# **BBA**(Occupational Health and Safety)

4 YEARS

(Under National Education Policy; 2020)

### PROGRAM: BBA (Occupational Health and Safety)

### (Credit Based Continuous Pattern System under National Education Policy 2020)

#### 1. Preamble:

In the complex of global environment, the managers find various barriers that prevent them from achieving the goals and improving the level of efficiency in the organizations. Leaders and Managers constantly try tackling these issues that drive towards lowering productivity. Challenges of management in the present contexts include; technology, ethics, globalization, competition, diversity, economic, socio- cultural and politico-legal issues. All these challenges pose threat to the existence of the organization; as such mortality is high than ever before. All those challenges can be addressed through quality and contemporary harnessed skills of management.

Various blocs such as G-7, SAARC, Common Wealth countries, BRICS, QUAD, BIMSTEC, and WTO declarations, have created a plethora of opportunities to accelerate various economic activities within their jurisdiction. As the activities grown unprecedentedly; the perils, hazards, and accidents are inescapable. Construction, Industrial, health, all kinds of transportations, hospitality, R&D, manufacturing and service sectors, environment, and so on are vulnerable to the safety and health related problems. The main goal of safety and health programs is to prevent workplace injuries, illnesses, and deaths, as well as the suffering and financial hardship these events can cause for workers, their families, and employers. that finding and fixing hazards before they cause injury or illness is a far more effective approach. Disasters of either natural or manmade will become a catastrophe and its loss will wreck the fortune of the concerned. In order to address these problems professionals need to be proficient with knowledge and skills relating to occupational health and safety.

Many educational institutions have taken up initiatives to offer the compatible programs, so as to empower the young students to cope with the challenges of occupational health and safety. There is hardly any institution offering UG program (OHS) having the fragrance of managerial skills. BBA (OHS) provides a wide range of industrial relevant skill and professionalism in the occupational health and safety. National Education Policy 2020 emphasizes all such issues with prime motto to mould the younger generation as highly productive citizens of the country.

BBA (OHS) has been designed for the duration of 4 years under National Education Policy 2020. The BBA(OHS) program help aspirants to enrich themselves with the principles, concepts, theories, hypotheses of business, diverging trends in market scenario, managerial duties in the era of globalization and the recent pandemic and many more. The program is an embodiment of multidisciplinary holistic education. The National Education Policy has realized that the skills are imperative need to cope with challenges of 21<sup>st</sup> century and resolved to develop specialized knowledge with disciplinary rigor. It is to bring equity, efficiency and academic excellence in National Higher Education System. The important ones include innovation and improvement in course-curricula, paradigm shift in learning, teaching pedagogy, evaluation, and education

system. Learner-centric, flexibility, and mobility with the fragrance of professionalism and apt skill are required to operate efficiently. It should be holistic to train the students into perfect human beings and useful members of the society and country.

The syllabus and regulations of the program are in conformity with notification of Mangalore University and common curriculum notified by Karnataka State Higher Education Council. The program for 4 years is packed in highly balanced manner with discipline courses, discipline specific courses, skill enhancement courses, vocational courses, courses under open elective, language components of highly relevance and courses to assure physical fitness, maintain perfect discipline and courses to inculcate community development. The program is a multifaceted pedagogy with an effective interface with the industry to translate the mission into action. The program creates opportunities for its students to enhance their understanding of economic, social, legal, political and technological environment to broaden their horizon not only to adjust themselves to change but also to become catalyst in developing their power to conceptualize, decide and communicate.

BBA (OHS) program offers extraordinary job opportunities in diverse that includes marketing, operations, finance, infrastructure, automobile, marine, aeronautical, hospitality, hospitals, tourism and travel related sectors. These companies in various sectors are owned and managed by sole, partnership, companies of different types ranging from domestic company to transnational companies.

Qualified learners of the program will secure positions in various industries, organization, departments of varied sizes. The position includes safety officers, OHS/HSE manager and OHS/EHS/HSE engineers with attractive pay package in various companies across the world. Further after completing the BBA (OHS), the learners can also pursue PG program and move forward to carry on research in diverse field of operation.

#### 2. Program:

BBA (Occupational Health and Safety)

#### 2(a) Program objectives:

The objectives of BBA (OHS) are:.

- a) To enrich the learners themselves in disciplined courses i.e. occupational health and safety and allied courses.
- b) To select best tools strategically so as to diagnose the problems of health and safety at the work place, and cure them to ensure sustainability.
- c) To conduct accident investigation process mainly to find out its route cause.
- d) To apply statutory rules, regulations and standards in various operations of industry relating to occupational health and safety
- e) To develop competency of the employees through training in various aspects of health and safety.
- f) To engrave a positive attitude and life skills which are imperative need for a multi-faceted personality with a sense of environmental consciousness and ethical values.
- g) To instill confidence to the learners to become job providers

#### 2(b) Program Outcomes (PO):

On successfully completing the program, the Graduates will be attributed to:

- a) Apply concepts and principles of management/business, which in turn help them to resolve the problems easily, strategically and tactfully
- b) Prevent workplace injuries and illnesses
- c) Improve compliance with laws and regulations
- d) Reduce costs, including significant reductions in workers' compensation premiums
- e) Adopt best practices of occupational health and safety management for the wellbeing of the individual and organizations.
- f) Engage skilled workers to avert hazards
- g) Increase productivity and enhance overall business operations
- h) Prevent accidents at the work place so as to save the lives and the property.
- i) Visualize the safety issues at the construction sites.
- j) Anticipate, recognize, evaluate and control hazardous conditions and practices affecting people, property and the environment;
- k) Communicate and interact effectively with technical and non-technical audiences;
- I) Work individually or on a team to critically analyze, interpret, and provide leadership to address and manage problems in occupational safety and health; and
- m) Recognize that the practice of occupational safety and health requires ongoing learning, and undertake appropriate activities to address this need.
- n) Employ various devices to assure safety from fire hazards.
- o) Install the process of first aid and emergency at the workplace.
- p) Identify business opportunities, design and implement innovations in workspace.

#### 2 (c) Program Specific Outcomes (PSO):

On successful completion of BBA (OHS), the Graduates will be attributed to:

- PSO1: Acquire ability to analyses the problem by the application of theories and concepts, and solve such problems not only in the domain subjects-OHS, but also accounting, financing, marketing, human resources, operations, technology etc.
- PSO2: Prevent accidents at the work place so as to save the lives and the other hazards
- PSO3: Apply problem-solving skills to address various issues and challenges in the functional areas of management.
- PSO4: Adopt the best practices and standards of Occupational health and safety management in the organizations.
- PSO5:Ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to occupational safety and health.
- PSO6: Formulate or design a system, process, procedure or program to meet desired needs.
- PSO7: Develop and conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
- PSO8:Ability to realize the ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
- PSO9: Function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

- PSO10: Demonstrate skills so as to enable the organization to forecast the value and volume of business in the dynamic business environment.
- PSO11: Apply ergonomics safety system at various levels of work place.
- PSO12: Visualize the safety problems at the infra development /construction sites.
- PSO13 Use various devices to assure safety from hazards.
- PSO14: Install the process of first aid and emergency at the workplace, for the wellbeing of the organizations
- PSO15: Inculcate the capacity mainly to gain multi-disciplinary knowledge simulated problem, case analysis, industrial training and project relating occupational health and safety
- PSO16: Develop competent management professionals with robust ethical values in societal, environmental and ecological issue for sustainability.
- PSO18: Evolve proper strategies from time to time to address complex corporate problems.
- PSO19: Utilize resources optimally by the use of technology so as to render quality services to the users.

