

# LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

**COURSE: Health Care**  
**JOB ROLE: Dietetic Aide**  
(QUALIFICATION PACK: Ref. Id HSS/Q5201)

**Classes 9<sup>th</sup> and 10<sup>th</sup>**



**PSS CENTRAL INSTITUTE OF VOCATIONAL EDUCATION**  
**Shyamla Hills, Bhopal- 462 002, M.P., India**

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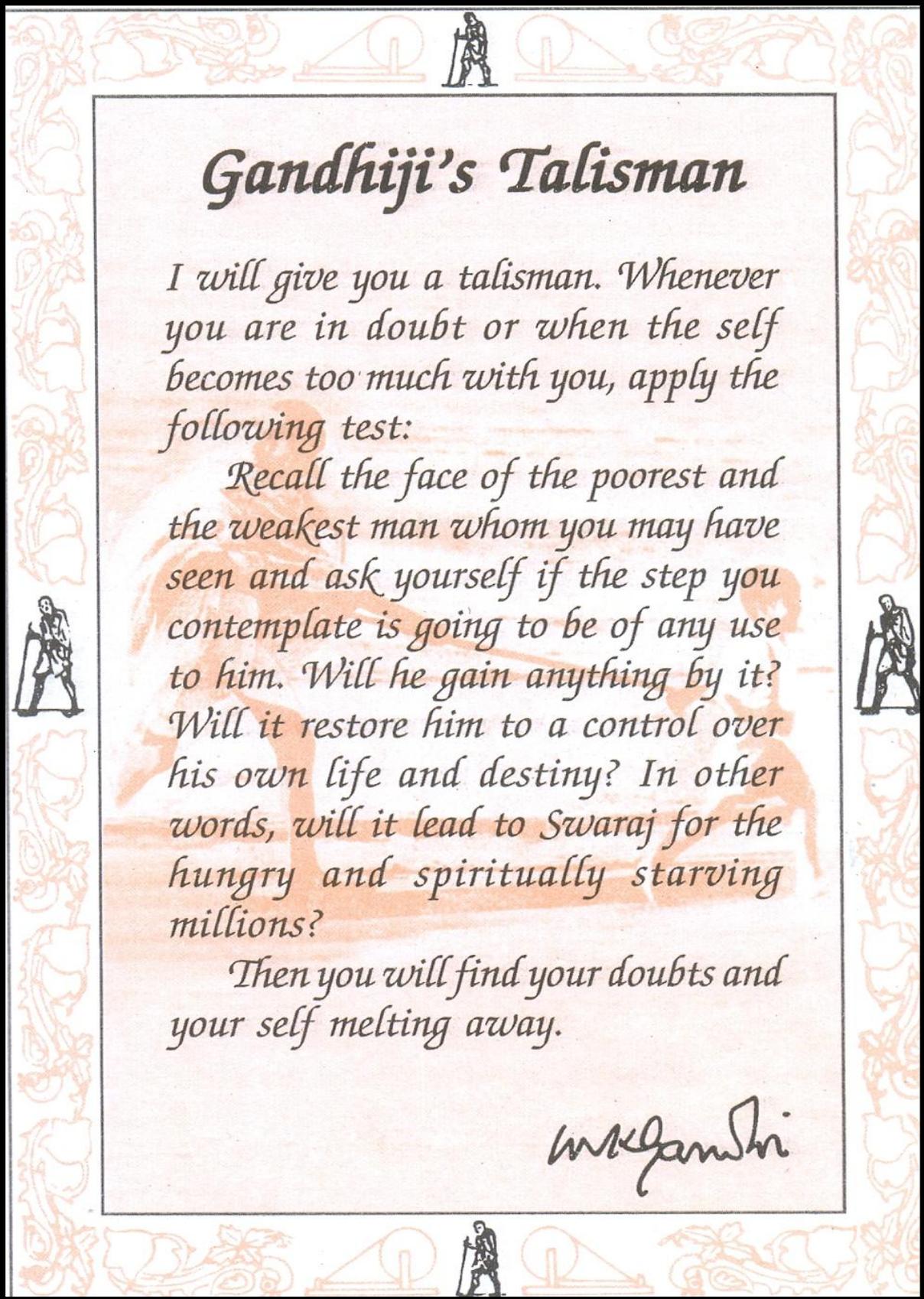
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## Gandhiji's Talisman

*I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test:*

*Recall the face of the poorest and the weakest man whom you may have seen and ask yourself if the step you contemplate is going to be of any use to him. Will he gain anything by it? Will it restore him to a control over his own life and destiny? In other words, will it lead to Swaraj for the hungry and spiritually starving millions?*

*Then you will find your doubts and your self melting away.*

*M.K. Gandhi*

**LEARNING OUTCOME BASED VOCATIONAL  
CURRICULUM  
Health Care – Dietetic Aide**

**January, 2020**

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## FOREWORD

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The Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) a constituent of the National Council of Educational Research and Training (NCERT) is spearheading the efforts of developing learning outcome based curricula and courseware aimed at integrating both vocational and general qualifications to open pathways of career progression for students. It is a part of Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education (CSSVSHSE) launched by the Ministry of Human Resource Development, Government of India in 2012. The PSS Central Institute of Vocational Education (PSSCIVE) is developing curricula under the project approved by the Project Approval Board (PAB) of Samagra Shiksha. The main purpose of the learning outcome based curricula is to bring about the improvement in teaching-learning process and working competences through learning outcomes embedded in the vocational subject.

It is a matter of great pleasure to introduce this learning outcome based curriculum as part of the vocational training packages for the job role of Dietetic Aide. The curriculum has been developed for the higher secondary students of vocational education and is aligned to the National Occupation Standards (NOSs) of a job role identified and approved under the National Skill Qualification Framework (NSQF).

The curriculum aims to provide children with employability and vocational skills to support occupational mobility and lifelong learning. It will help them to acquire specific occupational skills that meet employers' immediate needs. The teaching process is to be performed through the interactive sessions in classrooms, practical activities in laboratories and workshops, projects, field visits, and professional experiences.

