R. (2014) *Ecology, Environmental Science and Conservation*. S. Chand Publishing, New Delhi.
- Sengupta, R. (2003) *Ecology and economics: An approach to sustainable development*. OUP.
- Wilson, E. O. (2006) *The Creation: An appeal to save life on earth*. New York: Norton.
- Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll (2006) *Principles of Conservation Biology*. Sunderland: Sinauer Associates,

SRI VENKATESWARA UNIVERSITY
B.VoC. Degree course in Food Processing Technology

(w.e.f.2021-22)

Model question paper for theory examination at the end of IV
Semester Life Skill Course / ENVIRONMENTAL SCIENCE

Max. Time : $1\frac{1}{2}$ Hrs. 90 Mins

Max. Marks: 50

Max. Marks: 50 Time: 1 1/2 hrs (90 Minutes)

Section -A

(Total: 4x5=20 Marks)

(Answer any **four** questions. Each answer carries **5** marks)

(Total 8 questions. At least 1 question should be given from each Unit)

1. Explain the scope and importance of Environmental Education.
2. Explain the term Biodiversity and discuss its importance.
3. Global warming impact.
4. Renewable energy and its applications.
5. Air pollution in brief.
6. Environmental protection act.
7. Explain the In-Site and Ex-Site conservation of Biodiversity.
8. Biological, Industrial & solid waste in urban areas.

Section- B

(Total: 3x10 = 30 Marks)

(Answer any **three** questions. Each answer carries **10** marks)

(Total five questions. At least 1 question should be given from each Unit)

9. Write about different types of Biodiversity values
10. Discuss the population explosion & its impact on environment.
11. Ozone layer depletion, Acid rains and impact on human communities and agriculture.
12. Write about judicious use of land, water and forest resources.
13. Explain international agreements & Environmental movements.

Note: Questions may be set in such a way to test the outcomes instead of recalling of information.

Verified
Chauhan
(M. VANI)
BOS chairman zoology UG
HEAD
DEPARTMENT OF ZOOLOGY
B. V. ARTS COLLEGE
TIRUPATI

SRI VENKATESWARA UNIVERSITY
B.VoC. Degree course in Food Processing Technology

III-SEMESTER
Under CBCS w.e.f. 2021-22

SKILL DEVELOPMENT COURSES
SCIENCE STREAM

Syllabus of

ENVIRONMENT AUDIT

Total 30 hrs (02h/wk), 02 Credits & Max 50 Marks

Learning Outcomes:

By successful completion of the course, students will be able to;

1. *Understand the basic concepts Environmental health*
2. *Learn and identify the industrial pollution*
3. *Explain the highlights in the regulatory aspects of Environmental law and policy*
4. *Understand the various phases of Environmental Audit*

UNIT – I

Industrial Pollution and its effects

06h

Climate – Weather and Air Pollution – Classification of water and water bodies – Water Quality Parameters – Water Pollution – Sources – Classification, nature and Toxicology of water pollutants. - Soil parameters – Soil pollution and impacts – Soil conservation

UNIT - II

Environmental Law & Policy:

09h

Highlights of the Acts, Institutional arrangements for: (1) The Water (Prevention & Control of Pollution) Act, 1974 amended in 1988; (2) The Air (Prevention and Control of Pollution) Act, 1981 amended in 1987; (3) The Water (Prevention and Control of Pollution) Cess Act, 1977 amended in 1991; (4) The Environment (Protection) Act, 1986; (5) The Public Liability Insurance Act, 1991; – Indian Policy Statement for abatement of Pollution, 1992.

UNIT - III

Environmental Audit - Scope & Requisites:

10h

Environmental Audit: Definition; Objectives; Scope, Coverage - GOI Notification on Environmental Audit - Benefits to Industry. Reporting Environmental Audit Findings - Importance of Environmental Audit Report to industry, public and the governments.

Co-curricular Activities Suggested:

05h

1. Visit to understand Institutional arrangements and functioning of Pollution Control Boards.
2. Visiting different Ecosystems
3. **Soil analysis:** Determination of soil type and texture, pH, Soil Moisture, Nitrogen, Potassium and Phosphorous.
4. **Water analysis:** Determination of pH, Dissolved solids and suspended solids, Dissolved Oxygen, COD, BOD.
5. Assignments, Group discussion, Quiz etc.