#### 3. Definitions:

a. Title of the program: BBA (Occupational Health and Safety)

b. Nature of the program: Skill/vocational under National Education Policy

c. Period of Study: 4 years

d. Scheme: Semester – (8 semesters)

e. Credit System: Credit based as per the UGC/ NEP-f. Domain Subject: OHS – Occupational health and safety

g. Medium: English

h. Mode of Delivery: Face to Face and Online

i. Admission cycle: Two

### 4. Program Structure:

	Semester-I							
SL	No. Code Title of the Course of	Title of the Course	Category	Teaching Hours per	Marks For			Credits
No.		of Courses	Week (L+T+P)	SEE	CIE	Total Marks	Credits	
1	Lang-1.1	Language I	AECC	2+1+0	60	40	100	3
2	Lang-1.2	Language-II	AECC	2+1+0	60	40	100	3
3	BBAHS.1.1	Principles and Practice of Management	DSC	3+1+0	60	40	100	4
4	BBAHS.1.2	Fundamentals of Business Accounting	DSC	3+1+0	60	40	100	4
5	BBAHS.1.3	Foundation to Occupational Health &Safety	DSC	3+1+0	60	40	100	4
6	BBAHS.1.4	Business Organization and Office Management	OEC	2+1+0	60	40	100	3
7	BBAHS.1.5	Digital Fluency	SEC	1+0+2	30	20	50	2
8	BBAHS.1.6	Yoga/Sports	SEC-VB	0+0+2	0	25	25	1
9	BBAHS.1.7	H&W/NCC/NSS/R&R/CA	SEC-VB	0+0+2	0	25	25	1
	TOTAL				390	310	700	25

	Semester-II							
	Course Code Title of the Course Category of Week		Category	Teaching	Marks For			
SI. No.		Hours per Week (L+T+P)	SEE	CIE	Total Marks	Credits		
1	Lang-2.1	Language-I	AECC	2+1+0	60	40	100	3
2	Lang-2.2	Language- II	AECC	2+1+0	60	40	100	3
3	BBAHS.2.1	Corporate Accounting	DSC	3+1+0	60	40	100	4
4	BBAHS.2.2	Human Resource Management	DSC	3+1+0	60	40	100	4
5	BBAHS.2.3	Foundation to Construction Safety	DSC	3+1+0	60	40	100	4
6	BBAHS.2.4	EOHS Management	OEC	2+1+0	60	40	100	3
7	BBAHS.2.5	Environmental Control practices	AECC	1+0+2	30	20	50	2
8	BBAHS.2.6	Physical Education /Sports	SEC-VB	0+0+2	-	25	25	1
9	BBAHS.2.7	H&W/NCC/NSS/R&R/CA	SEC-VB	0+0+2	-	25	25	1
	TOTAL				390	310	700	25

	Acronyms Expanded			
a)	AECC	Ability Enhancement Compulsory Course		
c)	DSC	Discipline Specific Core (Course)		
d)	DSE	Discipline Specific Elective		
e)	SEC	Skill Enhancement Course		
f)	OEC	Open Elective Course		
g)	VOC	Vocational Courses		
h)	SEC-VB	Skill Based/Value Based		
i)	SEC-SB	Skill Based		
j)	SEE	Semester End Examination		
k)	CIE	Continuous Internal Evaluation		
1)	L+T+P	Lecture + Tutorial + Practical(s)		

#### Note:

- One Hour of Lecture is equal to 1 Credit.
- One Hour of Tutorial is equal to 1 Credit (Except Languages).
- Two Hours of Practical is equal to 1 Credit.
- Practical Classes be conducted in the Business Lab or in Computer Lab or in Class room depending on the requirement of the course.
- One batch of students should not exceed half (i.e., 30 or less than 30 students) of the number of students in each class/section.
- 2 Hours of Practical Class is equal to 1 Hour of Teaching, however, whenever it is conducted for the entire class (i.e., more than 30 students) 2 Hours of Practical Class is equal to 2 Hours of Teaching

#### 5 Pedagogy:

In addition to conventional face to face learning and time-tested lecture method, the approaches given here under may be adopted as and when required:

- Case Based Learning: Practical exposure can be given to students through Case based learning/critical learning tool. It enhances skills of students in analyzing the organizational problems and evaluates them properly so as to arrive critical decisions. The students understand to apply concepts, principles, and theories wherever necessary. Further they can employ analytical skill to solve complex problem in the vibrant business environment.
- Experiential/Live Projects/Grass Root Projects/Internship: In order to bridge the gap between the theory and practice, the students need to be encouraged to take up experiential projects/Live Projects/Grass Root Projects/internship in companies/organizations/factories.
- Team Spirit and Building: In an endeavor to internalize the core curriculum, it is necessary to work in teams and develop the team spirit. For this purpose, Interdisciplinary learning across outside the faculty would help learners to equip with the requisite skills.
- ICT enabled teaching with global fragrance: The modern gadgets of ICT enrich the students in the class room, which fulfill the motto of digital India. The digitalization establish network to the individual/company/Govt., all over the world instantaneously.
- Leadership Building: Apart from developing a strong background in the functional areas of management, the Model Curriculum developed under National Educational Policy, focuses on developing the capabilities of New Age Leadership among the students.
- Emphasis on Indian Business Models: Over the past two decades, several Indian business
  domains and organizations have made remarkable contribution in developing innovative
  business models by occupying a space in the global business scenario. This forms the part of
  Pedagogy.

#### 6. Assessment and Evaluation:

Assessment is an integral part of teaching learning process. A multi-disciplinary program BBA in OHS requires a multi-dimensional evaluation system to measure the effectiveness of the diverse courses, under National Educational Policy-2020. The assessment and evaluation system have two components namely Continuous Internal Evaluation (CIE) and Semester End Examination (SEE). Each course shall be evaluated for 100 marks, provided the course has either 3 credits or 4 credits. Apparently, CIE of a course will have 40% and SEE of a course will have 60%. Suggestive guidelines for both are given below;

#### a) Suggestive Guidelines for Continuous Internal Evaluation (CIE):

Continuous Internal Evaluation (CIE) of a course - 40% weightage. The evaluation system of the course is comprehensive & continuous during the entire period of the Semester. The CIE evaluation for a course will be based on the Parameters given hereunder:

SI. No.	Parameters for Evaluation	Marks			
6.1Contin	.1Continuous Internal Evaluation (CIE)				
A.	Continuous & Comprehensive Evaluation (CCE)	20 Marks			
B.	Internal Assessment Tests (IAT)	20 Marks			
	Total of CIE (A+B) 40 Marks				

#### b) Suggestive Guidelines for Semester End Examination (SEE)

As already indicated, SEE will be conducted at the end of each semester. Each course shall be evaluated for 60% of the weightage. SEE evaluation for a course will be based on the Parameters given hereunder.

6.2. Semester End Examination (SEE)			
C.	Semester End Examination (SEE)	60 Marks	
Total of CIE 8.1 (A + B) and SEE 8.2 (C) 100 Marks			

#### Note:

- In case of internship, evaluation of report submission- 30 Marks and presentation thereon is 20 Marks.
- In case of Project report, for submission- 100 Marks, Viva-Voce 40 Marks and CCE 60 Marks

#### 6.1. A. Continuous & Comprehensive Evaluation (CCE):

The CCE will carry a maximum of 15% weightage (15 marks) of total marks of a course (100). Prior to the commencement of the academic session in each semester, a faculty member shall choose his/her course, for which a minimum of five assessment methods out of with three (3.0) markseach:

- Individual Assignments
- Seminars/Class Room Presentations/Quizzes
- Group Discussions /Class Discussion/ Group Assignments
- Case studies/Case lets
- Participatory & Industry- Learning/ Field visits
- Practical activities / Problem Solving Exercises
- Participation in Seminars/ Academic Events/Symposia, etc.
- Mini Projects/Cap stone Projects
- Any other academic activity

**Note:**-in case of 50 percentages of CIE weightage courses, faculty members can choose Assessments methods as indicated above (proportionately)

#### 6.1. B Internal Assessment Tests (IAT):

The Internal Assessment Test will carry a maximum of 25% weightage. Under this component (25 marks) of total marks of a course, **two** tests shall be conducted in a semester for 25 marks each and the same shall be scaled down to **10 Marks each**.

#### 7. Summative Evaluation:

University will conduct Summative examinations at the end of each semester

#### 8 .Internship and Project:

#### 8.1 Internship:

A candidate, who has successfully completed 2 years of study, shall undergo an internship of any industry/ company/ establishment for a period from 3 to 4 weeks. He/she shall identify a problem, diagnose it and submit the report by focusing on recommendation to the University. Viva Voce shall be conducted at an appropriate time.