The curriculum has been developed and reviewed by a group of experts and their contributions are greatly acknowledged. The utility of the curriculum will be adjudged by the qualitative improvement that it brings about in teaching-learning. The feedback and suggestions on the content by the teachers and other stakeholders will be of immense value to us in bringing about further improvement in this document.

Hrushikesh Senapaty  
*Director*  
*National Council of Education Research and Training*

# PREFACE

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India today stands poised at a very exciting juncture in its saga. The potential for achieving inclusive growth are immense and the possibilities are equally exciting. The world is looking at us to deliver sustainable growth and progress. To meet the growing expectations, India will largely depend upon its young workforce. The much-discussed demographic dividend will bring sustaining benefits only if this young workforce is skilled and its potential is channelized in the right direction.

In order to fulfil the growing aspirations of our youth and the demand of skilled human resource, the Ministry of Human Resource Development (MHRD), Government of India introduced the revised Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education that aims to provide for the diversification of educational opportunities so as to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provide an alternative for those pursuing higher education. For spearheading the scheme, the PSS Central Institute of Vocational Education (PSSCIVE) was entrusted the responsibility to develop learning outcome based curricula, student workbooks, teacher handbooks and e-learning materials for the job roles in various sectors, with growth potential for employment.

The PSSCIVE firmly believes that the vocationalisation of education in the nation need to be established on a strong footing of philosophical, cultural and sociological traditions and it should aptly address the needs and aspirations of the students besides meeting the skill demands of the industry. The curriculum, therefore, aims at developing the desired professional, managerial and communication skills to fulfil the needs of the society and the world of work. In order to honour its commitment to the nation, the PSSCIVE has initiated the work on developing learning outcome based curricula with the involvement of faculty members and leading experts in respective fields. It is being done through the concerted efforts of leading academicians, professionals, policy makers, partner institutions, Vocational Education and Training experts, industry representatives, and teachers. The expert group through a series of consultations, working group meetings and use of reference materials develops a National Curriculum. Currently, the Institute is working on developing curricula and courseware for over 100 job roles in various sectors.

We extend our gratitude to all the contributors for selflessly sharing their precious knowledge, acclaimed expertise, and valuable time and positively responding to our request for development of curriculum. We are grateful to MHRD and NCERT for the financial support and cooperation in realising the objective of providing learning outcome based modular curricula and courseware to the States and other stakeholders under the PAB (Project Approval Board) approved project of Samagra Shiksha of MHRD.

Finally, for transforming the proposed curriculum design into a vibrant reality of implementation, all the institutions involved in the delivery system shall have to come together with a firm commitment and they should secure optimal community support. The success of this curriculum depends upon its effective implementation and it is expected that the managers of vocational education and training system, including subject teachers will make efforts to create better facilities, develop linkages with the world of work and foster a conducive environment as per the content of the curriculum document.

The PSSCIVE, Bhopal remains committed in bringing about reforms in the vocational education and training system through the learner-centric curricula and courseware. We hope that this document will prove useful in turning out more competent Indian workforce for the 21<sup>st</sup> Century.

RAJESH P. KHAMBAYAT  
*Joint Director*  
*PSS Central Institute of Vocational Education*

## ACKNOWLEDGEMENTS

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On behalf of the team at the PSS Central Institute of Vocational Education (PSSCIVE) we are grateful to the members of the Project Approval Board (PAB) of Samagra Shiksha and the officials of the Ministry of Human Resource Development (MHRD), Government of India for the financial support to the project for development of learning outcome based curricula.

We are grateful to the Director, NCERT for his support and guidance. We also acknowledge the contributions of our colleagues at MHRD, RMSA Cell at the National Council of Educational Research and Training (NCERT), National Skill Development Agency (NSDA), National Skill Development Corporation (NSDC) and Health Care Sector Skill Council (HCSSC) for their academic support and cooperation.

We are grateful to the course coordinator A. Nayak, Professor and Head, Department of Health and Paramedical Sciences and experts for their untiring efforts and contributions in the development of this learning outcome based curriculum. Their names are acknowledged in the list of contributors.

The contributions made by Vinay Swarup Mehrotra, Professor and Head, Curriculum Development and Evaluation Centre (CDEC), Dipak Shudhalwar, Associate Professor, Department of Engineering & Technology, PSSCIVE in the development of the curriculum for employability skills are duly acknowledged.

The assistance provided by Jivan Koli, Computer Operator Grade II in typing and composing of the material is duly acknowledged.

PSSCIVE Team

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# 1. COURSE OVERVIEW

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## **COURSE TITLE: Health Care – Dietetic Aide**

A Dietetic Aide assists a registered Dietician in planning, preparing and serving meals to patient with specific dietary and nutritional needs. The key responsibilities of the Dietetic Aide include diet preparation, diet regulations, food handling, safety and sanitary standards and certain administrative functions. The job requires the individual to demonstrate clinical, communication skills and ethical behavior. Healthcare sector is going rapidly over the years. India has a shortfall of 6 million health care professionals and India is far behind the global standards in term of availability of health care services. The job role of Dietetic Aide is one such area where the shortage of this kind of manpower is felt.

**COURSE OBJECTIVES:** On completion of the course, student should be able to:

- Communicate effectively with the customers;
- Identify and control hazards in the workplace that pose a danger or threat to their safety or health, or that of others.
- Demonstrate the knowledge of modern computers and their parts and peripherals
- Communicate effectively at workplace
- Demonstrate knowledge and understanding about the role of diet assistant in the healthcare settings.
- Demonstrate the ability to perform clinical skills essential in providing basic diet services such as supervising preparation of food & serving meals to the patient.
- Demonstrate safe handling and management of food by following quality assurance process.
- Demonstrate techniques to show safe disposal of food waste.
- Demonstrate maintenance and cleanliness of all equipment, utensils and tools coming in contact with food.
- Demonstrate techniques to maintain the personal hygiene needs

