

Competency Based Curriculum

National Vocational Education Qualification Programme

NVEQ Level 2

IT Service Desk Attendant

Sector: Information Technology/ Information Technology Enabled Services (IT/ITeS)



PSS Central Institute of Vocational Education, Bhopal

**(a constituent unit of NCERT, an autonomous organization under Ministry
of Human Resource Development, Government of India)**

Contents

Sn	Contents	Page
1	Introduction	2
2	About the sector	3
3	Objectives of the course	4
4	Course structure	5
5	Classroom activities	5
6	Practical activities	5
7	On-the-job training	5
8	Certification	5
9	Competency Based Units	6
IT201	Functional English (Intermediate)	6
IT202	Web Applications (Basic)	9
IT203	Word Processing (Intermediate)	10
IT204	Spreadsheet (Intermediate)	12
IT205	Digital Presentation (Intermediate)	15
IT206	Email Messaging (Intermediate)	17
IT207	Database Development (Basic)	18
10	Assessment guide	19
11	List of tools, equipment and materials	20
12	Teacher's qualifications	21
13	List of contributors	22

Introduction

The National Vocational Education Qualification Framework (NVEQF) developed by the Ministry of Human Resource Development (MHRD), Government of India is a descriptive framework that provides a common reference for linking various qualifications. It is used for setting common principles and guidelines for a nationally recognized qualification system covering Schools, Vocational Education and Training Institutions, Technical Education Institutions, and Universities/Colleges.

The NVEQF organizes qualifications according to a series of levels of knowledge and skills. These levels are defined in terms of learning outcomes i.e., the competencies (knowledge, skills and attitude) which the learners must possess regardless of whether they were acquired through formal, non-formal or informal education and training system. Qualifications are made up of occupational standards for specific areas of learning units or unit of competency. Units of competency are the specification of knowledge and skill and the application of that knowledge and skill to the standard of performance expected in the workplace. The Unit of competency or National Occupation Standards comprising generic and technical competencies an employee should possess are laid down by the Sector Skill Council of the respective economic or social sector.

Competency is defined in terms of what a person is required to do (performance), under what conditions it is done (conditions) and how well it is to be done (standards). It can be broadly categorized into foundational, practical and reflexive competencies. Generic competencies are considered essential for a person to participate effectively in the workforce, whereas technical competencies are an

individual's knowledge and expertise in the specific group task and its processes and its rules and regulations. An executive order F.No.1-4/2011-VE dated 3 Sept., 2012 on the various aspects of NVEQF has been issued by the MHRD. For more details on the NVEQF, please visit the website of MHRD at [www: mhrd.gov.in](http://www.mhrd.gov.in).

The term “**curriculum**” (plural: *curricula* or *curriculum*s) is derived from the Latin word for “*race course*”, referring to the course of deeds and experiences through which children grow to become mature adults. A competency based curriculum describes what learners must “know” and “be able to do” by the end of a program or study. It identifies the competencies and sub-competencies each learner is expected to master. It states clearly the criteria and conditions by which performance will be assessed. It also defines the learning activities that will lead to the learner to mastery of the targeted learning outcome. The **competency based curriculum** is broken down into coherent parts known as **Units**. Each unit is further broken down into knowledge and skills on the basis of which evidence is to be provided by the learner and the evaluation is to be done by the teacher or trainer.

About the Sector

Information Technology (IT) and Information Technology-enabled Services (ITeS) are one of the most significant growth catalysts for the Indian economy. IT industry has not only influenced the employment prospects of the people but also affected the social lives of the people through networking and social websites. The major segments of the Industry are IT Services, Business Process Outsourcing (BPO), engineering services, research and development and products. IT Products being manufactured in India include

personal computers, servers, workstations, supercomputers, data processing equipment, printers, digitizers, networking products, etc. Much of the IT related activities are centred on services in Banking, Financial Services, and Insurance (BFSI), Telecommunication, Manufacturing, and Retail.

Indian IT Industry has been contributing substantially to India's GDP, exports and employment. The sector is responsible for enabling employment to an additional 8.9 million people in various associated sectors – catering, security, transportation, housekeeping, etc – many of whom belong to rural areas/small towns in India. It has grown tremendously over the last 15 years. The industry had about 1,50,000 employees in 1993, and around 5,00,000 employees in 1999 but today, the industry employs around 2.2 million employees. The IT/ITES exports have grown to a staggering US\$ 46.3 billion in 2008-09, the IT sector currently employing 2.2 million professionals directly and another 8 million people indirectly accounts for over 5% of GDP, a majority of the Fortune 500 and Global 2000 corporations are sourcing IT/ITES from India and it is the premier destination for the global sourcing of IT/ITES accounting for 55% of the global market in offshore IT services and garnering 35% of the ITES/BPO market.