#### 8.2. Group Research Project.

Candidates who have successfully completed 7<sup>th</sup> semester of study shall undergo a group research Project during 8<sup>th</sup> semester. Group research Project may be prepared by a group of three students on topic relating to domain/specialization and submit it to the university. The groups of such student have to appear for Viva-Voce exam. Details of group research project shall be notified by the department/Institution before commencement of the concerned semester. In case the candidates decides, not to opt group research project, they shall appear for two courses of the program, as provided in the program structure of 8<sup>th</sup> semester

The University shall arrange to conduct viva voce after the term end examination is over as per the University norms.

### 9.0 Suggestive Template for IAT:

Internal Assessment Test
BBA (OHS) (1 to 6 Semesters)
Course Code: Course Name
Duration:1 Hour Total Marks: 20
SECTION-A
Answer any <b>two</b> of the following questions. Questions are asked on remembering. (2 x 2= 4)
1.
2.
3.
SECTION- B
Answer any <b>two</b> of the following questions. Questions are asked on Understanding and Applying.  (2 x4= 8)
4.
5.
6.
SECTION- C
Answer any <b>one</b> of the following questions. Questions are asked on analyzing and evaluating. (1x8= 8)
7.
8.

#### Note:

Internal Test question papers format is prepared based on Revised Bloom's Taxonomy (https://www.apu.edu/live\_data/files/333/blooms\_taxonomy\_action\_verbs.pdfInternal Assessment Test.

#### **Internal Assessment Test**

#### **BBA-Hon's (OHS)**

(7th and 8th Semesters)

**Course Code: Course Name** 

<b>Duration:1 Hour</b>	Total Marks: 20
------------------------	-----------------

#### **SECTION-A**

Answer any **two** of the following questions.

 $(2 \times 2 = 4)$ 

- 1.
- 2.
- 3.

#### **SECTION-B**

Answer any two of the following questions (Application of theories, concepts, doctrine).

 $(2 \times 4 = 8)$ 

- 4.
- 5.
- 6.

#### **SECTION-C**

Answer any **one** of the following questions (Analysis and interpreting).

(1x8 = 8)

- 7.
- 8.

#### Note:

Internal Test question papers format is prepared based on Revised Bloom's Taxonomy. (https://www.apu.edu/live\_data/files/333/blooms\_taxonomy\_action\_verbs.pdf

### 10. Semester End Examination (SEE):

The Semester End Examination for all the courses will be conducted for the students who get registered during the semester. SEE of the course shall be conducted after fulfilling the minimum attendance requirement as per the Universities/Institutes' norms.

	Semester End Examination	
BBA (OHS)	(1 <sup>st</sup> to 6 <sup>th</sup> Semester) (For courses carrying 3/4 credits)	
	Course Code: Course Name	
<b>Duration:3 Hour</b>		Total Marks: 60
SECTION-A		
Answer any <b>five</b> sub que	stions of the following (based on concepts/theori	es/frame work) (2x 5=10)
1		(ZX 0=10)
2 3		
4		
5 6		
0		
SECTION- B Answer any three of the	following questions (based on skills)	(2 vE_ 1E)
7		(3 x5= 15)
8 9		
10		
11		
SECTION- C		
Answer any <b>two</b> of the fo	ollowing questions (based on knowledge and skill	). (2x10= 20)
12		
13 14		
SECTION- D  Answer any one of the fo	ollowing questions (based on application of skill)	
		(1x15= 15)
15 16		
10		

# Semester End Examination BBA Hon's (OHS)

(7<sup>th</sup> to 8<sup>th</sup> Semester)

(For courses carrying 3 or 4 credits)
Course Code: Course Name

**Duration:3 Hour Total Marks: 60 SECTION-A** Answer any **five** sub questions of the following (based on concepts/theories/frame work) (2x 5=10) 2 3 4 5 6 **SECTION-B** Answer any **three** of the following questions (based on skills) (3 x5 = 15)7 8 9 10 11 **SECTION-C** Answer any two of the following questions (based on knowledge and skill). (2x10=20)12 13 14 **SECTION- D** 15 Answer Compulsorily (Case study/ or a question based on application of skill) (1x15=15)

# Semester End Examination BBA (OHS)

BBA (OHS)
(For courses carrying 2 credits)
Course Code: Course Name

Duration: 1 hour 30 minutes	Total Marks: 30
SECTION-A Answer any five sub questions of the following (based on concepts/theories)  1 2 3 4 5 6 7	s/frame work) (1x 5=5)
SECTION- B Answer any three of the following questions (based on skills)   8 9 10 11	(3 x3= 9)
SECTION- C Answer any two of the following questions (based on knowledge and skill).  12 13 14	(2x5= 10)
SECTION- D Answer any one of the following questions (Case study/problem based on a 15 16	application of skill) (1x6= 6)

#### **Detailed Syllabus:**

## Title of the Program: BBA (OHS) Course Code: BBAHS.1.1

**Title of the Course: Principles and Practice of Management** 

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	3+1+0Hrs	56Hrs

#### Pedagogy:

Classrooms lecture, Case studies, Group discussion, Seminar, technology enabled learning and field work etc.

#### **Course Outcomes:**

On completion of the course, the learner will be able to:

- Meet the challenges of modern Management
- Perform as Manager for company to ensure effective utilization of resources
- Apply various theories of management in the functioning of an organization
- Make out the importance of planning and why organizations need to plan and control
- Outline the planning and controlling processes.
- Identify different types of plans and control systems employed by organizations.
- Convince the individual and organizational effects associated with goal setting and planning.
- Organize the staffing properly to ensure overall efficiency. Identify when and where controlling is necessary to take corrective action for an organization
- Contributes to increased employee goal commitment, motivation, and performance in the organization

#### Syllabus

Unit-I 10 Hours

Nature and process of management- meaning and definition of management - management process - Management as a science, an art or a profession- difference between administration and management - significance of management; Managerial functions- brief explanation of various management functions- managerial skills - role of managers.

Unit-II 10 Hours

Management thought:

Classical Theory- Scientific Management - elements-principles criticisms; Administrative Management- principles of modern management; Contributions of Henry Fayol, Maslow, Herzberg, Hurge Burge, F W Taylor, CK Prahalad, Malcom Gladwell, Malcolmglad Well, Michael Porter, Rathan Tata and Peter F. Drucker.

Unit-III 8 Hours

Planning- meaning, definition, features, benefits and limitations of planning- process of planning - how to make planning effective- types of plans-types/ kinds/ forms of planning; MBO- process importance-making MBO effective; Decision Making- meaning- process- types of decisions.

Unit-IV 10 Hours

Organization-meaning - definition- features- principles of organization- process-Types of organization-line -functional- line & staff - matrix (in brief) - project (in brief)-committees (in brief) -Organization chart-meanings & content - Organization manual-meanings & content - Authority & power- (concepts only) -Delegation of authority-principles – Centralization & Decentralization -Span of management

Unit-V 8 Hours

Staffing - meaning & significance - Process of staffing (in brief); Leadership - meaning, qualities -

Styles of leadership. Motivation - meaning - importance and objectives, Morale and Productivity-Communication - importance and objectives, Barriers in effective communication; Types of communication

Unit-VI 10 Hours

Coordination and Control- Coordination –Meaning- Need - Principles –Control – Meaning – Process – Control Methods or techniques; Management Audit concept - SWOT, KAIZEN, TQM, MIS, ISO, Change Management, Knowledge Management (Meaning only). Emerging Trends in management

#### **Skill Developments Activities:**

- Technical skills involve skills that give the managers the ability and the knowledge to use a variety of techniques to achieve their objectives.
- The manager is able to see an entire concept, analyze and diagnose a problem, and find creative solutions.
- The human or the interpersonal skills enable the managers to make use of human potential in the company and motivate the employees for better results.
- Planning is the process of formulating a set of actions or one or more strategies to pursue and achieve certain goals or objectives with the available resources.
- Clearly established communication channels in an organization allow the manager to collaborate with the team, prevent conflicts and resolve issues as they arise.
- Manager to possess great decision-making skills, as it often dictates his/her success in achieving organizational objectives.
- Manager to have good delegation abilities to achieve optimal results and accomplish the required productivity results
- Motivation helps to bring forth a desired behavior or response from the employees or certain stakeholders.
- Management position demands specific competency for achieving measurable results and success on the job.
- Fun activity can easily be customized and used in leadership development, building teams, building brands, corporate culture, student can probably find out even more ways to adapt it to training

Ex: A pilot officer of Air India needs technical skill, beside conceptual skill.

