B.VOC (FOOD PROCESSING) 1st YEAR

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**:** Computer Science

NAME OF THE PROGRAMME: B.VOC Food Processing

NAME OF COURSE: Introduction to Computer

NAME OF FACULTY: Assistant Professor :Mandeep Singh

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Explain overview of computer and other components of computer.	Quizzes/Objective Test/Assignments/Exams
CO-2	Demonstrate basic of computer hardware and software.	Computer simulation/ Lab work
CO-3	Generate text documents with formatting features of MS Word.	Lab work/Home Assignments
CO-4	Demonstrate working knowledge of internet and multimedia.	Lab work/Reports
CO-5	Illustrate the basic concepts of Windows Operating System.	Lab work/Tests/Quizzes
CO-6	Work on Spreadsheets and make presentation on MS Power Point.	Lab work/Class Test/Exams

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Documentation in Food Processing

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Define and describe major terminologies related to documentation in food industry.**	**University exams, MST, Class tests**
CO-2	**Write well-structured reports, proposals to facilitate the different industrial activities.**	**Viva, Class tests, assignments**
CO-3	**Classify and explain programs needed to inspect raw materials in different food industries.**	**Practicals, Viva**
CO-4	**Explain various types of packaging materials used in food industry.**	**Practical, Viva, Class tests**
CO-5	**Analyze and evaluate the hazards in food industry to improve the efficiency of industry.**	**Viva, class tests**

CO-6	**Describe different requirements essential for the labelling of packaged food products.**	**Viva, University exams, MST, class tests, Projects**

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Documentation in Food Processing - Practical

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Analyze and evaluate the problems in food industries using spreadsheets and word.**	**Lab work, viva**
CO-2	**Compare and contrast the data in food industry using statistical package.**	**Lab work, viva**
CO-3	**Explain and demonstrate the use of ERP to organize data from various departments of a food industry.**	**Lab work, viva**
CO-4	**Accumulate the information about different production processes and machineries used in food industry by industrial visits.**	**Industrial visit, viva**
CO-5	**Develop skills to produce reports related to food industry.**	**Presentation**

CO-6	**Identify and practise the labelling requirements for packaged food materials.**	**Projects, viva**

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: DAIRY PROCESSING (B.VFP- 115)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Describe the chemical composition of milk, identify the appropriate content of individual types present, and describe physicochemical characteristics of the main components.	Class tests, class assignment, presentations and Seminars.
CO-2	Analyze the types of processed milk (Pasteurized milk, toned milk, flavoured and fermented milk, infant milk, milk powder)	Class tests, class assignment, Presentations and Seminars.
CO-3	Explain how dairy products (such as lassi, flavoured drink, kalakand, ice-cream, butter, ghee, fermented milk, condensed milk and cheese) are made and the key functions of the processing steps involved.	Class tests, class assignment, presentations and Seminars.
CO-4	Design, execute and record the results of cream separator, form fill seal machine, homogenizer, pasteurizer, sterilizer, plate heat exchanger, drum drier, evaporators, ice-cream freezer and Gerber centrifuge	Computer simulations
CO-5	Knowledge of the chemistry of dairy components(proteins, fats, lactose, salts) to evaluate the impact of processing conditions(e.g. heat, pH) on milk and dairy products.	class assignments
CO-6	Conduct independent library research on current topics of importance to the dairy industry, frame the selections based on chemical and physical properties of milk and put the discussion in the context of implications of the dairy industry.	Group discussions and group assignments.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: DAIRY PROCESSING (PRACTICAL)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Preparation of Dahi and Paneer.	Lab work
CO-2	Demonstration on form fill seal machine.	Lab work, Viva
CO-3	Analyze quality of butter and ghee. Detection of various adulterants in milk.	Lab work
CO-4	Discuss a chart of physico- chemical properties and microbiological standards of milk and milk products.	Presentation, Discussion
CO-5	Calculate the sterility of milk by turbidity test and Phosphotase test to check pasteurization of milk.	Lab work
CO-6	Explain various parts of cream separator	Viva, Discussion

: AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: DAIRY PROCESSING EQUIPMENT OPERATOR QUALIFICATION PACK: FIC/Q2002 Sector Skill Council: Food Industry Capacity & Skill Initiative (FICSI) NSQF LEVEL: 4

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Calculate the process time for effective utilization of machineries and manpower	Lab work, Viva, Industrial visit
CO-2	Perform documentation and record keeping related to production of dairy products,	Lab work, Viva
CO-3	Demonstrate preparation of work area for producing dairy products,	Lab work, industrial visit
CO-4	Apply food safety and hygiene practices at work.	Industrial visit, viva
CO-5	Conduct minor repairs and faults in process machineries	Industrial visit, industrial visit
CO-6	Analyze the quality of raw material by assessing its physical parameters	Viva, Discussion, industrial visit