**COURSE REQUIREMENTS:** The learner should have the basic knowledge of science.

**COURSE LEVEL:** This is level 4 courses in Dietetic Aide for Class 9<sup>th</sup> and Class 10<sup>th</sup>.

**COURSE DURATION: 400 hrs**

Class 9<sup>th</sup> : 200 hrs  
 Class 10<sup>th</sup> : 200 hrs

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**Total : 400 hrs**

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## 2. SCHEME OF UNITS

This course is a planned sequence of instructions consisting of Units meant for developing employability and vocational competencies of students of Class 9<sup>th</sup> and 10<sup>th</sup> opting for vocational subject along with general education subjects. The unit-wise distribution of hours and marks for Class 9<sup>th</sup> is as follows:

<b>CLASS 9<sup>th</sup></b>			
<b>Units</b>		<b>No. of Hours for Theory and Practical =200</b>	<b>Max. Marks for Theory and Practical = 100</b>
<b>Part A</b>	<b>Employability Skills</b>		
	Unit 1: Communication Skills – I	20	10
	Unit 2: Self-management Skills – I	10	
	Unit 3: Information and Communication Technology Skills – I	20	
	Unit 4: Entrepreneurship Development – I	15	
	Unit 5: Green Skills – I	10	
	<b>Total</b>	<b>75</b>	
<b>Part B</b>	<b>Vocational Skills</b>		
	Unit 1: Introduction to Healthcare System	35	30
	Unit 2: Role and Responsibilities of Dietetic Aide	20	
	Unit 3: Food Handling and Hygiene Practices	40	
	<b>Total</b>	<b>95</b>	
<b>Part C</b>	<b>Practical Work</b>		
	Practical Examination	06	15
	Written Test	01	10
	Viva Voce	03	10
	<b>Total</b>	<b>10</b>	<b>35</b>
<b>Part D</b>	<b>Project Work/Field Visit</b>		
	Practical File/Student Portfolio	10	10
	Viva Voce	05	05
	<b>Total</b>	<b>15</b>	<b>15</b>
<b>Part E</b>	<b>Continuous and comprehensive Evaluation</b>	<b>05</b>	<b>10</b>
	<b>Total</b>	<b>200</b>	<b>100</b>

The unit-wise distribution of hours and marks for Class 10<sup>th</sup> is as follows:

<b>CLASS 10<sup>th</sup></b>			
<b>Units</b>		<b>No. of Hours for Theory and Practical =200</b>	<b>Max. Marks for Theory and Practical = 100</b>
<b>Part A</b>	<b>Employability Skills</b>		
	Unit 1: Communication Skills – II	20	10
	Unit 2: Self-management Skills – II	10	
	Unit 3: Information and Communication Technology Skills – II	20	
	Unit 4: Entrepreneurship Development – II	15	
	Unit 5: Green Skills - II	10	
	<b>Total</b>	<b>75</b>	<b>10</b>
<b>Part B</b>	<b>Vocational Skills</b>		
	Unit 1: Introduction to Nutrition and Dietetics	45	30
	Unit 2: Patient Safety and Right's	30	
	Unit 3: Documentation and Recording	20	
	<b>Total</b>	<b>95</b>	<b>30</b>
<b>Part C</b>	<b>Practical Work</b>		
	Practical Examination	06	15
	Written Test	01	10
	Viva Voce	03	10
	<b>Total</b>	<b>10</b>	<b>35</b>
<b>Part D</b>	<b>Project Work/Field Visit</b>		
	Practical File/Student Portfolio	10	20
	Viva Voce	05	05
	<b>Total</b>	<b>15</b>	<b>15</b>
<b>Part E</b>	<b>Continuous and comprehensive Evaluation</b>	<b>05</b>	<b>10</b>
	<b>Total</b>	<b>200</b>	<b>100</b>

### 3. TEACHING/TRAINING ACTIVITIES

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The teaching and training activities have to be conducted in classroom, laboratory/workshops and field visits. Students should be taken to field visits for interaction with experts and to expose them to the various tools, equipment, materials, procedures and operations in the workplace. Special emphasis should be laid on the occupational safety, health and hygiene during the training and field visits.

#### **CLASSROOM ACTIVITIES**

Classroom activities are an integral part of this course and interactive lecture sessions, followed by discussions should be conducted by trained vocational teachers. Vocational teachers should make effective use of a variety of instructional aids, such as audio-video materials, colour slides, charts, diagrams, models, exhibits, hand-outs, online teaching materials, etc. to transmit knowledge and impart training to the students.

#### **PRACTICAL WORK IN LABORATORY/WORKSHOP**

Practical work may include but not limited to hands-on-training, simulated training, role play, case based studies, exercises, etc. Equipment and supplies should be provided to enhance hands-on learning experience of students. Only trained personnel should teach specialized techniques. A training plan that reflects tools, equipment, materials, skills and activities to be performed by the students should be submitted by the vocational teacher to the Head of the Institution.

#### **FIELD VISITS/ EDUCATIONAL TOUR**

In field visits, children will go outside the classroom to obtain specific information from experts or to make observations of the activities. A checklist of observations to be made by the students during the field visits should be developed by the Vocational Teachers for systematic collection of information by the students on the various aspects. Principals and Teachers should identify the different opportunities for field visits within a short distance from the school and make necessary arrangements for the visits. At least three field visits should be conducted in a year.

### 4. ASSESSMENT AND CERTIFICATION

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Upon successful completion of the course by the candidate, the Central/ State Examination Board for Secondary Education and the respective Sector Skill Council will certify the competencies.

The National Skills Qualifications Framework (NSQF) is based on outcomes referenced to the National Occupation Standards (NOSs), rather than inputs. The NSQF level descriptors, which are the learning outcomes for each level, include the process, professional knowledge, professional skills, core skills and responsibility. The assessment is to be undertaken to verify that individuals have the knowledge and skills needed to perform a particular job and that the learning programme undertaken has delivered education at a given standard. It should be closely linked to certification so that the individual and the employer could come to know the competencies acquired through the vocational subject or course. The assessment should be reliable, valid, flexible, convenient, cost effective and above all it should be fair and transparent. Standardized assessment tools should be used for assessment of knowledge of

students. Necessary arrangements should be made for using technology in assessment of students.

### KNOWLEDGE ASSESSMENT (THEORY)

**Knowledge Assessment** should include two components: one comprising of internal assessment and second an external examination, including theory examination to be conducted by the Board. The assessment tools shall contain components for testing the knowledge and application of knowledge. The knowledge test can be objective paper based test or short structured questions based on the content of the curriculum.