#### **References:**

- 1. Harold Koontz & Heinz Weihrich, Principles of management Essentials of Management, Tata McGraw Hill, 10th edition (2015)
- 2. K.S. Adiga, Principles of Management Shubha Prakashana
- 3. L.M. Prasad, Principles and Practice of Management, Sultan Chand & Sons, 6<sup>th</sup> Edition, (2013)
- 4. T.N. Chhabra, Principles and Practice of Management, Dhanpat Rai & Co Publication, (2018)
- 5. S. P. Rao Principles and Practice of Management, Konark Publishers, 1996
- 6. S. P. Rao V Hari Krishna, Management: Text and Cases Excel Publications (2005)

### Title of the Program: BBA (OHS) Course Code: BBAHS.1.2

Title of the Course: Fundamentals of Business Accounting

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	3+1+0Hrs	56Hrs

#### Pedagogy: Classrooms lecture, tutorials, and problem solving

#### Course Outcomes: On successful completion of the course, the Students will demonstrate

- Sketch out framework of accounting as well accounting standards.
- Ability to pass journal entries and prepare ledger accounts
- Ability to prepare subsidiaries books
- Prepare trial balance and final accounts of proprietary concern.
- Construct final accounts through application of? tally.

#### **Syllabus**

#### Unit. 1: INTRODUCTION TO FINANCIAL ACCOUNTING 08 HOURS

Introduction – Meaning and Definition – Objectives of Accounting – Functions of Accounting – Users of Accounting Information – Limitations of Accounting – Accounting Cycle - Accounting Principles – Accounting Concepts and Accounting Conventions. Accounting Standards – objectives- significance of accounting standards. List of Indian Accounting Standards.

#### **Unit. 2: ACCOUNTING PROCESS**

12 HOURS

Meaning of Double entry system –Process of Accounting –Kinds of Accounts –Rules - Transaction Analysis –Journal –Ledger –Balancing of Accounts –Trial Balance –Problems on Journal, Ledger Posting and Preparation of Trial Balance.

#### **Unit. 3: SUBSIDIARY BOOKS**

14 HOURS

Meaning —Significance —Types of Subsidiary Books —Preparation of Purchases Book, Sales Book, Purchase Returns Book, Sales Return Book, Bills Receivable Book, Bills Payable Book. Types of Cash Book—Simple Cash Book, Double Column Cash Book, Three Column Cash Book and Petty Cash Book(Problems only on Three Column Cash Book and Petty Cash Book), Bank Reconciliation Statement —Preparation of Bank Reconciliation Statement (Problems on BRS)

#### Unit. 4: FINAL ACCOUNTS OF PROPRIETARY CONCERN

10 HOURS

Preparation of Statement of Profit and Loss and Balance Sheet of a proprietary concern with special adjustments like depreciation, outstanding and prepaid expenses, outstanding and received in advance of incomes, provision for doubtful debts, drawings and interest on capital.

#### **Unit: ACCOUNTING SOFTWARE**

12 HOURS

Introduction-meaning of accounting software, types software Tally-Meaning of Tally software – Features accounting software-accounting

Advantages, Creating a New Company, Basic Currency information, other information,
 Company features and Inventory features. Configuring Tally - General Configuration,
 Numerical symbols, accounts/inventory info – master configuration -voucher entry
 configuration. Working in Tally: Groups, Ledgers, writing voucher, different types of voucher,
 voucher entry Problem on Voucher entry - Generating Basic Reports in Tally-Trail Balance,
 Accounts books, Cash Book, Bank Books, Ledger Accounts, Group Summary, Sales Register
 and Purchase Register, Journal Register, Statement of Accounts, and Balance Sheet.

#### **Skill Developments Activities:**

- 1. List out the accounting concepts and conventions.
- 2. Prepare a Bank Reconciliation Statement with imaginary figures
- 3. Collect the financial statement of a proprietary concern and record it.
- 4. Prepare a financial statement of an imaginary company using tally software.

#### References:

- 1. Hanif and Mukherjee, Financial Accounting, McGraw Hill Publishers
- 2. Arulanandam & Raman; Advanced Accountancy, Himalaya Publishing House
- 3. S.Anil Kumar, V.Rajesh Kumar and B.Mariyappa—Fundamentals of Accounting, Himalaya Publishing House.
- 4. Dr. S.N. Maheswari, Financial Accounting, Vikas Publication
- 5. S P Jain and K. L. Narang, Financial Accounting, Kalyani Publication
- 6. Radhaswamy and R.L. Gupta, Advanced Accounting, Sultan Chand
- 7. M.C. Shukla and Goyel, Advanced Accounting, S Chand.

### Title of the Program: BBA (OHS) Course Code: BBAHS.1.3

Title of the Course: Foundation to OHS

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	2+1+2Hrs	56Hrs

#### Pedagogy:

Classrooms lecture, Case studies, Group discussion, Seminar, technology enabled learning and field work etc.

#### **Course Outcomes:**

On completion of this course, the students will be able to;

- Illustrate and familiarize the basic concepts and development of OHS.
- Understand the types and causes of industrial accidents.
- Explain the ways of accident prevention at the workplace.
- Illustrate the importance of Housekeeping in the mitigation of accidents at the worksite.
- Discuss the benefits and limitations of Personal Protective Equipment (PPE's).
- Discover the application of ergonomics safety program at the workplace.
- Appraise the significance of prevention and control of ventilation systems at the place of work.
- Make out how the noise can be reduced at work place.
- Evaluate the role of safe working practices in combating the industrial accidents.

#### **Syllabus**

#### Unit-I: 14 Hours

Industrial Revolution and Development of OHS: Industrial Revolution- Introduction, Meaning and Definition, History, Effects. Development of Safety and Occupational Health. Occupational Safety and Health in India- DGFASLI, CLI and RLI, Inspectorate of Dock Safety, DGMS, NSC. Environmental Movement - History. Environmentalism. UN Conference on Human Environment. Environmental Legislation in India.

Definitions related to HSE field, Statement of HSE policy, HSE goals, new employee orientation training program, and Employee's responsibility in industry. Activities related to workplace safety such as Safety pledge.

**Industrial accident:** Introduction, meaning, industrial accidents-types, Causes- Unsafe Act, Unsafe condition, Consequences. 5W and 1H investigation theory and documentation. Investigation of accidents –methodology, outcomes, Reports, Benefits.

#### Unit-II: 14 Hours

Accident Causation and Prevention: Meaning and Definition, Theories of Accident Causation, Heinrich Domino Theory, Axioms of Industrial Safety, Domino Theory, Hepburn's Theory, Human Factors Theory, Epidemiological Theory, Combination Theory, Behavioral based Theory, Management Failures and Accident Causation, Accident causation model, Accident Prevention Measures, Basic philosophy and theories of accident occurrence and prevention, Five E's (5 E's) for Accident Prevention.

**Job safety and Hazard Analysis:** JSA- Introduction, Steps. Activities. Hazard Analysis - Introduction, Principles.

**Housekeeping:** Introduction, Meaning. Advantages, Profits, 5'S – Introduction, Advantages, Roles of employees.

**Personal Protective Equipments (PPEs)**: Introduction, Requirements, points of consideration when selecting, types based on hazards, maintenance. Benefits & Limitations of PPE's. Indian standards of PPE's - Specification of safety PPE are based on Indian standard.