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.voc Food processing

NAME OF COURSE: Basics of food processing

NAME OF FACULTY: Jaspreet kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Enlist the basics and requirements for processing of food	**Exams, Class tests, class assignment, presentations and Seminars.**
CO-2	Identify different kinds of food processes such as milling, cooking, boiling, frying, baking, fermentation etc.	**Exams, Class tests, class assignment,**
CO-3	Explain about various physical food preservation methods such as high and low temperature, drying, radiation.	**Exams, Class tests, class assignment, presentations and Seminars.**
CO-4	Evaluate various chemical food preservation methods such as fermentation, smoking and use of chemical	**Exams, Class tests, class assignment**

	preservatives.	
CO-5	Evaluate effect of browning on seasonal fruits and vegetables.	**Viva, quiz, class assignments**
CO-6	Demonstrate Effect of Blanching on fruits and vegetables.	**Group discussions, assignments.**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: Practical pertaining to theory B.VFP 114

NAME OF FACULTY: Mrs.Jaspreet kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Analyse the effect of browning on vegetables & heat and acidity on milk proteins.	**Lab work**
CO-2	Estimation of milk by MBRT.	**Lab work**
CO-3	Evaluate the effect of heat ,low temperature and drying on given food sample.	**Lab work**
CO-4	Analyse the effect of blanching on raw fruits and vegetables.	**Lab work**
CO-5	Demonstrate different pasteurization techniques.	**Lab work**
CO-6	Determine shelf life of a given food at ambient temperature and under refrigeration.	**Lab work**

B.VOC (FOOD PROCESSING) 1st YEAR

CO (EVEN SEMESTER)

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: BASICS OF FOOD PACKAGING (B.VFP-213)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Describe the role and function of packaging materials used for a range of consumer food needs and wants.	Class assignment, presentations and Seminars.
CO-2	Measure and evaluate the chemical, physical and mechanical properties of packages and packaging.	Class tests, class assignment, Presentations and Seminars.
CO-3	Analyse the principles and practices of laminates, active packaging materials and edible films.	Class tests, class assignment, presentations and Seminars.
CO-4	Describe the technology involved in the production, shaping and printing of various packaging materials and packages.	Presentations,
CO-5	Relate the properties of food packages to conversion technologies, processing and packaging technologies and user requirements including safety, convenience and environmental issues.	class assignments, group discussion
CO-6	Explain various types of packaging methods and check shelf life of foods.	Group discussions and group assignments.

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: BASICS OF FOOD PACKAGING (PRACTICAL)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Determine grease resistance of packaging materials	Lab work
CO-2	Determination water vapour transmission rate of various packaging materials.	Lab work
CO-3	To see the chemical resistance of packaging material.	Lab work, Group discussion
CO-4	Shelf life evaluation of packed foods.	Lab work, Viva
CO-5	Understand the role and effectiveness of various packaging systems.	Viva, Lab work, group discussion
CO-6	Aware the symbols used in food industries.	Group discussions, industrial visit, viva

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Food Product Packaging Technology

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Define and categorize different types of packaging materials**	**University exams, MST, Class tests**
CO-2	Identify packaging requirements and their selection for raw and processed foods	**Viva, Class tests, assignments**
CO-3	Explain different forms of packaging.	**Practicals, Viva**
CO-4	Evaluation of quality and safety of packaging materials.	**Practical, Viva, Class tests**
CO-5	Describe various packaging machinery	**Viva, class tests**
CO-6	Explain Food Safety Standards and Regulations	**Viva, University exams, MST, class tests, Projects**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Food Product Packaging Technology- practical

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Identify different types of packaging materials	**Lab work, viva, assignment**
CO-2	Perform destructive and non- destructive tests for glass containers	**Lab work, viva**
CO-3	Determine tensile strength, tearing strength, water vapour transmission rate and drop test	**Lab work, viva**
CO-4	Demonstrate vacuum and shrink packaging and intelligent packaging	**Industrial visit, viva, lab work**
CO-5	Measure thickness of packaging material, wax weight, grease resistance, bursting strength, chemical resistance and can seaming.	**Lab work, viva**
CO-6	Study latest trends in packaging	**Projects, viva, assignment**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: **B.Voc. Food Processing (B.VFP 214)**

NAME OF COURSE: **Introduction to Food Microbiology**

NAME OF FACULTY: **Parminder Kaur**

C.O. No.	**Description of Course Outcome**	**Method/s of Assessment**
CO-1	Describe Food microbiology, important terms, Safety regulations for food microbiology.	Group discussion, Presentation, Exam.
CO-2	Enlist the types of microorganisms, classification and nomenclature of micro organisms, structure & functions .	Exams, Class test, Presentation, Assignments.
CO-3	Demonstrate microscopy ant its uses.	Exams, Class test, Presentation, viva
CO-4	Discuss microbial growth in food, Characterstics, bacterial growth curve ,.	Exams, Class test, Presentation, Group discussion
CO-5	Define cultivation of microorganisms , methods, techniques, Hygienic handling of food.	Exams, Class test, Presentation
CO-6	Explain sources of microorgamisms in food, food spoilage bacteria	Presentation, Seminar, Class test, viva.