#### WRITTEN TEST

It allows candidates to demonstrate that they have the knowledge and understanding of a given topic. Theory question paper for the vocational subject should be prepared by the subject experts comprising group of experts of academicians, experts from existing vocational subject experts/teachers, subject experts from university/colleges or industry. The respective Sector Skill Council should be consulted by the Central/State Board for preparing the panel of experts for question paper setting and conducting the examinations.

The blue print for the question paper may be as follows:

**Duration: 3 hrs**

**Max. Mark: 30**

	Typology of Question	No. of Questions			Marks
		Very Short Answer (1 mark)	Short Answer (2 Marks)	Long Answer (3 Marks)	
1.	Remembering – (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories; identify, define or recite, information)	3	2	2	13
2.	Understanding – (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information)	2	3	2	14
3.	Application – (Use abstract information in concrete situation, to apply knowledge to new situations: Use given content to interpret a situation, provide an example, or solve a problem)	0	2	1	07
4.	High Order Thinking Skills – (Analysis & Synthesis – Classify, compare, contrast, or differentiate between different pieces of information; Organize and/ or integrate unique pieces of information from a variety of sources)	0	2	0	04
5.	Evaluation – (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	0	1	0	02
	<b>Total</b>	<b>5x1=5</b>	<b>10x2=20</b>	<b>5x3=15</b>	<b>40 (20 questions)</b>

### SKILL ASSESSMENT (PRACTICAL)

Assessment of skills by the students should be done by the assessors/examiners on the basis of practical demonstration of skills by the candidate, using a competency checklist. The competency checklist should be developed as per the National Occupation Standards (NOSs) given in the Qualification Pack for the Job Role to bring about necessary consistency

in the quality of assessment across different sectors and Institutions. The student has to demonstrate competency against the performance criteria defined in the National Occupation Standards and the assessment will indicate that they are 'competent', or are 'not yet competent'. The assessors assessing the skills of the students should possess a current experience in the industry and should have undergone an effective training in assessment principles and practices. The Sector Skill Councils should ensure that the assessors are provided with the training on the assessment of competencies.

Practical examination allows candidates to demonstrate that they have the knowledge and understanding of performing a task. This will include hands-on practical exam and viva voce. For practical, there should be a team of two evaluators – the subject teacher and the expert from the relevant industry certified by the Board or concerned Sector Skill Council. The same team of examiners will conduct the viva voce.

**Project Work** (individual or group project) is a great way to assess the practical skills on a certain time period or timeline. Project work should be given on the basis of the capability of the individual to perform the tasks or activities involved in the project. Projects should be discussed in the class and the teacher should periodically monitor the progress of the project and provide feedback for improvement and innovation. Field visits should be organised as part of the project work. Field visits can be followed by a small-group work/project work. When the class returns from the field visit, each group might be asked to use the information that they have gathered to prepare presentations or reports of their observations. Project work should be assessed on the basis of practical file or student portfolio.

**Student Portfolio** is a compilation of documents that supports the candidate's claim of competence. Documents may include reports, articles, and photos of products prepared by students in relation to the unit of competency.

**Viva voce** allows candidates to demonstrate communication skills and content knowledge. Audio or video recording can be done at the time of viva voce. The number of external examiners would be decided as per the existing norms of the Board and these norms should be suitably adopted/adapted as per the specific requirements of the vocational subject. Viva voce should also be conducted to obtain feedback on the student's experiences and learning during the project work/field visits.

## 5. UNIT CONTENTS

### CLASS 9<sup>th</sup>

#### Part A: Employability Skills

S. No.	Units	Duration (Hrs)
1.	Communication Skills –I	20
2.	Self-management Skills –I	10
3.	Information and Communication Technology Skills-I	20
4.	Entrepreneurship Development – I	15
5.	Green Skills – I	10
<b>Total</b>		<b>75</b>

<b>Sub Unit 1: Communication Skills – I</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (20 Hrs)</b>
1. Demonstrate knowledge of various methods of communication	1. Methods of communication <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Non-verbal</li> <li>• Visual</li> </ul>	1. Writing pros and cons of written, verbal and non-verbal communication 2. Listing do's and don'ts for avoiding common body language mistakes	05
2. Identify elements of communication cycle	1. Meaning of communication 2. Importance of communication skills 3. Elements of communication cycle– <ul style="list-style-type: none"> <li>• sender,</li> <li>• ideas,</li> <li>• encoding,</li> <li>• communication channel,</li> <li>• receiver,</li> <li>• decoding, and</li> <li>• feedback</li> </ul>	1. Draw a diagram of communication cycle 2. Role plays on communication process related to the sector/job role	05
3. Identify the factors affecting our perspectives in communication	1. Perspectives in communication 2. Factors affecting perspectives in communication <ul style="list-style-type: none"> <li>• Visual perception</li> <li>• Language</li> <li>• Past experience</li> <li>• Prejudices</li> <li>• Feelings</li> <li>• Environment</li> </ul>	1. Group discussion on factors affecting perspectives in communication 2. Sharing of experiences on factors affecting perspectives 3. Sharing experiences on factors affecting communication at workplace	05
4. Demonstrate the knowledge of basic writing skills	1. Writing skills related to the following: <ul style="list-style-type: none"> <li>• Phrases</li> <li>• Kinds of sentences</li> <li>• Parts of sentence</li> <li>• Parts of speech</li> <li>• Use of articles</li> <li>• Construction of a paragraph</li> </ul>	1. Demonstration and practice of writing sentences and paragraphs on topics related to the subject	05
<b>Total</b>			<b>20</b>