Unit-III: 14 Hours

**Ergonomics:** Ergonomics - Introduction, meaning, Application, Objectives, safety program. Musculoskeletal disorder - MSD's - Signs and symptoms, engineering controls.

**Industrial Ventilation and Illumination:** Introduction to ventilation, deficient areas of ventilation, Heat effect, prevention and control of ventilation problems, Education and training, Engineering controls. Introduction to Industrial Illumination, the National Lighting Code (NLC), factors in selecting an illumination level, Illumination levels in various areas. Color coding system of hazards.

Unit-IV: 14 Hours

**Industrial Noise** - Introduction, definition, Units and measurement system, Noise Pollution (Regulation and Control) Rules permissible exposure limits, various ways to control and reduce of noise at work place-by engineering and administration controls, use of PPE's, Education and training.

**Safe Working Practices:** Introduction. Definitions, Purpose. Safe working Environment - Free from Dust, Fumes, and Gases, Adequate Lighting and Ventilation, Noise levels within the Norms. Minimizing Thermal Radiation, Waste disposal as per legal requirements.

#### **Skill Developments Activities:**

- Conducting of oath taking of 'Safety pledge' which says that the safety is everyone's responsibility and blending the concept of personal safety commitment philosophy and to develop workplace safety culture.
- Carry out the Job safety Analysis and Job Hazard Analysis at the relevant worksites.
- Correlate the reduction in the workplace accidents and the applicability of Ergonomics and Safe Working Practices.
- Compare the actual workplace noise levels with that of permissible exposure limits as
  prescribed in the Noise Pollution (Regulation and Control) Rules, and plan for the
  various ways to control and reduce of noise at work place-by engineering and
  administration controls, use of PPE's.

#### References:

- 1. R.S Khurmi & J.K Gupta Industrials safety S. Chand &Co. Ltd.
- 2. R.K. Jain& Sunil S Rao Industrials safety, Health and Environment management systems Khanna Publishers.
- **3.** Leelakrishnan The Factory Act, 1948 and The Karnataka factories rules 1969 Sun Publishing House, Bangalore.

### Title of the Program: BBA (OHS) Course Code: BBAHS.1.4

#### Title of the Course: Business Organization and Office Management

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	3+1+0 Hrs	56 Hrs

#### Pedagogy:

Classrooms lecture, Case studies, Group discussion, Seminar, technology enabled learning and field work etc.

#### **Course Outcomes:**

On Completion of the course, the learner will be able to:

- Use business terms and concepts when communicating.
- Analyze data to verify accuracy of conclusions.
- Use effective communication skills to promote respect, trust and relationships.
- Practice an awareness of ethical and social responsibilities to multi-cultural, teamoriented, rapidly changing environments.
- Utilize information by applying a variety of business and industry standard software and hardware to major business functions (e.g., marketing, accounting, and human resource management)
- Select and use appropriate resources to collect business data that will ultimately translate into information for decision-making.
- Practice critical and creative thinking to improve the decision-making process.

#### **Syllabus**

#### Unit-1: 8 Hours

#### **Introduction to Business**

**Business:** Meaning, Nature, Scope and Social responsibility of Business, Objectives, Essentials of successful business; Functional areas of business. Concept of Business Organization.

Unit-2: 12 Hours

#### Forms of Business Organization:

Sole proprietorship: Definitions, Features, Merits and Demerits. Partnership: Definitions, partnership deed, Features, Merits and Demerits. Joint Stock Company: Definitions, Features, Merits and Demerits. Co- operatives: Definitions, Features, Merits and Demerits.

Unit-3: 12 Hours

#### **Public Enterprises**

Departmental Undertaking: Definitions, Features, Merits and Demerits. Public Corporations: Definitions, Features, Merits and Demerits. Government Companies: Definitions, Features, Merits and Demerits

#### Unit-4: 12 Hours

#### **Business Combinations**

Meaning Definitions, Causes, Types, Forms, merits and demerits of Business Combinations, Recent Trends in Business Combinations

#### Unit-5: 12 Hours

#### **Management of Organizations**

Management- Meaning, Definitions, Difference between Management and Administration, Levels of Management, Objectives of Management, Functions of management- planning,

#### organizing, staffing, directing, coordinating, controlling, Principles of Management

#### **Skill Developments Activities:**

- Planning, ranging from office meetings, handling the delegations, and other business operations within the organization to execute everything efficiently on its proper time.
- Hire new employees, fire the underperforming ones.
- Evaluate performance appraisal, training and supervising new employees.
- Make plans, schedule and attend meetings and perform other business operations as well.
- Process, practices, and procedures to do the job efficiently.
- Strong hands-on practice on computer skills ranging from the word processor to excel and PowerPoint.
- Strong communication skills to see the visitors coming in case the respective professionals are out from the office.
- Communicate effectively within the organization both verbally and written in a friendly, efficient and professional way to make sure everything goes just fine. Student can play the role of a bridge between the employees working in the organization and the management. Excellent in order to utilize every minute of one's duty to its fullest potential and squeeze out the maximum outcome.
- Social skills towards relevant employees involved in the company or outside visitors.

#### References:

- 1. CB. Guptha Business Organization and Management, Sultan Chand & Sons.
- 2. Dr. S. C. Saxena Business Administration & Management, Sahitya Bhawan.
- 3. Y K. Bhushan. Fundamentals of Business Organization and Management, Sultan Chand & Sons.
- 4. R K. Sharma, Business Organizations and Management, Kalyani Publishers.
- 5. I.M. Sahai, Padmakar Asthana Business Organization& Administration, Sahitya Bhawan Publications, Agra

# Title of the Program: BBA (OHS) Course Code: BBAHS.1.5

**Title of the Course: Digital Fluency** 

Course Credits	No. of Hours per week	Total No. of Teaching Hours
2 Credits	0+0+2 Hrs	28 Hrs

#### Pedagogy:

- 1. The content (both video and other resources) on the related topic, quiz on Future Skills Prime Platform
- 2. Class room activities are designed around the topic of the session towards developing better understanding, clearing misconceptions and discussions of higher order thinking skills like application, analysis, evaluation and design.
- 3. Exercise for practical activity of the week

#### **Course Outcomes:**

On completion of the course, the learner will be able to:

- Intelligent conversation on the key concepts and applications of Big Data Analytics (BDA), Internet of Things (IoT), Cloud Computing, and Cyber Security
- Develop holistically by learning essential skills such as effective communication, problem-solving, design thinking, and teamwork
- Build his/her personal brand as an agile and expansive learner one who is interested in horizontal and vertical growth?

#### **Syllabus**

Unit 1: 10 Hours

#### **Emerging Technologies Overview of**

- i. Artificial Intelligence, Machine Learning, Deep Learning,
- ii. Database Management for Data Science, Big Data Analytics,
- iii. Internet of Things (IoT) and Industrial Internet of Things (IIoT)
- iv. Cloud computing and its service models
- v. Cyber Security and Types of cyber attack

Unit 2: 10 Hours

#### **Applications of Emerging Technologies**

- i. Artificial Intelligence
- ii. Big Data Analytics
- iii. Internet of Things
- iv. Cloud Computing
- v. Cyber Security

Unit 3: 8 Hours

#### **Building Essential Skills Beyond Technology**

Importance of the following:

- i. Effective Communication Skills
- ii. Creative Problem Solving & Critical Thinking
- iii. Collaboration and Teamwork Skills
- iv. Innovation & Design Thinking
- v. Use of tools in enhancing skills

#### **Skill Developments Activities:**

- Proficient in certain programming languages such as R, Python, Java, C++, and more. While Python will make it easy for the student to create complex algorithms, C++ can accelerate the encoding process.
- Java to implement mappers and reducers—it is the best for both Certification in Big data Analytics
- Solid Knowledge of Mathematical and Algorithms
- Solid knowledge of statistics, probability, and applied math in the AI candidates, which they can utilize to solve their key business pain points.
- Data must be evenly distributed across a cluster. Therefore, Al aspirants must improve their knowledge of distributed computing.
- Transformation of pixel values into meaningful data or information.