It is expected that with the launch of the ultra low-cost Aakaash tablets exclusively for students, use of information technology will increase. Internet has made revolutionary changes with possibilities of e-filing Income Tax returns or applying for passports online or railway e-ticketing. With an internet user-base of over 125 million, which is likely to grow to about half-a-billion over the next few years, and an established mobile base of 950 million, coupled with a large and talented pool of human resources, India will be a key player in the cyber-world.

Objectives of the Course

Upon completion of this course, you will be able to:

- Frame standard sentences in English for introducing yourself, greeting others, expressing about your family, telling time, asking questions, describing weather, expressing likes and dislikes, inviting people, etc.
- Describe the role and functions of various parts of computers.
- Demonstrate the use of various hardware and software in basic operations, such as creating and managing files and folder, changing display, and mouse properties, using internet and world wide web, using digital media devices, etc.
- Demonstrate the knowledge of preventing harm from natural and human threats.
- Demonstrate the ability to perform touch typing.
- Demonstrate the use of word processor in creating, editing, formatting and printing a document.
- Demonstrate the use of spreadsheet program in creating spreadsheet, entering and editing data, entering formulae for calculations, formatting cells, preparing stock register, inserting currency symbol, checking and correcting spelling errors, applying borders and different styles, and printing worksheets.
- Demonstrate the use of digital presentation software in creating, editing, formatting and printing slides and making presentations.
- Demonstrate the knowledge of opening and operating an email account for reading, composing, editing, sending, forwarding and managing email messages.

Competency Based Curriculum Level 2

Sector: Information Technology/Information Technology Enabled Services

Course Structure: This course (vocational qualification package) is a planned sequence of instructions consisting of the following 07 modules, called as Units.

Sn	Unit Code	Unit Title	Learning Hours	Prerequisite
1	IT201	Functional English (Intermediate)	10	
2	IT202	Web Applications (Basic)	10	
3	IT203	Word Processor (Intermediate)	10	
4	IT204	Spreadsheet (Intermediate)	10	
5	IT205	Digital Presentation (Intermediate)	10	
6	IT206	Email Messaging (Intermediate)	10	
7	IT207	Database Development (Basic)	10	
		Total Hours	70	

Successful completion of **70** hours of theory sessions and **130** hrs of practical activities and on-the-job learning is to be done for full qualification.

Classroom Activities: Classroom activities are an integral part of this programme and interactive lecture sessions, followed by discussions should be conducted by trained teachers. Teachers should make effective use of a variety of instructional aids, such as Videos, Colour Slides, Charts, Diagrams, Models, Exhibits, Handouts, Recorded Compact Discs, etc. to transmit knowledge in projective and interactive mode.

Practical Activities: Activities that provide practical experience through case based problems, role play, games, etc. and practical exercises using props, tools and equipment should be regularly organized off-the-job and on-the-job. Equipment and supplies should be provided to enhance hands-on experiences to students in the chosen occupation. Trained personnel should teach specialized techniques such as dismantling and assembling of computer parts, servicing of computers, operating software programming, etc.

On-the-Job Training: On-the-job training (OJT) occurs whenever more experienced employee or supervisor teaches less experienced person on how to do one or more tasks of a job. The training utilizes actual equipment and materials. OJT should be undertaken in a structured manner with a training plan under the supervision of an experienced trainer or supervisor. A training plan that reflects tasks to be performed and competencies to be imparted should be prepared and signed by the student, teacher, and supervisor at the workplace for training of the students in the organization/industry. The trainer should break down all the steps of the job and train the

students as per the training plan. In a structured OJT, the following steps should be followed:

Step 1: The Instructor or the trainer tell, show, demonstrate, and explain. The trainer gives an overview of the task while explaining the constructional details and use of the tools, equipment, materials, etc. in performing the tasks.

Step 2: The Instructor or the trainer demonstrates each step in detail, actually doing the steps of the task and explaining each step, one at a time, while the trainee watches. The steps may not necessarily be demonstrated in the sequence of actual operation, as sometimes it is better that simple tasks are demonstrated first to build confidence. Showing finished products at each appropriate step will help the learner understand what is required as outcome. While demonstrating, the trainer explains why each step is done in the way it is done.

