

CODE: ZBCE-101
SUBJECT: Communication Skills (B.Voc)
CODE: ZBCE-101
CATEGORY: General Education Component

Credit	Hours	Marks		
		I	E	To
3	45	15	35	50

Objectives:

- To inculcate in students professional and ethical attitude, effective communication skills, teamwork, skills, multidisciplinary approach and an ability to understand engineer's social responsibilities.
- To inculcate in students written communication skills.

Learning Outcomes:

The syllabus introduces students to have basic skill set of channelizing information, self development, decision making, and interpersonal skills.

Unit Number	Key Learning	NOS Mapping
Unit-I Communication:	Meaning of Communication, Importance of Communication, Types of communication. Process of communication, Communication network in an organization, Barriers to communication, Essentials of good communication, Communication techniques	ASC/N3507 ASC/N3508
Unit-II: (a)Remedial English Grammar (b)Understanding and applying Vocabulary	Articles, agreement between verb and subject, uses of tenses, Modal and their uses, Prepositions, active and Passive voice. One word substitutes, Synonyms and Antonyms Word formation:-Prefixes , Bases and Suffixes, one word Substitution, homonyms ,homophones.	
Unit-III Listening Skills	The process of listening, Types of listening, Benefits of effective listening, Barriers to listening.	ASC/N3507 ASC/N3508
Unit-IV Reading Skills	Process and methodologies of reading, Skimming and scanning, Levels of reading ,Proofreading, Summarizing,Precise writing, Unseen comprehension	ASC/N3507 ASC/N3508

	passage, Note taking and reviewing, conversion of given information into charts and graphs.	
Unit-V Writing Skills	Elements of Effective Writing. Main Forms of Written Communication: Notices, Drafting an E-mail. Correspondence: Personal Official and Business, Technical Report Writing, Preparing agenda and minutes of meetings.	ASC/N3507 ASC/N3508

Suggested Readings:

1. Sethi, J & et al. A Practice Course in English Pronunciation, Prentice Hall of India, New Delhi.
2. Sen, Leena. Communication Skills, Prentice Hall of India, New Delhi.
3. D.G Saxena, Essentials of Communication Skills, Kuntal Tamang.
4. D.G Saxena, Communication Skills in English Kuntal Tamang.
5. Roach Peter. English Phonetics and Phonology.
6. A.S. Hornby's. Oxford Advanced Learners Dictionary of Current English, 7th Edition.
7. Prasad, P. The Functional Aspects of Communication Skills, Delhi.
8. McCarthy, Michael. English Vocabulary in Use, Cambridge University Press.
9. Rajinder Pal and Prem Lata. English Grammar and Composition, Sultan Chand Publication.
10. Idioms & Phrases (English-Hindi), Arihant Publication (India) Pvt. Ltd.
11. One Word Substitution, Dr. Ashok Kumar Singh, Arihant Publications (India) Pvt, Ltd .

Communication Skill Lab

Paper: Communication Skills Lab

Total Marks: 50

Final Exam Duration: Practical: 4 Hrs.

External (PR):15 Internal Marks (PR): 35

1. Greetings and starting a conversation.
2. Information transfer and Oral presentation
3. Reading activities.
4. Extempore public speaking.
5. Situational dialogues / Role play.
6. Telephonic skills.
7. Group Discussion.

8. Intonation and common error in pronunciation
9. Listening and comprehension activities.

SUBJECT: Basics of Agriculture farming

CODE:

CATEGORY: Skill Education Component

Credit	Hours	Marks		
		I	E	To
3	45	30	70	100

Objectives

To study about importance of agriculture and execution of various cultivation practices in the field. The course will help in developing the basic technical skills. It also helps in understanding the ON farm, OFF farm and NON farm.

Learning Outcomes

- Study Role of agriculture in Indian economy, cropping pattern.
- Understand Various forms of agriculture practises.
- Study various agriculture innovative practices.
- Understand agricultural policies.
- Learn about OFF-FARM i.e., Dairy and Fisheries farming.
- Learn about NON-FARM essential i.e., Warehousing and Microfinance

Unit	Topic	Key Learning
I	Introduction to Agriculture	<ul style="list-style-type: none"> • Introduction, History of Agricultural Development, Factors affecting agriculture, Factors affecting agriculture, Indian agriculture under five year plans, Role of agriculture in Indian economy, cropping pattern, Agriculture practice
II	Innovative Agriculture practices	<ul style="list-style-type: none"> • Information and Communication Technology (ICT) and Agriculture, • Drone or UAV: Principle and mechanism, • IOT: Role in Agriculture.
III	OFF-FARM essentials	<ul style="list-style-type: none"> • Dairy: Traditional and modern dairying, Three Tier Model - The Anand Pattern, National Dairy Development Board (NDDB) • Fisheries
IV	NON-FARM essentials	<ul style="list-style-type: none"> • Warehousing • Micro finance
V	Agriculture waste management	<ul style="list-style-type: none"> • Introduction, Agricultural waste generation, waste utilization, Classification of waste, Bio-CNG: An Alternative Fuel