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: **B.Voc. Food Processing (B.VFP 214)**

NAME OF COURSE: **Introduction to Food Microbiology**

NAME OF FACULTY: **Parminder Kaur**

C.O. No.	**Description of Course Outcome**	**Method/s of Assessment**
CO-1	Describe Food microbiology, important terms, Safety regulations for food microbiology.	Group discussion, Presentation, Exam.
CO-2	Enlist the types of microorganisms, classification and nomenclature of micro organisms, structure & functions .	Exams, Class test, Presentation, Assignments.
CO-3	Demonstrate microscopy ant its uses.	Exams, Class test, Presentation, viva
CO-4	Discuss microbial growth in food, Characterstics, bacterial growth curve ,.	Exams, Class test, Presentation, Group discussion
CO-5	Define cultivation of microorganisms , methods, techniques, Hygienic handling of food.	Exams, Class test, Presentation
CO-6	Explain sources of microorgamisms in food, food spoilage bacteria	Presentation, Seminar, Class test, viva.

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.voc Food processing

NAME OF COURSE: PERSONALITY DEVELOPMENT

NAME OF FACULTY: Jaspreet kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Identify the personality patterns,personal effectiveness and personality development .	**Exams, Class tests, class assignment, presentations and Seminars.**
CO-2	Evaluate interpersonal relations,analysis of relation of ego states	**Exams, Class tests, class assignment,**
CO-3	Illustrate motivation, motivating others	**Exams, Class tests, class assignment, presentations and Seminars.**
CO-4	Collaborate learning and undergo interactive session for time management,conflict management.	**Exams, Class tests, class assignment**
CO-5	Discuss and evaluate personality	**Viva, quiz, class assignments**
CO-6	Analysis the strokes and life positions.	**Group discussions, assignments.**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: Practical pertaining to theory B.VFP 114

NAME OF FACULTY: Mrs.Jaspreet kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Perform various personality tests	**Lab work**
CO-2	Create group and individual activities to resolve stress and conflict	**Group activity ,quiz**
CO-3	Demonstrate collaborative learning for time management	**Group discussion ,viva,quiz**
CO-4	Design participation for personality development.	**Viva,quiz**
CO-5	Classify personality traits.	**Viva,quiz**
CO-6	Plan personality adventory administration	**Viva ,quiz**

BVoc 2nd year odd semester

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA, ROPAR, PUNJAB.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE PROGRAM : B.Voc 2nd (3rd SEM)

NAME OF THE COURSE : (Communication skills I)

NAME OF FACULTY : Lovepreet SIngh (ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Defining characteristics of poetry so that students will be able to explore a variety of poetic genres.	MST, Class tests, Class Assignment.
CO 2	Develop the ability to respond to a variety of situation and contexts by shifting voice, tone, level formality, design, medium and structure.	MST, Class Assignment, Class tests.
CO 3	Designing job application for formal communication.	MST, Class assignments, class tests.
CO 4	Apply the LSRW skills.	MST, PPTs.
CO 5	Demonstrate use of English language in day to day life	MST, Participation in class, Class assignments, Class tests.
CO 6	Develop the fluency of language, presentation skills and creative writing.	MST, Participation in class, Class assignments, Class tests.

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**:Biotechnology and Food Processing**

NAME OF THE PROGRAMME:**B.voc Food processing**

NAME OF COURSE: **Introduction to grain milling and machineries (BVFP-312)**

NAME OF FACULTY: Parneet Kaur

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Describe the milling of Wheat as well as classify different mills used in wheat flour.	**Exams, Oral Exams, Quizzes, Home Assignments**
CO-2	Explain general principle of corn milling and enlist different types of products formed from corn flour and from wheat flour.	**Exams, Oral Exams, Quizzes, Home Assignments**
CO-3	Distinguish different types of pulses suitable for milling, Demonstrate different types of machines used in Dal milling.	**Exams, Oral Exams, Quizzes, Home Assignments.**
CO-4	Enlist different types of grain milling machinery such as Hammer mill, groundnut decorticator, mini dal mill, mini rice mill and mini oil expeller.	**Exams, Oral Exams, Quizzes, Home Assignments**
CO-5	Identify different types of adultration in flour.	**Virtual lab**