Reference books and websites:

1. Environmental Education in India by K.R. Gupta
2. Environmental Legislation in India by K.R. Gupta
3. <https://parivesh.nic.in/>
4. <https://www.cpcb.nic.in/>
5. <https://www.free-ebooks.net/environmental-studies-academic>

SRI VENKATESWARA UNIVERSITY
B.VoC DEGREE COURSE IN FOOD PROCESSING TECHNOLOGY
SKILL DEVELOPMENT COURSE
SCIENCE STREAM
III-SEMESTER
MODEL QUESTION PAPER
UNDER CBCS W.E.F.2021-22 *Time: 1½ hrs (90 Minutes)*
ENVIRONMENT AUDIT

Max. Marks: 50

SECTION- A

(4x5M=20 Marks)

*Answer any four questions. Each answer carries 5 marks
(At least 1 question should be given from each Unit)*

1. Write any three global environmental problems?
2. Write a short note on soil pollution and its impact?
3. What is BOD and explain its significance in determining the quality of water?
4. What are the objectives of the environmental Acts and the Institutional arrangements
5. Write a brief note on the environmental laws that governs the water pollution
6. Write a brief note on the functioning of central and state pollution control boards?
7. What are the objectives of environmental audit
8. What is GoI notification on environmental audit?

SECTION B

(3x10M = 30 Marks)

*Answer any three questions. Each answer carries 10 marks
(At least 1 question should be given from each Unit)*

1. What is water pollution and explain in detail about the water pollutants?
2. What is air pollution and explain in detail about the air pollutants?
3. Write an essay on the Water (Prevention & Control of Pollution) Act, 1974 amended in 1988
4. Write an essay on the Air (Prevention and Control of Pollution) Act, 1981 amended in 1987
5. What is environmental audit and explain the various stages involved in it and the benefits of environmental audit to the industry?

SRI VENKATESWARA UNIVERSITY: TIRUPATI
B.VOC. DEGREE COURSE IN FOOD PROCESSING TECHNOLOGY
SECOND YEAR – THIRD SEMESTER
Under CBCS W.E.F. 2020-21
SKILL COMPONENT

Core Paper-I: BAKERY AND CONFECTIONERY

Total Credits: 04

Total hours: 60

UNIT-I INTRODUCTION TO BAKERY

12hrs

Growth status and scope of National/International bakery industry.

Importance of bakery in food industry.

Principles and factors influencing bakery.

UNIT-II INTRODUCTION TO CONFECTIONERY

12hrs

Growth status and scope of National/International confectionary industry.

Importance of confectionery in food industry.

Principles and factors influencing confectionary.

UNIT-III BAKERY PROCESSING

12hrs

Essential ingredients: Flours, Types of flours, Eggs, Butter, Margarine, Sweeteners.

Leavening agents- Yeast, Sodium bicarbonate, Flavouring ingredients- Spices, Essence, Zest.

Tests to evaluate flour quality.

Preparation methods of Bread, Cakes, Cookies. Characteristics of finished bakery products.

UNIT-IV CONFECTIONERY PROCESSING

12hrs

Role of ingredients and their functions- Sweeteners, Emulsifiers, Dairy ingredients, flavours, cocoa products.

Sugar confectionery- Definition, Functional properties of sugar. Classification- Hard and soft boiled sugar confectionery: Fondant, Fudge, Caramel, Toffee.

UNIT-V TOOLS AND MACHINERY

12hrs

Tools and machinery used in bakery and confectionery- Construction and working of various equipment's like Mixers, dough dividers, beaters, moulder and sheeter, ovens and their types, cooling chamber, sealing and packaging machines, Rolling and cutting machines.

SKILL PAPER I (Practical-I)
BAKERY AND CONFECTIONERY

Credits: 02

Total hours: 30

1. Sugar cookery- caramel
2. Preparation of biscuits
3. Preparation of chocolates
4. Preparation of bread
5. Preparation of pizza
6. Preparation of doughnut
7. Preparation of cookies
8. Preparation of cup cakes
9. Preparation of cake.
10. Visit to production unit of a bakery.