<b>Sub Unit 2: Self-management Skills – I</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (10 Hrs)</b>
1. Describe the meaning and importance of self-management	<ol style="list-style-type: none"> <li>1. Meaning of self-management</li> <li>2. Positive results of self-management</li> <li>3. Self-management skills</li> </ol>	<ol style="list-style-type: none"> <li>1. Identification of self-management skills</li> <li>2. Strength and weakness analysis</li> </ol>	05
2. Identify the factors that helps in building self-confidence	<ol style="list-style-type: none"> <li>1. Factors that help in building self-confidence – social, cultural, and physical factors</li> <li>2. Self-confidence building tips – getting rid of the negative thoughts, thinking positively, staying happy with small things, staying clean, hygienic and smart, chatting with positive people, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Role play exercises on building self-confidence</li> <li>2. Use of positive metaphors/ words</li> <li>3. Positive stroking on wakeup and before going bed</li> <li>4. Helping others and working for community</li> </ol>	05
<b>Total</b>			<b>10</b>

<b>Sub Unit 3: Information and Communication Technology Skills – I</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (20 Hrs)</b>
1. Describe the role of Information and Communication Technology (ICT) in day-to-day life and workplace	<ol style="list-style-type: none"> <li>1. Introduction to ICT</li> <li>2. Role and importance of ICT in personal life and at workplace</li> <li>3. ICT in our daily life (examples)</li> <li>4. ICT tools - Mobile, tab, radio, TV, email, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discussion on the role and importance of ICT in personal life and at workplace.</li> <li>2. Preparing posters / collages for showing the role of ICT at workplace</li> </ol>	04
2. Identify components of basic computer system and their functions	<ol style="list-style-type: none"> <li>1. Computer system - Central Processing Unit (CPU), memory, motherboard, storage devices</li> <li>2. Hardware and software of a computer system</li> <li>3. Role and functions of Random Access Memory(RAM) and Read Only Memory(ROM)</li> <li>4. Role and functions of Central Processing Unit</li> <li>5. Procedure for starting and shutting down a computer</li> </ol>	<ol style="list-style-type: none"> <li>1. Connecting the cables and peripherals to the Central Processing Unit</li> <li>2. Starting and shutting down a computer</li> <li>3. Group discussion on the various aspects of hardware and software</li> </ol>	07

3. Demonstrate use of various components and peripherals of computer system	1. Peripherals devices and their uses – mouse, keyboard, scanner, webcam, etc. of a computer system	1. Identification of various parts and peripherals of a computer 2. Demonstration and practice on the use of mouse 3. Demonstration and practice on the use of keyboard 4. Demonstration of the uses of printers, webcams, scanner and other peripheral devices 5. Drawing diagram of computer system and labelling it	05
4. Demonstrate basic computer skills	1. Primary operations on a computer system – input, process, storage, output, communication networking, etc.	1. Identification of the various input and output units and explanation of their purposes	04
<b>Total</b>			<b>20</b>

<b>Sub Unit 4: Entrepreneurial Skills - I</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (15 Hrs)</b>
1. Identify various types of business activities	1. Types of businesses – service, manufacturing, hybrid 2. Types of businesses found in our community 3. Business activities around	1. Prepare posters of business activities found in cities/villages, using pictures 2. Discuss the various types of activities, generally adopted by small businesses in a local community 3. Costing of the product made out of waste 4. Selling of items made from waste materials 5. Prepare list of businesses that provides goods and services in exchange for money	09
2. Demonstrate the knowledge of distinguishing characteristics of entrepreneurship	1. Meaning of entrepreneurship development 2. Distinguishing characteristics of entrepreneurship 3. Role and rewards of entrepreneurship	1. Prepare charts showing advantages of entrepreneurship over wages 2. Group discussions on role and features of entrepreneurship 3. Lectures/presentations by entrepreneurs on their experiences and	06

<b>Sub Unit 4: Entrepreneurial Skills - I</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (15 Hrs)</b>
		success stories 4. Identify core skills of successful entrepreneur	
<b>Total</b>			<b>15</b>

<b>Sub Unit 5: Green Skills – I</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (10 Hrs)</b>
1. Demonstrated the knowledge of the factors influencing natural resource conservation	1. Introduction to environment, 2. Relationship between society and environment, ecosystem and factors causing imbalance 3. Natural resource conservation 4. Environment protection and conservation	1. Group discussion on hazards of deteriorating environment 2. Prepare posters showing environment conservation 3. Discussion on various factors that influence our environment	<b>05</b>
2. Describe the importance of green economy and green skills	1. Definition of green economy 2. Importance of green economy	1. Discussion on the benefits of green skills and importance of green economy 2. Prepare a Poster showing the importance of green economy with the help of newspaper/ magazine cuttings	<b>05</b>
<b>Total</b>	<b>34</b>	<b>41</b>	<b>75</b>

## Part B: Vocational Skills

<b>S. No.</b>	<b>Units</b>	<b>Duration (Hrs)</b>
1.	Introduction to Healthcare System	35
2.	Role and Responsibilities of Dietetic Aide	20
3.	Food Handling and Hygiene Practices	40
<b>Total</b>		<b>95</b>

<b>Sub Unit 1: Introduction to Healthcare System</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (35 Hrs)</b>
1. Demonstrate basic understanding of Healthcare Sectors and functions of Hospital	1. Healthcare delivery System-Public & Private sector 2. Levels of Healthcare 3. Hospital-set-up & Functions	1. Visit primary and community health centre to enlist available facilities. 2. Visit government and private hospitals and list out the departments.	15

2. Basic understanding of Dietetics Department and it's facilities	1. Department of Dietetics 2. Organisational Chart of Dietetics Department 3. Functions of Dietetics Department	1. Outline and discuss functions of Dietetics departments. 2. Prepare organisational chart of Dietetics departments	10
3. Identify Food Storage Equipment, Kitchen Equipment and articles and their uses	1. Kitchen Equipments- large and small 2. Electrical & non-electrical 3. Equipment used in food weighing, cutting, cooking and serving	1. Identify kitchen appliances and collect images of appliances used for cooking and serving of food at large scale.	10
<b>Total</b>			<b>35</b>

<b>Sub Unit 2: Role and Responsibilities of Dietetic Aide</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (20 Hrs)</b>
1. Demonstrate functions of Dietetic Aide.	1. Role and Responsibilities of Dietetic Aide:- supervision of food preparation, food service, hygiene maintenance, patient comfort, dietary education, follow-up, food related issues	1. Explain various roles of dietetic Aide in health care setting	10
2. Exhibit skills and qualities required for dietetic aide	1. Skill, qualities and knowledge required for Dietetic Aide	1. Enumerate skills required for dietetic Aide job role.	5
3. Display Ethical Behaviour	1. Code of Conduct/ethics for Dietetic Aide at workplace	1. Initiate a group discussion on code of conduct for dietetic Aide.	5
<b>Total</b>			<b>20</b>