Step 3: It involves direct trainee participation. The trainer monitors the progress on a checklist of competencies and offers feedback and pointers where and when needed.

Step 4: The trainee practices with clearly defined targets for performance standards.

Certification: Upon successful completion of this course, the State Education Board and the IT-ITeS Sector Skill Council will provide a certificate to the student verifying the competencies acquired by the student. For more details about SSC visit the website of NASSCOM at <http://www.nasscom.in/itites-sector-skill-council>.

Code	Unit Title	Duration	Location	Teaching & Training Method
IT 201	Functional English (Intermediate)	10 Hours	Classroom and Computer Lab	Interactive Lecture & Practical Activity

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Ordering Food at a Restaurant	Describe the ways of ordering food at restaurants	Frame the sentences used for ordering food in the restaurant	Framing sentences for ordering food	Create scenario of restaurant in classroom with students, playing different roles and interacting with each other for various expression
	Making Resolutions	Describe the importance of resolutions	Frame multiple sentences used for making resolutions	Framing sentences for making resolution	Practicing framing of sentences or making resolutions
3	Talking about Change	Describe the grammatical ways of Talking about Changes	Identifying the Active voice and passive voice sentences	Describing the sentences to be used while talking about changes	Group discussion
4	Planning an Outing	Make different types of sentences for planning an outing	Identifying the correct/incorrect use of the pronouns	Describe the sentence frame for suggesting and planning an outing using pronouns	Role play on framing sentences
5	Narrating a Story	Describe the ways to effectively narrate a story using correct tense	Identifying and writing the sentences using correct tenses	Describing the ways to effectively narrate story	narrating a story in different ways
6	Describing a Known Place	Describe the known places using adjectives and adverbs	Combine the phrases to describe a known place	Describe the ways to be used for describing a known place using adjectives and adverbs	Role play on framing descriptive sentences

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
7	Giving Directions	Describe the different words used for giving directions using prepositions	Give sentences to describe different route from a route chart	Describing the ways to give directions	Give directions using different flow charts
8	Describing an Event	Describe an event place using effective verbal	Using odd one out of the correct sentences for describing an event	Describe the events using effective grammatical skills	Role play on framing descriptive sentences for an event
9	Recounting an Experience	List and describe past events by retelling the events in the sequence in which they occurred	Recounts the sentences to tell about a story or an event	Describing the methodology for recounting the events	Give directions to order the sentences into event occurrence with example
10	Finding a Place to Stay	Make appropriate sentences used for finding a place to stay	Change the sentences into different types of tenses	Describe the pointers to make sentences for finding place to stay	Deliver the same sentence in different styles
11	Saying No	Describe the effective grammatical ways of saying No	Describe the appropriate ways of saying No in different situations	Describing the styles of saying No	Modeling the artificial situations of saying No
12	Describing a Lost Item	State appropriate ways of describing a lost item	Finding out the correct word from information given to describe a lost item	Frame the sentences to describe a lost item	Creating a scene of losing any item and describe it effectively
13	Appreciating Someone	Give different ways of appreciating someone at workplace, home, etc.	State appreciation styles in different situations	Describe different ways of appreciating someone	Find different words to appreciate someone
14	Attending a Phone Call	Describe different styles for attending a phone call in different situations	Describe the appropriate way to respond while attending a phone call in different situations	Appropriate ways of attending a phone call in different tenses	Role Play of a phone call

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
15	Giving Instructions	State appropriate prepositions to be used while giving instructions	Describe ways of giving instructions in multiple situations	Describe different ways of appreciating someone	Find different words to appreciate someone
16	Registering a Complaint	Give different ways of registering a complaint in different situations	Rearranging the sentences for logging the complaint	Describe the styles of registering complaint	Role Play
17	Calling up to Find about a Job Vacancy	Enlists the sentences used while calling for finding a job vacancy	Use correct words for sentences used for job vacancy finding call	Describe appropriate sentences to be used while calling up to find about a job vacancy	Role play of telephone call
18	Writing a Resume	Give different formats, cover letter, inclusions, etc. of a resume	Enlist the parameters and formats be included in resume	Describe the styles of writing effective resume	Hands on resume creation
19	Writing a Covering Letter	Describe cover letters in different formats	Write cover letter for any specific occupation	Give sample formats for writing cover letters for occupations	Writing sample cover letter for any advertisement in current newspaper
20	Facing an Interview	Enlist the common interview questions	Enlist the common interview questions and their answers	Describe the common interview questions and their answers	Role Play
21	Taking a Telephonic Interview	Describe the standards of a telephonic interview	Describe telephonic interview statements. Answering the typical questions asked during interview	Methodology and sentences used while Telephonic Interview	Demonstration of telephonic interview
22	Accepting a Job Offer	Enlist the points included while accepting a job offer	Explain the formats/words/phrases used while accepting a Job offer	Describe the ways to accept a job offer effectively	Writing any Job offer acceptance letter