SRI VENKATESWARA UNIVERSITY: TIRUPATI
B.VOC. DEGREE COURSE IN FOOD PROCESSING TECHNOLOGY
SECOND YEAR – THIRD SEMESTER

Under CBCS W.E.F. 2020-21

SKILL COMPONENT

Core Paper-II: CEREALS PULSES AND OIL SEED PROCESSING

Total Credits: 04

Total hours: 60

UNIT-I INTRODUCTION OF CEREALS, PULSES AND OIL SEEDS 12hrs

Structure, Composition, Classification of grains, Nutritive value and Quality characteristics of cereals, pulses and oil seeds.

UNIT-II CEREAL PROCESSING 12hrs

Paddy Dehusking Processes. Rice Mill, Modern Rice Mills – Their Components - Pre Cleaners, Rubber roll Shellers, Paddy Separators, Polishers - Cone polishers, Glazing. Wheat milling process – Cleaning, conditioning/hydrothermal treatment, milling-break roll and reduction roll.

UNIT-III PULSE PROCESSING 12hrs

Types of Pulses and Legumes, Traditional methods, Wet and Dry milling methods, Changes during cooking, Factors affecting cooking time, Germination, Changes during germination. Effect of processing steps on germination.

UNIT-IV OIL SEED PROCESSING 12hrs

Oil seed – Sources, Types and Processing production in India, Extraction of oil and Refining. By product utilization- Defatted flour, Protein concentrate and isolates.

UNIT-V PRODUCTS FROM CEREALS PULSES AND OIL SEEDS 12hrs

Different by products from processing of cereals-Rice bran oil and uses of rice bran in food industry and pulses, Their composition and nutritional value, Method of processing.

SKILL PAPER II (Practical-I)

CEREALS AND PULSES OIL SEED PROCESSING

Credits: 02

Total hours: 30

1. Grain structure- Rice, Wheat
2. Pulse structure- Dhals
3. Nuts and oil seeds- Ground nuts and Gingelly seeds.
4. Estimation of gluten content of flour
5. Soaking and germination- Cereals, Pulses.
6. Popping- Jowar, Corn
7. Prepare oilseeds value added product
8. Flour mill visit
9. Oil mill visit
10. Market survey of cereal and pulse products.

SRI VENKATESWARA UNIVERSITY: TIRUPATI
B.VOC. DEGREE COURSE IN FOOD PROCESSING TECHNOLOGY
SECOND YEAR – THIRD SEMESTER
Under CBCS W.E.F. 2020-21
SKILL COMPONENT
Core Paper-III: TECHNOLOGY OF MEAT, POULTRY AND SEA FOODS

Total Credits: 04

Total hours: 60

UNIT-I INTRODUCTION TO MEAT INDUSTRY

12hrs

Development of meat and poultry industries in India. Classification and Quality of Meat, Nutritive value of meat, wholesale and retail cuts.

UNIT-II MEAT PROCESSING

12hrs

Structure, Composition, and Post-mortem changes in meat - Rigor mortis, Tenderization of meat, Ageing of meat.

Preservation of meat -Refrigeration and freezing, Thermal processing - canning of meat, dehydration, meat curing.

UNIT-III POULTRY PROCESSING

12hrs

Egg- Structure, Composition and Nutritive value, egg proteins, functional properties of eggs, internal quality of eggs and its preservation.

Poultry- Classification, Composition and Nutritive value, Processing and its preservation.

UNIT-IV FISH AND SEA FOOD PROCESSING

12hrs

Types, Composition, Classification, Processing

Methods of preservation of fish and prawns -Chilling, Freezing, Curing, Drying, Salting - salting methods: Brining, Pickling, Curing and Canning of fish.

UNIT-V PRODUCTS FROM FISH, MEAT AND EGG

12hrs

Fishery products: Fish protein concentrates (FPC), Fish protein extracts (FPE). Meat products: Sausages - processing, RTE meat products. Egg products– Egg powder.

By-products from processing units and its utilization

SKILL PAPER III (Practical-I)

TECHNOLOGY OF MEAT, POULTRY AND SEA FOODS

Credits: 02

Total hours: 30

1. Preparation of meat products
2. Preservation techniques of meat and poultry products- Pickling, Drying
3. Determination of quality of eggs
4. Egg cookery- poached eggs, foam
5. Preservation techniques of sea food products
6. Preparation of fish product
7. Identification of preservatives used in meat processed products- nitrates and nitrites
8. Visit to meat industry
9. Visit to cold storage
10. Market survey of meat processed products