Suggested Readings:**Text Books**

- Datt and Sundharam's Indian Economy.
- Modern Techniques of raising field crops by Chidda Singh, OXFORD & IBH publishing Co. Pvt. Ltd.,
- Handbook of Agriculture (ICAR Publication)
- Text Book of field crops by Rajendra Prasad, ICAR Publication.
- Basic agriculture, Student Handbook Class X NSQF Level-2

Reference Books

- Training manual for ORGANIC AGRICULTURE Edited by Nadia SCIALABBA
- Microfinance in India 2017 – 18 by NABARD.
- Farm Power and Machinery, ICAR e-Course
- Basics of Agriculture for Engineers by R.K. Sharma & A.K.Soni, R. Bhagat, N. Pandey and V.K. Pandey.

SUBJECT: Basic of Computers**CODE:****CATEGORY:** Skill Education Component

Credit	Hours	Marks			
		I	E	P	To
5	105	15	35	50	105

Objectives

- The syllabus introduces students to basic information and communication technology and proper paradigms that need to be implemented to develop any kind of computer applications. The course will help in developing the basic technical skills by hands on experience.

Learning Outcomes

- State the applications of Computers and understand the basic components of computer. (Theory)
- Identify & describe various parts of computers like CPU, keyboard, monitor, etc. (Theory)
- View files, work with files and customize window (Theory)
- Able to Differentiate in various operating system. (Theory)
- Apply the office Applications for the task assigned by the authorities. (Theory)
- Outline the basics of Networking. (Theory)
- Make use of Internet and its applications when required. (Theory)

Unit	Topic	Key Learning
I	Introduction to Computer System: Basic Applications of Computer; Input Output Devices, Computer Memory, Concepts of Hardware and Software, Computer Virus:	<ul style="list-style-type: none"> • State the applications of Computers and understand the basic components of computer. (Theory) • Identify & describe various parts of computers like CPU, keyboard, monitor, etc. (Theory)

	Definition, Types of viruses, Characteristics of viruses, Anti-virus software,	
II	Number System: Introduction to number system, Decimal to Binary and Vice Versa, Decimal to Octal and Vice Versa, Decimal to Hexa-Decimal and Vice Versa, ASCII Codes	<ul style="list-style-type: none"> • Understand the Binary Language of Computers.
III	Operating System: Overview of operating system: Definition, Functions of operating system, Need and its services, Types of operating system, Batch Processing, Multiprocessing, Multiprogramming, Time-Sharing, On-Line Processing, Real-Time Processing	<ul style="list-style-type: none"> • View files, work with files and customize window (Theory) • Able to Differentiate in various operating system. (Theory)
IV	Understanding Office Applications: Introduction to MS Word, Introduction to MS Excel and its applications, Introduction to MS PowerPoint, Menus, Shortcuts, Document types, Formatting documents, spread sheet and presentations, Working with Spreadsheets, Different templates, Macros, Mail merge.	<ul style="list-style-type: none"> • Apply the office Applications for the task assigned by the authorities. (Theory)
V	Networking: Network Technologies, Introduction to Internet and protocol, Network connecting devices, Topologies, HTTP, HTTPS.	<ul style="list-style-type: none"> • Outline the basics of Networking. (Theory) • Make use of Internet and its applications when required. (Theory)

Suggested Readings:

Books Recommended

Text Books

1. Computers and Beginners by Jain, V.K.;
2. Computer Fundamentals by Anita Goel, Pearson.

Reference Books

1. Introduction to Information Technology, Leon Tech World by Leon and Leon
2. Foundations of Computing, BPB Publication by Sinha, Kr. Pradeep and Preeti Sinha;
3. Word Processing and Typing by Sharon Spencer, Heinemann.
4. MS Office by S.S. Srivastava, Firewall Media.
5. Microsoft Office 2010 by Bittu Kumar, V & S Publications
6. Data Communication and Networking by Behrouz.A. Forouzan, McGraw Hill

Web Links

<http://cec.nic.in/E-Content/Pages/default.aspx>

SUBJECT: Organic farming

CODE:

CATEGORY: Skill Education Component

Credit	Hours	Marks		
3	45	I	E	To
		15	35	50

Objectives

To study about basic concepts of organic farming. The course will help in developing the basic technical skills. It also helps in understanding the Organic standards and certification and Urban Farming.