CO-6	Describe micropulverizer and destoner machine used in grain milling.	**Exams, Oral Exams, Quizzes, Home** **Assignments**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT:**Biotechnology and Food Processing**

NAME OF THE PROGRAMME:**B.voc Food processing**

NAME OF COURSE:**Practcal pertaining toIntroduction to grain milling and machineries(BVFP-312)**

NAME OF FACULTY: **Parneet Kaur**

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Demonstrate general principle of milling of Wheat through industrial visit.	**Exams, Oral Exams, Quizzes,** **Home Assignments**
CO-2	Identify adultration in wheat flour by NaHCo3 method.	**Virtual lab**
CO-3	Calculate alcoholic acidity in given sample of flour	**Virtual lab**
CO-4	Indentify Moisture content in wheat flour	**Virtual lab**
CO-5	Estimate ash value in given flour sample.	**Virtual lab**
CO-6	Demonstrate different types of mills used in grain miling process.	**Exams, Oral Exams, Quizzes,**

		Home Assignments

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.Voc. Food Processing

NAME OF COURSE: Fundamentals of Food Biochemistry (B.VFP-313)

NAME OF FACULTY: Parminder Kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Define & explain carbohydrates and biochemical changes in food on cooking.	**Exams, Class tests, class assignment, and Seminars.**
CO-2	Identify the sources of proteins.	**Exams, Class tests, class assignment, Presentations and Seminars.**
CO-3	Describe the classification of enzymes, enzyme specificity , co-enzymes and cofactors.	**Exams, Class tests, class assignment, presentations and Seminars.**
CO-4	Explain enzyme kinetics , Line weaver-Burk& applications of enzymes in food.	**Exams, Class tests, class assignment, group discussion.**
CO-5	Discuss the mechanisms of Lipid peroxidation.	**Group discussions, class assignments**

CO-6	Demonstrate the food additives and pigments	**Group discussions, group assignments .**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.Voc. Food Processing

NAME OF COURSE: Practical Pertaining to theory B.VFP-313

NAME OF FACULTY: Parminder Kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Perform the TSS values from food sample.	**Lab work**
CO-2	Practice for acidity pH value of food.	**Lab work**
CO-3	Determination and estimation of acid value and salt contents from different food sample.	**Lab work**
CO-4	Measure the Vitamin C by titration methods.	**Lab work**
CO-5	Analysis of qualitative estimation of sugar.	**Lab work**
CO-6	Communicate Food Biochemistry related concepts and experimental results through effective written and oral communication.	**Viva, quiz, class assignments**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: INTRODUCTION TO CEREAL AND LEGUME PROCESSING (B.VFP-314)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Understand the technology for wheat milling and wheat based food products.	Class tests, class assignment, presentations and Seminars.
CO-2	Explain the technology for rice milling and rice based other food products	Class tests, class assignment, Presentations and Seminars.
CO-3	Identify the structure and chemical composition of pulses	Class tests, class assignment, presentations and Seminars.
CO-4	Estimate the working of machinery and equipments employed in milling industry.	Lab work
CO-5	Analyse the process of legume drying.	Class assignments
CO-6	Describe the technology for oil extraction and oil seed processing along with equipments.	Group discussions and group assignments.

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: INTRODUCTION TO CEREAL AND LEGME PROCESSING (PRACTICAL)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Discuss the Milling of wheat flour	Lab work
CO-2	Determination of gluten	Lab work
CO-3	Preparation of chapattis, bread, biscuits and cakes	Lab work
CO-4	Preparation of fried snacks and germinated foods	Group discussion, Lab work
CO-5	Determination of moisture and ash content.	Lab work
CO-6	Identification and description of common pulses	Group discussion, assignments

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE

BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Fundamentals of Foods and Nutrition BVFP-315 THEORY

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Define food and its components**	**University exam, MST, class tests, assignments**
CO-2	**Describe nutritive value of different food groups.**	**University exam, MST, class tests, assignments, presentation.**
CO-3	**Identify the causes and symptoms of deficiency and excess of different nutrients.**	**University exam, MST, class tests, assignments, presentation, assignments.**
CO-4	**Define and design a balanced diet.**	**Lab work**
CO-5	**Explain the functions of different nutrients in body.**	**University exam, MST, class tests, assignments, presentation, assignments.**
CO-6	**Describe the dietary allowances and standards for**	**University exam, MST, class tests,**

	different age group.	**assignments, presentation.**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE
BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Fundamentals of Foods and Nutrition- Practical BVFP-319

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Develop the skills to identify the nutritional values of different food products.**	**Lab work, viva**
CO-2	**Estimate the iodine value of fats and oils.**	**Lab work, viva**
CO-3	**Determine the acid value of fats**	**Lab work, viva**
CO-4	**Calculate saponification value of fat.**	**Lab work, viva**
CO-5	**Analyze different nutrients by qualitative and quantitative methods.**	**Lab work, viva**
CO-6	**Plan and design a diet chart for normal physiological**	**Projects, viva**

	conditions.	