#### References:

- 1. The learning resources made available for the course titled "Digital 101" on Future kills Prime Platform of NASSCOM
- Venugopal Jalihal Prof. Anand Patil, Digital Fluency, Companion Instructor Guide First Edition, Department of BCA, DMSM's BCA College, Gogate College of Commerce, Belagavi
- 3. David Crystal (2010), David Crystal Texts and Tweets: Myths and Realities, You tube Latest edition of text books may be used.

### Title of the Program: BBA (OHS) Course Code: BBAHS.2.1

**Title of the Course: Corporate Accounting** 

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	3+1+0Hrs	56 Hrs

#### Pedagogy:

- Class room activities are designed around the topic of the session towards developing better understanding, clearing misconceptions and discussions of higher order thinking skills like application, analysis, evaluation and design
- The content (both video and other resources) on the related topic, quiz on Future Skills Prime Platform.
- Exercise for practical activity of the week

#### **Course Outcomes:**

- Ability to raise share capital by following the procedures
- Enrich with the task of issuing debentures under the provision of company law.
- Conversant with underwriting of shares and debentures under SEBI regulations
- Draft a Financial Statements under Companies Act, 2013
- Value the good will of an organisation and determine the factors to be considered while assessing the goodwill and shares
- Calculate Net Profits for Managerial Remuneration under the provision of company Act

**Syllabus** 

#### **Unit 1: ISSUE OF SHARES AND DEBENTURES**

14 Hrs.

Share Capital: Subdivision of Share Capital; Issue of Shares, Pricing of Public Issue – Fixed Price Offer Method, Book-building Method; Journal entries for Issue of Shares - when payable fully on application and when payable in installments - if shares are issued at par, at premium and at discount. Calls-in-arrears and Calls-in-advance. Forfeiture and Re-issue of Shares. Debentures: Meaning & Types of Debentures; Provisions for Issue of Debentures under Companies Act, 2013. Accounting entries for issue of Debentures – when payable fully on application and when payable in installments; Issue of Debentures other than for Cash; Issue of Debentures as collateral security for loan.

#### **Unit 2: UNDERWRITING OF SHARES AND DEBENTURES**

08 Hrs.

Meaning of Underwriting – SEBI regulations regarding underwriting; Underwriting commission. Types of underwriting agreement – conditional and firm; Determination of Liability in respect of underwriting contract – when fully underwritten and partially underwritten – with and without firm underwriting.

#### Unit 3: FINANCIAL STATEMENTS OF COMPANIES

16 Hrs.

Components of Financial Statements – Statement of Profit and Loss and Balance Sheet. Schedule III of Companies Act, 2013 – Main features of Schedule III – Format and Content of Statement and Profit and Loss & Balance Sheet according to Schedule III. Problems on preparation of Financial Statements. Treatment for typical adjustments – depreciation, interest on debentures, tax deducted at source, advance payment of income tax, provision for taxation, and dividends.

#### **Unit 4: VALUATION OF GOODWILL AND SHARES**

12 Hrs.

Valuation of Goodwill: Meaning – Circumstances of Valuation of Goodwill – Factors influencing the value of Goodwill – Methods of Valuation of Goodwill: Average Profit Method, Super Profit Method, Capitalisation of average Profit Method, Capitalization of Super Profit Method, and Annuity Method - Problems. Valuation of Shares: Meaning – Need for Valuation – Factors Affecting Valuation – Methods of Valuation: Intrinsic Value Method, Yield Method - Problems.

#### **Unit 5: MANAGERIAL REMUNERATION**

06 Hrs.

Meaning – Provisions under Schedule V of Companies Act regarding Managerial Remuneration. Overall maximum managerial remuneration, Calculation of Net Profits for Managerial Remuneration. Simple Problems on calculation of remuneration payable.

#### **Skill Developments Activities:**

- Allotment of shares under prorate basis.
- Prepare financial statements and balance sheets under Indian Company Act 2013.
- Assess good will under various methods.
- Determine of Liability in respect of underwriting contract
- Valuation of goodwill under Capitalisation of average Profit Method
- Assessment of shares Intrinsic Value Method
- Compute managerial remuneration by applying provisions of Indian Companies Act.
- Declaration of dividend under provision of Companies Act

#### **References:**

- Nirmal Gupta, Corporate Accounting: Theory & Practice 2nd Ed,
- Chhavi Sharma; Financial Accounting: Cost Accounting: Theory & Practice, 3rd
- S. Jayapandian- Accounting on 3rd. Revised Ed. Effective Techniques for Decision Making
- T.S. Reddy and Murthy ;Corporate Accounting, Volume 1; Margham publications
- Gupta RL; Advanced Accounting; Sultan Chand Publisher
- SN Maheshwari; Financial Accounting; Himalaya publisher

### Title of the Program: BBA (OHS) Course Code: BBAHS.2.2

#### Title of the Course: Human Resource Management

Course Credits	No. of Hours per week	Total No. of Teaching Hours
3 Credits	2+1+0 Hrs	42 Hrs

#### Pedagogy:

Classrooms lecture, Case studies, Group discussion, Seminar, technology enabled learning and field work etc.

#### **Course Outcomes:**

On completion of this course, the student will be able to

- Apply human resource management perspective ability to draft HR planning
- Design job description and job specifications
- Administer Techniques of Job Design
- Recruit, select and interview job candidates
- Train using various methods of Training Implement Management Development Techniques
- Appraise the Performance of the employees
- Implement Employee benefits and Welfare measures
- Adopt Employee safety and Health Measures
- Ability to implement practices related to employee separation
- Implement methods of Industrial Democracy
- Adopt participative management in organizations

#### **Syllabus**

Unit-I 10 Hours

Introduction: Importance and Functions, Scope of HRM, Human Resource Management in a changing environment; Manpower Planning: Manpower planning process, Job Description and Job specification, Job analysis and Job design; Techniques of Job design.

Unit-II 10 Hours

HR Processes: Employee Selection and Development – Recruitment, Selection and Induction, Training and Development, Performance Appraisal

Unit-III 10 Hours

Compensation Planning- Employee Compensation, Job evaluation, Employee Benefits and Welfare, Compensation and Salary Administration. Governance: Integration and separation

Unit-IV 12 Hours

Employee Discipline, Suspension, Dismissal and Retrenchment; Employee Grievance Handling, Trade Unionism, Collective Bargaining, Industrial Democracy, Labor Laws. New Trends in HRM: HRM in India, HRM in International Firms, talent management, HR Accounting, HR Audit, HRIS, Impact of Pandemic on human resource- work from home issues

#### and challenges

#### **Skill Developments Activities:**

- HR Planning for a software company
- Job Analysis to hire school teachers for school run by municipal corporation
- HRIS- for Security guards
- Recruiting of personnel for Amazon
- Selection of ground staff for BIAP
- Orientation for newly selected police officers
- Training for conductors selected by KSRTC
- Employee Development of class 1 officers appointed by KPSC
- Career Planning
- Performance Appraisal- 360 degree

#### References:

- 1. Raymond Andrew Noe, John R. Hollenbeck, Barry Gerhart, Patrick M Wright, Human Resource Management, The McGraw Hill Pub, 2007
- 2. Flippo, Edwin B., Personnel Management, Tata McGraw Hill Publishing Co, 2007, New Delhi.
- 3. H. John Bernardin, Human Resource Management, McGraw Hill Pub, 2007.
- 4. Johm M Ivancevich, Human Resource Management, McGraw Hill Pub, 2007.
- 5. Louis & Gomitz Mejia et. al: Managing Human Resources, Pearson Education, 2007.
- 6. K. Aswathappa, Human Resource Management, Tata McGraw Hill, 2009.
- 7. T.V. Rao, Appraising and developing managerial performance, Excel,2001 Latest edition of text books may be used.

### Title of the Program: BBA (OHS) Course Code: BBAHS.2.3

Title of the Course: Foundation to Construction Safety

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	3+1+0Hrs	56Hrs

#### Pedagogy:

Classrooms lecture, Case studies, Group discussion, Seminar, technology enabled learning and field work etc.