Learning Outcomes

- Study Need of organic Farming.
- Difference between organic and conventional farming.
- Study organic certification process.
- Need of urban farming.
- Understand Aquaponics and hydroponics.
- Impact of pesticides and insecticides on the environment.
- Learn about reducing impacts through Integrated Pest management

Unit	Topic	Key Learning
I	Introduction to Organic Farming	<ul style="list-style-type: none">• Introduction, Need of organic Farming, Principles of organic farming, Important goals, Difference between organic and conventional farming,
II	Nutrient management	<ul style="list-style-type: none">• Nurtures soil biodiversity, soil testing, soil analyses, Composting, green manures, animal manures, fertilizers
III	Organic standards and certification	<ul style="list-style-type: none">• Organic certification, purpose of certification, certification process: operational structures, National Accreditations only, Evaluation committee, certification agencies, Inspectors
IV	Urban Farming	<ul style="list-style-type: none">• Need of urban farming, factors involved, technology used, different case studies• Aquaponics• Hydroponics
V	Pests and Insects	<ul style="list-style-type: none">• Pesticides, Insecticides, Herbicides, environmental impact, reducing impacts through Integrated Pest management.

Suggested Readings:

Text Books

- Organic farming and sustainability by P K Shetty, Claude Alvares and Ashok Kumar Yadav.
- Organic Agriculture: A Global Perspective, Paul Kristiansen, Acram Taji and John Reganold

Reference Books

- The Complete Book on Organic Farming and Production of Organic Compost by NPCS Board of Consultants & Engineers

- Future of urban agriculture in India, Meera Sahasranaman December-2016

SUBJECT: Fundamental of Rural

Development

CODE:

CATEGORY: General Education

Component

Credit	Hours	Marks		
3	45	I	E	To
		30	70	100

Objectives: To Study about the Rural Economy and Development; Rural Communication and extension and Maximum utilisation of local resources without adversely affecting the environment. The development of rural activities is essential to accelerate the pace of over all economic development of the country.

Learning Outcomes:

- Basic understanding of Indian villages and their pattern
- Rural health conditions
- Extension methods, organizing groups, discussion, farm and home visit, leaflet, pamphlets etc.

UNIT	CHAPTER	CONTENT
1	Rural Economy and Development	Basic understanding of sociology particularly in terms of society at large and concepts like caste, class, creed, race, gender etc
		Basic understanding of Indian villages and their pattern in terms socio, economic, political and cultural pattern.
	History of development	Rural development, History of Govt. Development Programmes, Panchayati Raj Institutions,
2	Rural Communication and extension	SMCRE model, Relation of SMRCE with diffusion, Extension methods, organizing groups, discussion, farm and home visit, leaflet, pamphlets etc.
	Communication Skills	Communication exercises, Effective ways of communication, How to address the groups, Clear pronunciations, Putting the objectives to rural mass, A drama to be played by the students at the end of the week
	SHG a tool	Evolution of SHG, SHG a tool for development, Addresses women development, Women vis-à-vis rural India; Advance study of SHG, Like records, Group meeting, models of SHGs, SHG and credit; How to form a SHG, different way to approach the community and mobilize women; Book keeping, cash book ledger, Book keeping: Basic of accounting, Need of accounts, some basic exercises
3	Basics of Computer	Word, excel, Internet, Data entry

	Rural Women	A perspective, Why women are backward, what things need to be done etc.
	Adult and Non Formal Education	Need of education, how to run NFE centers,
	Social Research	Develop Questionnaire, Survey methods, Case study etc.
	Rural Health	Rural health conditions with focus on child health, AIDS and RH issues, (Mostly theory parts)
	Agriculture Extension	Agriculture in India, Agriculture research in India
	Micro Credit	Micro credit work, Models, thumb rules, ways to do it etc.
4	Understanding Cooperatives	History of cooperative and models of cooperatives, MACS Act.
	Livelihood	Livelihood models, Need of livelihood
	Micro Finance	How to give credit, Group recognition test, tracking of Loans, Different formats etc. Bank linkage; Models of Micro finance, Regulatory framework, Need of financial services
	MIS	Importance, need
	Standards in MF	Calculating OTR, PAR, Rep. Rate, rating groups,
	Transparency	Transparency in social life, MFI, Work, etc.

Suggested Readings:

- Rural Development: Principles, Policies, and Management by Katar Singh, Anil Shishodia.
- Fundamentals of Extension Education and Rural Development with practical by Sagar Mondal, Om Prakash Mishra