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE
BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Industrial visit

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Accumulate knowledge regarding internal working of industries**	**Industrial visit, viva, presentation, assignment**
CO-2	**Evaluate different industrial processes like GMP and HACCP**	**Industrial visit, viva, presentation, assignment, lab work**
CO-3	**Identify various production processes for different food products**	**Industrial visit, viva, presentation, assignment**
CO-4	**Generate ideas about how to start a business**	**Industrial visit, viva**
CO-5	**Recognise functional opportunities in different sectors to combine theoretical knowledge with industrial knowledge**	**Industrial visit, viva, presentation, assignment**

CO-6	**Evaluate the working environment of industries**	**Industrial visit, viva, presentation, assignment, Project**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE

BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Chief miller- level 6 (ficsi exam)

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Practise the milling process for all types of grains overseeing activities	**Lab work, viva, assignment, presentation, industrial visits**
CO-2	Handle various milling machineries	**Lab work, viva, assignment, presentation, industrial visits**
CO-3	Explain and evaluate inspection of raw material and finished	**Lab work, viva, assignment, presentation, industrial visits**
CO-4	Develop reading, writing and communication skills to communicate effectively with higher authorities and works.	**assignment, presentation, viva**
CO-5	Develop ability to plan, organize, prioritize, calculate, concentrate and handle pressure.	**industrial visits, lab work**
CO-6	Develop mechanical aptitude and trouble shooting skills	**industrial visits, lab work**

B.voc 2nd year FP- Even semester

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AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE
BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: FOOD SPOILAGE AND CONTROL (B.VFP-413)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Understand the principles involving food spoilage and preservation involving microorganisms.	Class tests, class assignment, presentations and Seminars.

CO-2	Identify the characteristics of important pathogens and spoilage microorganisms in foods.	Class tests, class assignment, Presentations and Seminars.
CO-3	Learn principles of different techniques used in processing and preservation of foods.	Class assignment, presentations and Seminars.
CO-4	Impart knowledge on the causes of food spoilage.	Presentations and Seminars.
CO-5	Understand the role and significance of intrinsic and extrinsic factors on growth of microorganisms in food and differentiate which organisms would be likely to grow in a specific food product.	class assignments, Group discussion
CO-6	Identify the conditions under which the important pathogens and spoilage microorganisms are commonly inactivated killed or made harmless in foods and identify ways to control microorganisms in foods.	Group discussions and group assignments.

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: FOOD SPOILAGE AND CONTROL (PRACTICAL)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Demonstration of compound microscope.	Lab work

CO-2	Perform simple, negative, gram staining techniques.	Lab work
CO-3	Perform streak plate and spread plate techniques.	Lab work
CO-4	Perform drying/Freezing of given food material.	Lab work, Viva
CO-5	Analyze adulterants in given food materials.	Lab work,
CO-6	Learn various methods for isolation, detection and identification of microorganisms in food.	Lab work, Viva

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Quality Control and regulationsBVFP- 414

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Define and explain Good Laboratory practices and Good manufacturing Practices**	**University exams, MST, Class tests**
CO-2	**Describe role and importance of different food regulatory authority in India**	**Viva, Class tests, assignments**

CO-3	**Evaluate the need scope, limitations, legal issues and regulations of labelling**	**University exams, MST, Class tests, Viva**
CO-4	**Explain bio-safety guidelines for research**	**Practical, Viva, Class tests**
CO-5	**Identify and evaluate ISO 22000 certified Indian companies**	**University exams, MST, Class tests, Viva, class tests**
CO-6	**Explain the concept of HACCP, FSSAI 2006 and GMP**	**Viva, University exams, MST, class tests, Projects**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Quality control and regulations- practical BVFP-418

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Identify and evaluate ISO 22000 certified Indian companies**	**assignment, viva**
CO-2	**Define and apply the concept of HACCP**	**Lab work, viva, assignment, presentation, Industrial visit**

CO-3	**Describe and evaluate the essentials of GMP**	**Lab work, viva, assignment, Industrial visit**
CO-4	**Define and explain bio-safety hazards**	**Industrial visit, viva, Lab work, assignment**
CO-5	**Explain and apply safety practices in production area**	**Presentation, Industrial visit, Lab work, viva, assignment**
CO-6	**Explain FSSAI 2006**	**Presentation, viva, assignment**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: **B.Voc Food Processing**