<b>Sub Unit 3: Food Handling &amp; Hygiene Practices</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (40 Hrs)</b>
1. Demonstrate steps of Hand Hygiene 2. Develop techniques of personal Grooming. 3. Use personal protective equipments	1. Personal hygiene Practices 2. Personal grooming practices 3. Personal protective equipments & their uses	1. Collect pictures of personal protective equipments. 2. Demonstrate hand washing steps.	10
4 Identify causes and prevention of food contamination	1. Food Contamination :- sources, routes and packaging material, cross-contamination 2. Preventive measures of	1. Outline and discuss preventive measures for food contamination	20

	food contamination		
5. Demonstrate food hygiene practices and food waste disposal methods	<ol style="list-style-type: none"> <li>Cleanliness of work area- food handling, storage and serving area utensils, equipments.</li> <li>Food serving practices</li> <li>Food Waste disposal</li> </ol>	<ol style="list-style-type: none"> <li>Prepare a schedule plan to maintain cleanliness and hygiene of kitchen, utensils and equipments.</li> </ol>	10
<b>Total</b>			<b>40</b>

## CLASS 10<sup>th</sup>

### Part A: Employability Skills

S.No.	Units	Duration (Hrs)
1.	Communication Skills –II	20
2.	Self-management Skills –II	10
3.	Information and Communication Technology Skills-II	20
4.	Entrepreneurship Development – II	10
5.	Green Skills – II	15
<b>Total</b>		<b>75</b>

<b>Sub Unit 1: Communication Skills – II</b>			
Learning Outcome	Theory	Practical	Duration (20 Hrs)
1. Demonstrate knowledge of various methods of communication	<ol style="list-style-type: none"> <li>Methods of communication <ul style="list-style-type: none"> <li>Verbal</li> <li>Non-verbal</li> <li>Visual</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>Writing pros and cons of written, verbal and non-verbal communication</li> <li>Listing do's and don'ts for avoiding common body language mistakes</li> </ol>	05
2. Provide descriptive and specific feedback	<ol style="list-style-type: none"> <li>Communication cycle and importance of feedback</li> <li>Meaning and importance of feedback</li> <li>Descriptive feedback - written comments or conversations</li> <li>Specific and non-specific feedback</li> </ol>	<ol style="list-style-type: none"> <li>Constructing sentences for providing descriptive and specific feedback</li> </ol>	03
3. Apply measures to overcome barriers in communication	<ol style="list-style-type: none"> <li>Barriers to effective communication – types and factors</li> <li>Measures to overcome barriers in effective communication</li> </ol>	<ol style="list-style-type: none"> <li>Enlisting barriers to effective communication</li> <li>Applying measures to overcome barriers in communication</li> </ol>	04

4. Apply principles of communication	<ol style="list-style-type: none"> <li>Principles of effective communication</li> <li>7 Cs of effective communication</li> </ol>	<ol style="list-style-type: none"> <li>Constructing sentences that convey all facts required by the receiver</li> <li>Expressing in a manner that shows respect to the receiver of the message</li> <li>Exercises and games on applying 7Cs of effective communication</li> </ol>	03
5. Demonstrate basic writing skills	<ol style="list-style-type: none"> <li>Writing skills to the following: <ul style="list-style-type: none"> <li>Sentence</li> <li>Phrase</li> <li>Kinds of Sentences</li> <li>Parts of Sentence</li> <li>Parts of Speech</li> <li>Articles</li> <li>Construction of a Paragraph</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>Demonstration and practice of writing sentences and paragraphs on topics related to the subject</li> </ol>	05
<b>Total</b>			<b>20</b>

<b>Sub Unit 2: Self-management Skills – II</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (10 Hrs)</b>
1. Apply stress management techniques	<ol style="list-style-type: none"> <li>Meaning and importance of stress management</li> <li>Stress management techniques – physical exercise, yoga, meditation</li> <li>Enjoying, going to vacations and holidays with family and friends</li> <li>Taking nature walks</li> </ol>	<ol style="list-style-type: none"> <li>Exercises on stress management techniques – yoga, meditation, physical exercises</li> <li>Preparing a write-up on an essay on experiences during a holiday trip</li> </ol>	06
2. Demonstrate the ability to work independently	<ol style="list-style-type: none"> <li>Importance of the ability to work independently</li> <li>Describe the types of self-awareness</li> <li>Describe the meaning of self-motivation and self-regulation</li> </ol>	<ol style="list-style-type: none"> <li>Demonstration on working independently</li> <li>goals</li> <li>Planning of an activity</li> <li>Executing tasks in a specific period, with no help or directives</li> <li>Demonstration on the qualities required for working independently</li> </ol>	04
<b>Total</b>			<b>10</b>

<b>Sub Unit 3: Information and Communication Technology Skills– II</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (20 Hrs)</b>
1. Distinguish between different operating systems	1. Classes of operating systems 2. Menu, icons and task bar on the desktop 3. File concept, file operations, file organization, directory structures, and file-system structures 4. Creating and managing files and folders	1. Identification of task bar, icons, menu, etc. 2. Demonstration and practicing of creating, renaming and deleting files and folders, saving files in folders and sub-folders, restoring files and folders from recycle bin	17
2. Apply basic skills for care and maintenance of computer	1. Importance and need of care and maintenance of computer <ul style="list-style-type: none"> <li>• Cleaning computer components</li> <li>• Preparing maintenance schedule</li> <li>• Protecting computer against viruses</li> <li>• Scanning and cleaning viruses and removing SPAM files, temporary files and folders</li> </ul>	1. Demonstration of the procedures to be followed for cleaning, care and maintenance of hardware and software	03
<b>Total</b>			<b>20</b>