Unit Code	Unit Title	Duration	Location	Teaching & Training Method
IT 202	Web Applications (Basic)	10 Hours	Classroom and Computer Lab	Interactive Lecture & Practical Activity

Sl	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Use accessibility options	Identify the different types of impaired computer users and Explore the various accessibility options for different impaired groups	Activate the required accessibility options in the operating system for different types of impaired users	Delivering types, significance and methodology to activate different accessibility options in operating system	Hands on for activating accessibility options
2	Use computer in network environment	Introduction to networking fundamentals and network connections – wired and wireless Introduction to Internet and its connectivity	Demonstrate the different wired and wireless network connections Demonstrate the process to connect with Internet	Introduction to networking fundamentals and network connections – wired and wireless	Visit a lab and see the different network connections
3	Use instant messaging services on the Internet	Instant messaging services, creating account and using instant messaging services	Create account in various instant messaging services Use instant messaging	Instant messaging services, creating account and using instant messaging services	Create account in various instant messaging services
4	Use Google talk for chatting with a contact	Chatting Features of Google talk	Chat using Google talk	Chatting with google talk	Chat using google talk
5	Create and Publish Web Pages – Blog	Web pages and blogs Creating pages and blogs Publishing pages and blogs	Demonstrate the creation and publishing of web pages and blogs	Delivering procedure of Creating and publishing blogs	Demonstration of Creating and publishing blogs in computer lab
6	Use blog editors off-line	What are off-line blog editors How to use off-line blog editors	Demonstrate the use of off-line blog editors	What are off-line blog editors How to use off-line blog editors	Use off-line

Code	Unit Title	Duration	Location	Teaching & Training Method
IT 203	Word Processing (Intermediate)	10 Hours	Classroom and Computer Lab	Interactive Lecture & Practical Activity

Sl	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Insert headers and footers in the document	Describe the use of headers and footers in word document Procedure to insert headers and footers in a document	Demonstrate to insert headers and footers in different format in the word document	Inserting header/footer	Prepare a document having your name as header and page number as footer
2	Format the document	What is formatting? Describing the procedure of formatting a document	Demonstrate formatting of page using different formatting options, changing portrait orientation to landscape	Formatting a page	Visit a computer lab and practice various options for formatting a page appearance
3	Use document template	Describe advantages of using documents template in preparing a document Enlist the steps to be followed to apply template on word document	Demonstrate the use of template on word document	Using templates	Visit computer lab and prepare a word document using different document templates
4	Use page break and section break	Page and section in a document Describe the use of page break and section break	Demonstrate the procedure of breaking a page and a section	Page break and section break	Prepare a word document with 2 columns by using page and section break
5	Usage of clip art in the document	What is clipart, Describe the advantages of using clip art in document	Demonstrate the use of clip art in word document	Using clip art in document	Prepare a word document having clip arts with text

Sl	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
6	Insert symbols, images and graphics shape	Describe the advantages of inserting graphics and images in a word document Describe the use of symbols in a word document	Demonstrate the use of symbols in word document Demonstrate the use of images and graphic shapes	Using images, shapes and symbols	Prepare a word document having images and shapes
7	Describe the process of inserting watermark in word document	Describe the process of inserting water marks in word document	Demonstrate a process of inserting watermark in a document	Inserting watermark in a document	Visit a computer lab and practice the insertion of watermark on word document
8	Describe the process of performing calculation on tabular data in word document	Describe the process of performing calculation on tabular data	Demonstrate the process of performing calculation on tabular data	Calculation on tabular data	Prepare a mark sheet using various options of word processor; calculate marks with the help of calculation tools
9	Describe the process of editing image	Describe the use of crop and resize tools for image editing	Demonstrate the procedure of editing images	Image editing	Visit a computer lab and practice the use of image editing tools
10	Use text wrapping feature	What is text wrapping? How to perform text wrapping in a document	Create a document and demonstrate the text wrapping feature	What is text wrapping ?, How to wrap text in a word document	Create a document with text wrapping in different styles
11	Insert different objects in the document	Different types of objects, advantages of using different objects in the document, Inserting the object in the document	Demonstrate the process of inserting different different objects like symbols, shapes and images in the document	Different types of graphic objects and process to insert it in the document	Demonstrate to insert different objects in document
12	Create complex Illustrations with 'SmartArt'	Describe the advantage of using 'SmartArt' feature for creating complex Illustration	Demonstrate the use of 'SmartArt' feature	Use of 'SmartArt' feature	Visit a computer lab and prepare a horizontal hierarchy diagram using 'SmartArt'