NAME OF COURSE: **Fruit and vegetable processing (B.VFP 415)**

NAME OF FACULTY: **A.P. Navjot Bharti**

C.O. No.	Description of Course Outcome	Method/s of Assessment
CO-1	Identify and classify various types and classification of fruits and vegetables.	Group discussion, Presentation, WSQ
CO-2	Explain the physiological changes occurring in fruit and vegetables during harvesting, storage and familiarize with processing techniques used for fruits and vegetables.	Exams, Class test, Presentation

CO-3	Describe the quality specification for the processing of fruit and vegetables and develop a detailed understanding of the different fruits and vegetables techniques like canning, freezing, drying, pickling and squash making.	Ppt., Assignment, Lab work, viva
CO-4	Define and Prepare jams, jellies, juices, pickles, tomato ketch-up, sauce, chutney, potato chips and finger chips from fruits and vegetables.	Class test, MST, University exam, Lab. work, oral test
CO-5	Evaluate organoleptic properties of fruits & vegetables.	Lab work, viva, assignment
CO-6	Determine firmness, moisture content, starch content, TSS and viscosity of different fruits and vegetables	Presentation, Seminar, Class test, lab work, viva

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BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: **B. Voc Food Processing**

NAME OF COURSE: **Practical pertaining to Fruit and vegetable processing (B.VFP 415)**

NAME OF FACULTY: **A.P. Navjot Bharti**

C.O. No.	Description of Course Outcome	Method/s of Assessment
CO-1	Prepare jams and jellies from different fruits, Extraction and preserve Fruit Juices and Prepare different types of pickles (sweet & sour).	Lab work and viva

CO-2	Evaluate Organoleptic of fruit & vegetable products, Estimate Ascorbic Acid content spectrophotometrically, Determine of Brix : Acid ratio of fruits and vegetable products	Lab work and viva
CO-3	Prepare tomato ketch-up, sauce, chutney, potato chips. Test of Pectin in fruit juices and pulp and Dried different methods of fruits and vegetables.	Lab work and viva
CO-4	Utilize waste for preparation of different products like vinegar, starch, pectin.	Lab work and viva
CO-5	Determine starch content of apples/potatoes. Determine total soluble solids by refractometer Determine viscosity of different food products.	Lab work and viva
CO-6	Determine moisture content of processed fruit/vegetable product. Determine firmness of seasonal fruit by penetrometer	Lab work and viva

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Industrial visit

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment

CO-1	**Accumulate knowledge regarding internal working of industries**	**Industrial visit, viva, presentation, assignment**
CO-2	**Evaluate different industrial processes like GMP and HACCP**	**Industrial visit, viva, presentation, assignment, lab work**
CO-3	**Identify various production processes for different food products**	**Industrial visit, viva, presentation, assignment**
CO-4	**Generate ideas about how to start a business**	**Industrial visit, viva**
CO-5	**Recognise functional opportunities in different sectors to combine theoretical knowledge with industrial knowledge**	**Industrial visit, viva, presentation, assignment**
CO-6	**Evaluate the working environment of industries**	**Industrial visit, viva, presentation, assignment, Project**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE

BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Chief miller- level 6 (ficsi exam)

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Practise the milling process for all types of grains overseeing activities	**Lab work, viva, assignment, presentation, industrial visits**
CO-2	Handle various milling machineries	**Lab work, viva, assignment, presentation, industrial visits**
CO-3	Explain and evaluate inspection of raw material and finished	**Lab work, viva, assignment, presentation, industrial visits**
CO-4	Develop reading, writing and communication skills to communicate effectively with higher authorities and works.	**assignment, presentation, viva**
CO-5	Develop ability to plan, organize, prioritize, calculate, concentrate and handle pressure.	**industrial visits, lab work**
CO-6	Develop mechanical aptitude and trouble shooting skills	**industrial visits, lab work**

B.voc. 3rd year odd semester

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE, BELA, ROPAR, PUNJAB.

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE PROGRAM : BVoc (F.p.)-3rd (5th SEM)

NAME OF THE COURSE : (English)

NAME OF FACULTY : Lovepreet SIngh (ASST. PROF.)

CO No.	Description of Course Outcomes	Method/s of Assessment
CO 1	Compare and contrast different genres of plays that will help the students to learn the structure of full length play and one act play.	MST, Class tests, Class Assignment.
CO 2	Explain major themes of plays that will make students capable to raise significant question, to enhance their creative expressions and reach well reasoned conclusion.	MST, Seminar, Class Assignment, Class tests.
CO 3	Apply the LSRW skills.	MST, Class assignments, class tests,
CO 4	Apply fundamentals of critical thinking reading writing and communicating.	MST, Seminar, GD, Role play examples.
CO 5	Analyze the role of literature as the means of reflecting and shaping thought and behavior.	MST, Participation in class, Class assignments, Class tests.
CO 6	Demonstrate the ability to discuss the literature using relevant support from the text.	MST, Participation in class, Class assignments, Class tests.