<b>Sub Unit 4: Entrepreneurial Skills – II</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (15 Hrs)</b>
1. List the characteristics of successful entrepreneur	1. Entrepreneurship and society 2. Qualities and functions of an entrepreneur 3. Role and importance of an entrepreneur 4. Myth about entrepreneurship 5. Entrepreneurship as a career option	1. Writing a note on entrepreneurship as career option 2. Collecting success stories of first generation and local entrepreneurs 3. Listing the entrepreneurial qualities – analysis of strength and weaknesses 4. Group discussion of self-qualities that students feel are needed to become successful entrepreneur	15

		5. Collect information and related data for a business 6. Make a plan in team for setting up a business	
<b>Total</b>			<b>15</b>

<b>Sub Unit 5: Green Skills – II</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (10 hrs)</b>
1. Demonstrate the knowledge of importance, problems and solutions related to sustainable development	1. Definition of sustainable development 2. Importance of sustainable development 3. Problems related to sustainable development	1. Identify the problem related to sustainable development in the community 2. Group discussion on the importance of respecting and conserving indigenous knowledge and cultural heritage 3. Discussion on the responsibilities and benefits of environmental citizenship, including the conservation and protection of environmental values 4. Preparing models on rain water harvesting, drip / sprinkler irrigation, vermin-compost, solar energy, solar cooker, etc.	10
<b>Total</b>	<b>38</b>	<b>37</b>	<b>75</b>

## Part B: Vocational Skills

<b>S. No.</b>	<b>Units</b>	<b>Duration (Hrs)</b>
1.	Introduction to Nutrition and Dietetics	45
2.	Patient Safety and Right's	30
3.	Documentation and Recording	20
<b>Total</b>		<b>95</b>

<b>Sub Unit 1: Introduction to Nutrition and Dietetics</b>			
<b>Learning Outcome</b>	<b>Theory</b>	<b>Practical</b>	<b>Duration (45 Hrs)</b>
1. Relate role of Food and Nutrition in maintenance of health	1. Food groups, balanced diet, functions of foods, Nutritional status of body	1. Draw food pyramid guide. 2. Calculate Body mass Index of your family member and identify the grade according to WHO	13

2. Enlist types of Nutrients and their importance	1. Macro and Micro nutrients:- function, food sources, deficiency-disorder/diseases	1. Prepare chart on macro nutrient and their functions. 2. Collect/Draw pictures of locally available rich food sources of micro-nutrients	25
3. Enumerate dietetics related medical terminologies	Dietetics-introduction, related Medical terminology	1. Discuss about dietetics related medical terminology in small groups.	7
<b>Total</b>			<b>45</b>

### Sub Unit 2: Patient Safety and Right's

Learning Outcome	Theory	Practical	Duration (30 Hrs)
1. Describe patient's right	1. Patient comfort, patient right and Consent	1. Make sample patient's consent form for dietary intervention and counselling	3
2. Able to explain hospital policy and procedures	1. Organisational policy and procedures	1. Discuss organisational policy of hospitals and other health institutes in groups.	4
3. Handle hazardous situation safely	1. Maintaining Safe working environment: fire safety, electrical safety, home safety, diet related safety, food allergy	2. Visit a hospital and observe fire, electricity and security safety measures.	10
4. Demonstrate safety issues concerning communicable and non-communicable diseases.	1. Infection –causes, prevention, Communicable and non-communicable diseases, Immunization	1. Enlist communicable and non-communicable diseases. 2. Prepare a chart on Immunization schedule.	13
<b>Total</b>			<b>30</b>

### Sub Unit 3: Documentation and Recording

Learning Outcome	Theory	Practical	Duration (20 Hrs)
1. Demonstrate documentation work of patients	1. Observing safe food preparation and handling 2. Record: types, importance, uses 3. Reporting and documentation	1. Prepare sample record books for recording patient's details, dietary prescription, food intake and kitchen working as per indent for one day.	10

2. To manage inventory and stock register	1. Inventory and kitchen management, patient indent	1. Enlist kitchen equipment and utensils in stock register. 2. Make a note on FIFO.	10
<b>Total</b>			<b>20</b>

## 6. ORGANISATION OF FIELD VISITS

In a year, at least 3 field visits/educational tours should be organised for the students to expose them to the activities in the workplace.

Visit a Hospital and observe various activities of the nurses on daily schedule basis. Also observe the following activities at Hospital:

1. Front office activities
2. Reception and registration activities
3. Disinfecting wards and equipments
4. Various activities related to patient care
5. Demonstration of First Aid
6. To observe the various safety measures
7. To take first hand knowledge of Bio medical waste Management
8. Observe the demonstration of Hospital record keeping
9. Diet Clinics
10. Primary Health Centre

## 7. LIST OF EQUIPMENT AND MATERIALS

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

- |  |  |
|--|--|
| 1. Food preparation lab                            | 17. Cylinder                                       |
| 2. Sinks for utensil washing                       | 18. Common House hold measures                     |
| 3. Food Trolley                                    | 19. Flip books and models for Food Groups          |
| 4. Storage cupboards                               | 20. Cutlery – cooking and serving                  |
| 5. Refrigerator                                    | 21. Storage and Garbage bins                       |
| 6. Cooking gas and burners & lighters              | 22. Charts of food groups,                         |
| 7. Microwave                                       | 23. Dry and fresh cooking ingredients with storage |
| 8. Dinning utensils                                | 24. Computer and Internet access                   |
| 9. Measuring cups                                  | 25. Teaching board (Smart board)                   |
| 10. Weight machine for food-10-50 gram sensitivity | 26. Aprons and head scarfs                         |
| 11. Blenderizers                                   | 27. Gloves (disposable)                            |
| 12. Kitchen Utensils and Equipment                 | 28. Liquid Soap Bottle                             |
| 13. Measuring Spoons                               | 29. Nutritional brochures                          |
| 14. Stadiometer                                    | 30. Registers                                      |
| 15. Measuring Tape                                 | 31. Pens   |
| 16. Gas burner                                     | 32. Pencils/Eraser/Sharpener                       |