Unit Code	Unit Title	Duration	Location	Teaching & Training Method
IT 204	Spreadsheet (Intermediate)	10 Hours	Classroom and Computer Lab	Interactive Lecture & Practical Activity

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Perform sum of cell values using autosum	What is the use of autosum in spreadsheet How to perform a autosum functions to perform addition in spread sheet	Creating a spreadsheet having student names and marks obtained and apply autosum for totaling the marks	How to perform a autosum functions to perform addition in spread sheet	Create a spreadsheet having students names and marks. Find the sum of marks by auto sum
2	Perform conditional formatting of the cells	What is conditional formatting How to make a spread sheet using different styles and rules of conditional formatting	Creating spread sheet using different styles and rules of conditional formatting	Explain conditional formatting, how to make a spread sheet using different styles and rules of conditional formatting	Create a spread sheet using different styles and rules of conditional formatting
3	Hide, unhide and freeze rows and columns	How to Hide / Unhide / Rows and Columns How to Freeze Rows and Columns What is the use of Hide / Unhide / Freeze Rows and Columns	Creating the spread sheet using Hiding/ unhiding rows and columns Creating the spread sheet using freezing the rows and columns	Explain how to Hide / Unhide / and Freeze Rows and Columns Explain what is the use of Hide/Unhide / Freeze Rows and Columns	Explain what is the use of Hide/Unhide / Freeze Rows and Columns
4	Set page break	How to use a page break option in a spreadsheet	Creating the spreadsheet having multiple page breaks	Explain the use of page break options	Visit a computer lab and Create the spreadsheet having multiple page breaks

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
5	Set page layout	How to layout the page in spreadsheet What are the different options available in page layout	Creating the spreadsheet using different options available in page layout (Margins, Orientation, headers and footers, Hide or display grid lines, page size, define the print area, specify the background)	Use of page break and page layout options	Visit a computer lab and Create the spreadsheet using different options available in page layout
6	Display the workbook in different views	What are the advantages of showing workbook records in different views like: Normal Page Layout, Page Break Preview, Custom view, Full Screen view etc.	Demonstrate the advantages of showing workbook records in different views like: Normal Page Layout, Page Break Preview, Custom view, Full Screen views in worksheet	Explain different views of Workbook	Visit a computer lab and practice by viewing different views on workbook
7	Name the cell and cell range	Advantage of naming the cell/ cell range How to assign a name to an individual cell as well as to the cell range	Creating spreadsheet naming cell and naming cell range using different examples	Explain how to assign a name to an individual cell as well as to the cell range	Practice by naming cell and cell range using different example
8	Create and format charts	Explain advantages of making charts Describe the procedure of making charts What are different elements used in charts What are different types of chart	Creating charts using different elements like: chart area, plot area, data points, horizontal and vertical axis, legend, chart and axis title, data label Creating different types of charts, modifying and	Calculating records across worksheet	Create charts using various elements format and modify them in a computer lab

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
		Formating the charts	formatting them		
9	Sort and filter data	What are advantages of sorting and filtering data How to sort and filter records	Demonstrate the use of sort and filter feature of spreadsheet using different data	Explain Sorting and Filtering records	Practice the sorting of records on the basis of alphabets and numbers to filter the data
10	Calculate data across worksheets	How to calculate data across rows and columns	Creating a worksheet for calculating data across the rows and columns	Explain how to calculate data across rows and columns	Practice the sorting of records on the basis of alphabets and numbers to filter the data
11	Linking the cells in multiple workbooks	Describe the advantage of Linking the Cells in a Multiple workbooks Describe the advantages of Linking the Cells in a Multiple workbooks How to link a cell in a multiple workbooks	Creating multiple workbooks and establishing the linkages between various cells	Explain how to make linkages between various cells in a multiple workbooks	Create a multiple workbooks and then establish the linkages between various cells
12	Share worksheet data	Describe the advantage of Sharing worksheet data	Creating a worksheet and sharing it for updating the data	Explain how to share the worksheet for multiple user to update data simultaneously	Create a worksheet and share it for updating the data by more than one users at a time