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DESCRIPTION OF COURSE OUTCOMES
NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING
NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING
NAME OF COURSE: MARKETING AND RETAIL MANAGEMENT (B.VFP-512)
NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Describe the marketing mix and how organisations use the marketing mix (often called the hour Ps) to market to their target customers.	Exams, Class tests, class assignment, presentations and Seminars..

CO-2	Explain the viability of marketing a product or service in an international market or markets.	Exams, Class tests, class assignment, presentations and Seminars.
CO-3	Evaluate the implementation of marketing strategy through the retail mix- including product and merchandise mix, pricing, location and store design management- to improve the total customer experience and retailer market competitiveness.	Exams, Class tests, class assignment, presentations and Seminars.
CO-4	Understand fundamental marketing concepts, theories, Principles in areas of marketing policy; of market and consumer behaviour; of product, distribution, promotion and pricing decisions.	Exams, Class tests, class assignment, presentations and Seminars.
CO-5	Prepare and deliver a sales presentation. Determine the strategies for developing new products and services that are consistent with evolving market needs.	Exams, Class tests, class assignment, presentations and Seminars.
CO-6	Develop strategies for the efficient distribution of products and services.	Group discussions and group assignments.

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: MARKETING AND RETAIL MANAGEMENT (PRACTICAL)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Demonstrate a clear understanding of the marketing concept	Lab work

CO-2	Collect different branded food items and their qualitative and quantitative comparison	Lab work
CO-3	Conduct a survey and prepare a report on consumer behaviour with respect to a particular product	Lab work
CO-4	Discuss the parameters of customer satisfaction.	Computer simulation
CO-5	Study the industrial unit setup for product	Lab work
CO-6	Describe advantages and disadvantages of online shopping	Group discussion, computer simulation, assignments

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.VOC FOOD PROCESSING

NAME OF COURSE: SUGAR PROCESSING TECHNOLOGY (B.VFP- 513)

NAME OF FACULTY: A.P MANPREET KAUR

C.O. No.	**Description of Course Outcome**	**Methods of Assessment**
CO-1	Describe the manufacture of granulated sugar and liquid sugar.	Class tests, class assignment, presentations and Seminars.
CO-2	Explain the general technical aspects of industrial sugar confectionery manufacture.	Class tests, class assignment, Presentations and Seminars.
CO-3	Analyse the process of sugar refining, sugar analysis, sugar balance and energy conservation.	Exams, Class tests, class assignment, presentations and Seminars.

CO-4	Illustrate the manufacture of high boiled sweets.	Class assignment, presentations and Seminars.
CO-5	Understand the purification of juice- Juice filtration and chemical purification, clarification stages, lime addition, pH control, treatment of clarified juices, evaporation, crystallization, centrifugal separation of sugar and other related processes.	Group discussions, class assignments, presentations and Seminars.
CO-6	Design the process of manufacturing of chocolates.	Group discussions and group assignments.

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Sugar processing technology BVFP-517 PRACTICAL

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/s of Assessment
CO-1	**Determine sugar content in fruit juice**	**Lab work, viva**
CO-2	**Identify reducing and non-reducing sugars in sugar products**	**Lab work, viva**
CO-3	**Prepare chocolate, candy and jelly.**	**Lab work, viva**

CO-4	**Calculate acidity and TSS of sugar products**	**Lab work, viva**
CO-5	**Study equipments related to sugar products**	**Presentation, industrial visits, viva, assignment**
CO-6	**Estimate moisture content of sugar product**	**Lab work, viva**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.Voc .Food Processing

NAME OF COURSE: Food Industry Waste Management (B.VFP-514)

NAME OF FACULTY: Parminder Kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Define the classification & characterization of industrial waste from various food industries.	**Exams, Class tests, class assignment and Seminars.**
CO-2	Enlist the various waste disposal methods.	**Exams, Class tests, class assignment and quiz .**
CO-3	Draw and design the processes that are used for liquid waste	**Exams, Class tests, class assignment,**

	treatment methods.	**presentations .**
CO-4	Describe the biological composting ,drying and incineration.	**Exams, Class tests, class assignment**
CO-5	Design the landfill digester, vermicomposting pit.	**Exams, Class tests, class assignment.**
CO-6	Explain the utilization of rice mill &coconut processing.	**Discussions, assignments, exam.**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT: BIOTECHNOLOGY & FOOD PROCESSING