- |                               |   |
|-------------------------------|---|
| 33. Marker pens               | 37. Scrubbers and Liquid soap           |
| 34. Dusters                   | 38. Tissues paper                       |
| 35. Paper                     | 39. Fire Extinguisher                   |
| 36. Cleaning Solution (Colin) | 40. Electric or Induction Cooking stove |

## 8. TEACHER'S/TRAINER'S QUALIFICATION

**Q**ualification and other requirements for appointment of vocational teachers/trainers on contractual basis should be decided by the State/UT. The suggestive qualifications and minimum competencies for the vocational teacher should be as follows:

S. No.	Qualification	Minimum Competencies	Age Limit
1.	Graduation in Dietetics / Nutrition or Home Science with at least 1 Year experience in teaching/working in as dietitian or in Dietary Department OR Graduation in any stream of biological/life Sciences(BSc) with Diploma in Nutrition/Dietetics having 01 year experience of teaching/Dietitian	<ul style="list-style-type: none"> <li>• Effective communication skills (oral and written)</li> <li>• Basic computing skills.</li> <li>• Technical competencies (e.g., Should be able to perform and train the patient related skills)</li> </ul>	18-37 years (as on Jan. 01 (year) Age relaxation to be provided as per Govt. rules.

Vocational Teachers/Trainers form the backbone of Vocational Education being imparted as an integral part of Samagra Shiksha. They are directly involved in teaching of vocational subjects and also serve as a link between the industry and the schools for arranging industry visits, On-the-Job Training (OJT) and placement.

These guidelines have been prepared with an aim to help and guide the States in engaging quality Vocational Teachers/Trainers in the schools. Various parameters that need to be looked into while engaging the Vocational Teachers/Trainers are mode and procedure of selection of Vocational Teachers/Trainers, Educational Qualifications, Industry Experience, and Certification/Accreditation.

The State may engage Vocational Teachers/Trainers in schools approved under the component of Vocationalisation of Secondary and Higher Secondary Education under RMSA in the following ways:

- (i) directly as per the prescribed qualifications and industry experience suggested by the PSS Central Institute of Vocational Education(PSSCIVE), NCERT or the respective Sector Skill Council(SSC)

OR

- (ii) through accredited Vocational Training Providers accredited under the National Quality Assurance Framework (NQAF\*) approved by the National Skill Qualification Committee on 21.07.2016. If the State is engaging Vocational Teachers/Trainers through the Vocational Training Provider (VTP), it should ensure that VTP should have been accredited at NQAF Level 2 or higher.

\* *The National Quality Assurance Framework (NQAF) provides the benchmarks or quality criteria which the different organisations involved in education and training must meet in order to be accredited by competent bodies to provide government-funded education and training/skills activities. This is applicable to all organizations offering NSQF-compliant qualifications.*

The educational qualifications required for being a Vocational Teacher/Trainer for a particular job role are clearly mentioned in the curriculum for the particular NSQF compliant job role. The State should ensure that teachers / trainers deployed in the schools have relevant technical competencies for the NSQF qualification being delivered. The Vocational Teachers/Trainers preferably should be certified by the concerned Sector Skill Council for the particular Qualification Pack/Job role which he will be teaching. Copies of relevant certificates and/or record of experience of the teacher/trainer in the industry should be kept as record.

To ensure the quality of the Vocational Teachers/Trainers, the State should ensure that a standardized procedure for selection of Vocational Teachers/Trainers is followed. The selection procedure should consist of the following:

- (i) Written test for the technical/domain specific knowledge related to the sector;
- (ii) Interview for assessing the knowledge, interests and aptitude of trainer through a panel of experts from the field and state representatives; and
- (iii) Practical test/mock test in classroom/workshop/laboratory.

In case of appointment through VTPs, the selection may be done based on the above procedure by a committee having representatives of both the State Government and the VTP.

The State should ensure that the Vocational Teachers/Trainers who are recruited should undergo induction training of 20 days for understanding the scheme, NSQF framework and Vocational Pedagogy before being deployed in the schools.

The State should ensure that the existing trainers undergo in-service training of 5 days every year to make them aware of the relevant and new techniques/approaches in their sector and understand the latest trends and policy reforms in vocational education.

The Head Master/Principal of the school where the scheme is being implemented should facilitate and ensure that the Vocational Teachers/Trainers:

- a) Prepare session plans and deliver sessions which have a clear and relevant purpose and which engage the students;
- b) Deliver education and training activities to students, based on the curriculum to achieve the learning outcomes;
- c) Make effective use of learning aids and ICT tools during the classroom sessions;
- d) Engage students in learning activities, which include a mix of different methodologies, such as project based work, team work, practical and simulation based learning experiences;
- e) Work with the institution's management to organise skill demonstrations, site visits, on-job trainings, and presentations for students in cooperation with industry, enterprises and other workplaces;
- f) Identify the weaknesses of students and assist them in upgradation of competency;
- g) Cater to different learning styles and level of ability of students;
- h) Assess the learning needs and abilities, when working with students with different abilities
- i) Identify any additional support the student may need and help to make special arrangements for that support;
- j) Provide placement assistance

Assessment and evaluation of Vocational Teachers/Trainers is very critical for making them aware of their performance and for suggesting corrective actions. The States/UTs should ensure that the performance of the Vocational Teachers/Trainers is appraised annually. Performance based appraisal in relation to certain pre-established criteria and objectives should be done periodically to ensure the quality of the Vocational Teachers/Trainers.

Following parameters may be considered during the appraisal process:

1. Participation in guidance and counselling activities conducted at Institutional, District and State level;
2. Adoption of innovative teaching and training methods;
3. Improvement in result of vocational students of Class X or Class XII;
4. Continuous upgradation of knowledge and skills related to the vocational pedagogy, communication skills and vocational subject;
5. Membership of professional society at District, State, Regional, National and International level;
6. Development of teaching-learning materials in the subject area;
7. Efforts made in developing linkages with the Industry/Establishments;
8. Efforts made towards involving the local community in Vocational Education
9. Publication of papers in National and International Journals;
10. Organisation of activities for promotion of vocational subjects;
11. Involvement in placement of students/student support services.

## **9. LIST OF CONTRIBUTORS**

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विद्यया ऽ मृतमश्नुते



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