#### **Course Outcomes:**

On completion of this course, the student will be able to

- Visualize the safety issues at different stages of construction activity.
- Understand the safety requirements in various construction operations and develop guidelines to ensure safety at construction site.
- Appreciate the health and safety requirements in material handling & equipment's and develop instructions to ensure safety at construction site.
- Envisage the health and safety obligations for the working at height, scaffold and the hot works carried in the construction sites.
- Learn the officially authorized provisions with respect to the health and welfare of workers at construction site.

#### **Syllabus**

#### **Unit-I: Foundation to construction Safety:**

14 Hours

Definition. - Construction, Construction Safety. Responsibilities of individuals involved in construction work - client, the planning supervisor, the designer, the principal contractor. Hazards and risks encountered in construction activities. Measures to be taken to minimize the risks. General principles of construction for Civil, Mechanical, and Electrical Works-Activities involved Expected Hazards, and Remedial measures. Management Responsibilities.

Excavation Safety: Definitions - Accepted Engineering Practices, Adjacent Structures Stability, Competent Person, Confined Space, Excavation, Trench (Trench excavation),Bell-bottom pier hole, Hazardous Atmosphere, Cave-ins, Ingress and Egress, Registered Professional Engineer, Soil Conditions, Support System, Sub-surface Encumbrances, Surcharge, Tabulated Data - tables and charts, Underground Installations, Unconfined Compressive Strength, Aluminum Hydraulic Shoring, Benching (Benching system), Cross braces, Ramp, Structural ramp, Protective System, Sheeting, Shield (Shield system), "Shoring (Shoring system), Sloping (Sloping system),Uprights Wales, Meaning and Objectives, Hazards of Trenching and Excavation Operations, Soil mechanics—Soil, Stable Rock, Type A, B, C and Layered Soils, protective systems—Shoring, Shielding, Sloping, Benching, underpinning. Pre-excavation Requirements, Special health and safety considerations.

#### **Unit II: Demolition safety:**

14 Hours

Introduction, Provision of Information, Survey of Demolishing structure, Preferred Method of Work, Safe Method of Work, Protection of the Public, Overhead and Underground Services, Temporary Services, Reduced voltage, Flammable Materials and Gases, Sequence of Demolition, Restricted Areas and Safe Distances, Health Hazards Training and Competence, Demolition safety tips Demolition equipment's.

**Crane Safety:** Introduction, Definitions, Basic principles of crane, Safe operation of lifting, General conditions, Types of crane, Crane Personnel, Crane and Rigging Safety Rules, Tower Crane, Location and position, Testing and certification, Lifting, Communication.

#### Unit-III: Mechanical equipment's and Safety:

14 Hours

Introduction, Types of mechanical equipment's - General requirements. Recommended Safe Practices Prior to Use of Compressors, Excavators, Forklifts, Dumpers and Dump trucks, Concrete mixers and Batching plants, Generators. Safety during Usage of Power Tools.

**Working at Height**: Introduction, Managing hazards-Identify the hazards Assess and control of the hazards, Safe access to roof areas, Assessment of the roofing material, Assessing the roof internally, Types of brittle roof cladding, Other working at height hazards, Edge protection, Safety nets, Crawl boards and roof ladders, Walking safely on a roof, Personal protective equipment.

#### **Unit-IV: Scaffold Safety:**

14 Hours

Definition, General hazards – falls from elevation, Struck by falling tools /debris, Electrocution, Scaffold collapse, Protecting workers from falling objects, Protecting workers from falling, Scaffold terminology, Scaffold construction materials, Competence and supervision of scaffolding operatives, Safe Scaffold Erection and Dismantling, Proper Use of Scaffolds - Ladders and Climbing, Guardrails Missing or Removed, Standing on Objects Above the Platform, Overloading, Exposure to Hazardous Material, Maintenance and Storage of scaffold materials. Types of scaffolds- Tube-and-coupler scaffolds, Suspension scaffolds, Mobile scaffolds. Scaffold inspection, scaffold safety essentials, Safe practice checklist

**Welding, Cutting and Brazing Safety:** Introduction General Requirements, General requirements of Storage of cylinders, Pressure-Reducing Regulators, Operating procedures.

#### **Skill Developments Activities:**

- Accomplish the targets of minimizing the risks and the associated workplace accidents by the adoption of the suitable control measures.
- Demonstrate the capabilities to develop the customized checklist which helps in the monitoring of the construction activities.
- Exhibit the competency in training the employees to become competent workmen.

#### **References:**

- 1. A.M. Sharma Industrial Health and Safety Management.
- 2. N.K. Tarafdar and K.J. Tarafdar Industrial Safety Management.
- 3. R.K. Mishra Safety Management.
- 4. R. K. Jain And Sunil. S. Rao Industrial Safety, Health and Environment Systems.
- 5. David V. McCollum. 2007. Construction Safety Engineering Principles-Designing and Managing Safer Job Sites. New York: McGraw Hill companies.

### Title of the Program: BBA (OHS) Course Code: BBAHS.2.4

Title of the Course: OHS Management

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	3+1+0Hrs	56Hrs

#### Pedagogy:

Classrooms lecture, Case studies, Group discussion, Seminar, technology enabled learning and field work etc.

#### **Course Outcomes:**

On completion of this course, the students will be able to

- Demonstrate the role and Responsibility of OHS officers.
- Apply the statutory rules and regulations applicable in various industries.
- Conduct Accident Investigation process and find the root cause of an Accident.
- Calculate the compensation money for injured person and reporting to higher authorities.
- Form an OHS policy for any organization and demonstrate its need.
- Explain the various elements of OHS Management
- Gain knowledge on essential elements of *work permit system, s*afety audit, safety survey, and emergency management.
- Form an emergency management plan for any Organization as per Indian Factories Act and Rules.

#### **Syllabus**

#### Unit-I: Accident Cost Evaluation:

#### 14Hours

Introduction, Consequences of Accidents and their Cost, *Accident Cost Evaluation*, Cost of Accidents - Iceberg Principle, Direct Costs, Indirect Costs. Accident Cost Assessment - Sample Form. Computation of Accidents cost- Accidents cost to the- Injured Person, Management and Society. Cost Compilation Procedure.

Accident and Incident Investigation Reporting and Analysis: Accident and Incident Investigation - Philosophy, purpose, process and types of investigations. Identifying the key factors and the immediate and basic causes. Corrective Action. Agencies investigating accident. Accident reporting- Report forms, writing reports, essential elements. Accident and Incident Analysis - Standard classification of factors associated with accident. Methods of collating and tabulating data. Record keeping.

**Measurement & Evaluation of Performance:** Definition of Accident, Reportable, Non-Reportable, Fatal, Non-Fatal. Near miss accident. Lost time accident. Disabling injury. Accidents reportable under the Factories Act and ESI Act. Frequency Rate, Severity Rate, Incidence Rate, Frequency Severity Index, Safety Score. Temporary Disablement and Permanent Disablement Partial and Total Disablement. Time Charges scheduled in 'The Employee's Compensation Act, 1923' and the National and International Standards.

#### **Unit-II: Factories Act-1948:**

14 Hours

Introduction, Highlights, Definitions- Factory, Manufacturing Process, Worker, competent person, Power, Prime mover, Transmission machinery, Machinery, Adult, Adolescent, Child, Young Person, Calendar Year, Day, Week, Shift and Relay, Occupier. Scope and Applicability.

**Health Provisions in Factory Act, 1948:** Section 11. Cleanliness. Section 12. Disposal of wastes and effluents. Section 13. Ventilation and temperature. Section 14. Dust and fume. Section 15. Artificial humidification. Section 16. Overcrowding. Section 17. Lighting. Section 18. Drinking water. Section 19. Latrines and urinals. Section 20. Spittoons.