NAME OF THE PROGRAMME: B.Voc. Food Processing

NAME OF COURSE: Practical Pertaining to theory B.VFP-514

NAME OF FACULTY: Parminder Kaur

C.O. No.	Description of Course Outcome	Methods of Assessment
CO-1	Describe the BOD & COD of the water sample	**Lab work**
CO-2	Calculate TDS &TSS of volatile and non- volatile components.	**Lab work**

CO-3	Devise the biodegradation constant (K)& the effect of timing on it.	**Lab work**
CO-4	Operate the electro dialysis apparatus.	**Lab work**
CO-5	Draw flow process of food waste utilization processes.	**Presentation,**
CO-6	Communicate Food Industry Waste Management related concepts and experimental results through effective written and oral communication.	**Viva, quiz, class assignments**

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ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Entrepreneurship development in food processing (BVFP-515) THEORY

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Define and explain entrepreneurship and the requirements to be an entrepreneur**	**University exams, MST, Class tests, presentation**
CO-2	**Identify and discuss the competencies of entrepreneurs.**	**Viva, Class tests, assignments**
CO-3	**Describe the functions of different governmental and**	**University exams, MST, Class tests,**

	private institutes promoting potential entrepreneurs.	**presentation, Viva**
CO-4	**Evaluate about planning a small scale unit**	**Practical, Viva, Class tests**
CO-5	**Plan project identification**	**Viva, class tests, University exams, MST, Class tests**
CO-6	**Explain the requirements to start a business**	**Viva, University exams, MST, class tests, Projects**

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Entrepreneurship development in processing (BVFP-519) PRACTICAL

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Assess entrepreneurial spirit through questionnaire**	**Assessment pro-forma, viva**
CO-2	**Demonstrate the core life skills**	**Lab work, viva**
CO-3	**Practise core life skills**	**Lab work, viva**

CO-4	**Analyse entrepreneurial opportunities in market**	**Field work, viva**
CO-5	**Identify and evaluate the strengths and weaknesses of entrepreneurs**	**Field work, viva**
CO-6	**Study different successful entrepreneurs**	**Projects, viva**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Industrial visit

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	**Accumulate knowledge regarding internal working of industries**	**Industrial visit, viva, presentation, assignment**
CO-2	**Evaluate different industrial processes like GMP and HACCP**	**Industrial visit, viva, presentation, assignment, lab work**
CO-3	**Identify various production processes for different food**	**Industrial visit, viva, presentation,**

	products	**assignment**
CO-4	**Generate ideas about how to start a business**	**Industrial visit, viva**
CO-5	**Recognise functional opportunities in different sectors to combine theoretical knowledge with industrial knowledge**	**Industrial visit, viva, presentation, assignment**
CO-6	**Evaluate the working environment of industries**	**Industrial visit, viva, presentation, assignment, Project**

B.Voc. FP 3rd year even semester

AMAR SHAHEED BABA AJIT SINGH JUJHAR SINGH MEMORIAL COLLEGE BELA ROPAR PUNAJB

DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Industrial training BVFP- 611

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Plan, coordinate and control various production processes	**Industrial visit, viva, presentation, assignment, industrial training**
CO-2	Practise skill set and industrial work ethics	**Lab work, viva, industrial visits,**

		industrial training
CO-3	Develop mathematical, organizational and analytical skills	**Lab work, viva, industrial visit, industrial training**
CO-4	Develop team worker and have good hand eye coordination	**Industrial visit, Lab work, industrial training**
CO-5	Develop reading, writing and communication skills to communicate effectively with higher authorities and works	**Presentation, assignments, industrial training**
CO-6	Describe food Safety Standards and Regulations	**Projects, viva, Lab work, viva, industrial visit, industrial training**

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DESCRIPTION OF COURSE OUTCOMES

NAME OF THE DEAPRTMENT**: Biotechnology and Food Processing**

NAME OF THE PROGRAMME: B.Voc Food Processing

NAME OF COURSE: Production manager FICSI EXAM LEVEL 7

NAME OF FACULTY: A.P. Navreet

C.O. No.	Description of Course Outcome	Method/sof Assessment
CO-1	Plan, coordinate and control various production processes	**Lab work, viva, industrial visit**

CO-2	Practise to obtain desired quantity and quality of products	**Lab work, viva, industrial visit**
CO-3	Develop mathematical, organizational and analytical skills	**Lab work, viva, industrial visit**
CO-4	Develop team worker and have good hand eye coordination	**Industrial visit, Lab work**
CO-5	Develop reading, writing and communication skills to communicate effectively with higher authorities and works	**Presentation, assignments**
CO-6	Describe food Safety Standards and Regulations	**Projects, viva, Lab work, viva, industrial visit**