Safety Provisions in Factory Act, 1948: Section 21. Fencing of machinery. Section 22. Work on or near machinery in motion. Section 23. Employment of young person's on dangerous machines. Section 24. Striking gear and devices for cutting off power. Section 25. Self-acting machines. Section 26. Casing of new machinery. Section 27. Prohibition of employment of women and children near cotton-openers. Section 28. Hoist and lifts. Section 29. Lifting machines, chains, ropes and lifting tackles. Section 30. Revolving machinery. Section 31. Pressure plant. Section 32. Floors, stairs and means of access. Section 33. Pits, sumps, openings in floors, etc. Section 34. Excessive weights. Section 35. Protection of eyes. Section 36. Precautions against dangerous fumes, gases, etc. Section 36A. Precautions regarding the use of portable electric light. Section 37. Explosive or inflammable dust, gas, etc. Section 38. Precautions in case of fire. Section 39. Power to require specifications of defective parts or tests of stability. Section 40. Safety of buildings and machinery. Section 40A. Maintenance of buildings. Section 40B. Safety Officers. Section 41. Power to make rules to supplement this Chapter.

Unit III: 14 Hours

Provisions relating to Hazardous Processes in Factory Act, 1948: Section 41A. Constitution of Site Appraisal Committees. Section 41B. Compulsory disclosure of information by the occupier. Section 41C. Specific responsibility of the occupier in relation to hazardous processes. Section 41D. Power of Central Government to appoint Inquiry Committee. Section 41E. Emergency standards. Section 41F. Permissible limits of exposure of chemical and toxic substances. Section 41G. Workers' participation in safety management. Section 41H. Right of workers to warn about imminent danger.

Other Relevant Provisions in Factory Act, 1948: Section 45. First-aid-appliances. Section 87. Dangerous operations. Section 87A. Power to prohibit employment on account of serious hazard. Section 88. Notice of certain accident. Section 88A. Notice of certain dangerous occurrences. Section 89. Notice of certain diseases. Section 90. Power to direct inquiry into cases of accident or disease. Section 91. Power to take samples. Section 91A. Safety and occupational health surveys. ILO Policy on Alcohol and Drugs Prevention in the Workplace.

#### **Unit IV: Work Permit System:**

14Hours

List of Safety Documents, Type of Work Permits- Hot, Cold, Confined Space Entry / Vessel Entry, Electrical isolation and Energization, Vehicle Entry, Working at Height, Excavation, Blasting, Radiography. Limited Work Permit, Contributing Factors for Work Permit, Application of Work Permit System, Permit Issue, Review, Validation, Cancellation, and Completion of Work, Administration Process for Work Permit System, Benefits and Limitations of Work Permit System.

**Safety Audit:** Introduction of safety audit, Definition of safety audit, types of safety audits, Objectivities of safety audit, Activities performed in safety audit, elements of safety programmes, safety audit report, Safety inspection and Safety walk.

**Safety Survey:** Introductions to safety survey, definition of safety survey, Points to be involved in safety survey, Schedules of safety survey, Conducting and Managing Safety Survey tips for

conducting safety survey, safety survey check list.

**Emergency Management:** Introduction, Need, Definition- Emergency, Emergency Management, Causes of Emergency, Types of Emergencies, On-Site Emergency- Objectives, Main Elements. Off-Site Emergency Plan.

#### **Skill Developments Activities:**

- Exhibit the competency in the application of 'Behavioral based Theory' and monitor for the reduction in the number of accidents.
- Conduct the occupational health, safety, and the environmental surveys and audits for the various industries.
- Carry out the calculations for the payment of compensation money for the injured person (for any given case).
- Exhibit the competency regarding the issue and usage of work permit system and train the employees to achieve the target of zero accident levels.
- Demonstrate table top exercise for the various identified emergencies.

#### References:

- 1. Mistry -- Industrial Safety.
- 2. R.K. Mishra Safety Management.
- 3. R.K. Jain and Sunil.S. Rao Industrial Safety, Health and Environment Systems.
- 4. Clifton A. Ericson, II Hazard Analysis Techniques for System Safety.

### Title of the Program: BBA (OHS) Course Code: BBAHS.2.5

#### Title of the Course: Environmental Control and Practices

Course Credits	No. of Hours per week	Total No. of Teaching Hours
2 Credits	2+0+0 Hrs	28 Hrs

#### Pedagogy:

Class lecture, Group discussion, brain storming, Seminar & field work etc.

#### **Course Outcomes:**

On completion of this course, the student will be able to

- Take measures to maintain his/ her surrounding clean and tidy
- Create awareness about the benefits of Biodiversity
- Reap benefits of Swatch Baharat for the betterment of people
- Orient the local people about the ill effects of global warming
- Extend support to the needy to fight against the environmental pollution
- Join hands to movement for conservation of precious water
- Adopt a policy such that learners to motivate his/ her neighbor to plant at least one plant in front of each house for better tomorrow

#### **Syllabus**

Unit-1: Introduction 8 Hours

- 1.1: Environmental Studies Importance and scope
- 1.2: Ecosystems Concept, structure and function; Pond ecosystem
- 1.3: Bio-geographical classification of India.
- 1.4: Biodiversity Meaning; Hotspots of biodiversity in India; Threats to biodiversity; Endangered and endemic species Meaning.

#### **Unit-2:Environmental pollution and its management**

8 Hours

- 2.1: Air pollution, water pollution, noise pollution, Cause, effect and control measures.
- 2.2: Global Warming Meaning, causes and effects
- 2.3: Solid waste management biodegradable and non-biodegradable waste
- 2.4: Segregation of domestic waste at source; Impact of plastic on human and animal health

#### **Unit-3:Natural resources and management**

6 Hours

- 3.1: Types of natural resources and energy resources.
- 3.2: Water conservation rain water harvesting; water shed management Meaning and importance
- 3.3: Wasteland reclamation, soil conservation, afforestation Meaning and importance
- 3.4: Disaster Definition and types (Natural and Man-made); Self-protection during disasters (Fire, Floods, Earth quakes)

#### **Unit-4: Environmental awareness and Legislations**

6 Hours

- 4.1: Environment movements Chipko, Appiko, Narmada Bachao Andolan
- 4.2: Individual and community initiatives Salu Marada Thimmakka; Concept of Sacred Groves (Devarakadu)
- 4.3: National Environmental Policy, 2006 Provisions and importance; Swachh Bharat Mission Objectives
- 4.4: Environmental ethics Issues & possible solutions.

#### **Skill Developments Activities:**

- Save our earth
- Participation in swatch sarweshkan
- Activities on solid & hazardous waste
- Landfill & combustion
- Composting
- Save soil for sustainable development.
- Measures to be taken in the event of earth quake
- Going green
- Green class room practices
- Recycling tips & tricks
- Reusing & recycling reduces waste recycling
- Coloring packet: reusing an old jar
- Minimizing pollution
- Activities on the product lifecycle & use
- Environment day
- Ways to help the environment
- · Protecting ecosystems

#### References:

- 1. K.C. Agarwal, Environmental Biology, Bikaner, Nidhi Pub. 2001.
- 2. Erach Bharucha, Text book of Environmental Science. Orient Black Swan, 2013.
- 3. E. P. Odum, Basic Ecology, W.B. Saunders Co. USA 1983.
- 4. G.N. Pandey, Environmental Management. Vikas Publishing House, 1997.
- 5. Pashupati Kumar Roy and Arvind Kumar, Environmental Resource Management. Daya Pub., 2008.
- 6. Robert Coenraads, Natural disasters and how we cope, Millennium House, 2010.
- 7. P.D. Sharma, Ecology and Environment Rastogi Publications, 2011...
- 8. Verma and Agarwal. Environmental Biology. S Chand and Company, 2000
- 9. Basker, Sushmitha & Bhasker, R., Environmental Studies for Undergraduate Courses, New Delhi, Unicorn Books, 2007
- 10. Harimohan Singh, Waste Water Treatment Technology, Alfa Publications, New Delhi, 2010
- 11. Janamjit Singh, Biodiversity planning for sustainable development, New Delhi, Deep and Deep Pub., 2006
- 12. R.B. Singh and Suraj Mal, Environmental change and bio-diversity. Jaipur, Rawat Pub, 2009
- 13. K. N. Bhatt, Population Environment and Health emerging issues, Jaipur, Rawat Pub., 2010
- 14. Aravinda Hebbar, Parisara Vijnana, Udupi, Lathangi Prakashana, 2003