Code	Unit Title	Duration	Location	Teaching & Training Method
IT 205	Digital Presentation (Intermediate)	10 Hours	Classroom and Computer Lab	Interactive Lecture & Practical Activity

Sl	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Insert movie in presentation	Describe the advantages of inserting movie in presentation How to insert movie in presentation	Creating a presentation having movie Procedure of animating graphical object in a slide	Explain how to insert movie/ film in presentation	Visit to a computer lab and create a presentation having multiple movie clips
2	Insert audio clips in presentation	Describe advantages of inserting audio clips in presentation How to insert Audio Clips in presentation	Creating a presentation having Audio Clips	Explain how to insert Audio Clips in presentation	Visit to a computer lab and create a presentation having multiple movie clips
3	Insert table in a presentation	Describe the procedure of inserting table in a presentation, importing table from different application How to format a table in a presentation	Creating presentation by importing table from another application	Explain how to insert tables and formatting the tables	Visit to a computer lab and create a presentation having multiple movie clips
4	Use charts in presentation	Describe the procedure of inserting charts in a slide Describe the advantage of using charts in a presentation	Demonstrate the procedure of creating chart for the presentation	Explain how to insert charts in a presentation	Visit to a computer lab and create a presentation having charts of different types

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
5	Insert transitions and animations	Describe the procedure of Inserting Transitions and Animations	Creating presentation by inserting transitions and animations	Explain how to insert Transitions and Animations	Visit to a computer lab and create a presentation by inserting Transition and Animations
6	Grouping objects	What is the advantage of grouping objects Describe the Grouping Objects in presentation	Creating presentation by grouping objects	Explain how to Group the Objects	Visit to a computer lab and create a presentation by inserting Transition and Animations
7	Insert speaker notes	Describe how to insert speakers note	Creating presentation by inserting speakers note	Explain how to insert speakers note	Visit to a computer lab and create a presentation by inserting speakers note
8	Review content	How to review content	Reviewing the contents of presentations	Explain how to review the contents	Visit to a computer lab and create a presentation by inserting speakers note
9	Prepare to deliver the presentation	How to deliver the presentation	Delivering presentation by choosing the appropriate way as per the availability of equipments	Explain how to deliver the presentation	Visit to a computer lab and Deliver the presentation by choosing the appropriate way as per the availability of equipment
10	Print a presentation	Describe various print formats of presentation	Print the presentation in handout format.	Printing a presentation	Visit to a computer lab and print a previously prepared presentation in handout format having 4 slides per page

Code	Unit Title	Duration	Location	Teaching and Training Method
IT 206	E-mail Messaging (Intermediate)	10 Hours	Classroom and Computer Lab	Interactive Lecture and Practical Activity

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Manage calendar	What is time management How to utilizes the calender	Enlist the steps to manage (add, edit, delete) schedule in e-mail calendar	Explain how to manage schedules in calendar for e-mail account's	Practice to mark schedules in e-mail calendar date, month and hours wise
2	Manage appointments	How can we schedule an appointments in calenders	Scheduling (add, edit and delete) appointments in e-mail calendar	Explain how to schedule appointments in e-mail account's calendar	Practice to schedule appointments in e-mail calendar
3	Categorize an appointments	How to categorize the appointments as per our need	Categorizing an appointments as per our priorities	Explain how to categorize the appointments as per need	Visit to a computer lab and categorize appointments as per our priorities
4	Share and print calender	What is use of sharing, Describe how to share and print the calendar	Sharing the calendar with others and Printing a calender	Explain how to share and print the calendar	Visit to a computer lab and share and print the calendar
5	Create a meeting request	Describe how to send meeting request to user	Sending meeting request to multiple user	Describing the meeting request procedure	Send a meeting request to all the network users in lab
6	Respond to a meeting request	Describe how to respond to a meeting request	Responding to a meeting request sent by the host	Describing the procedure to respond to meeting request	Respond to a meeting requests received by you
7	Create and edit a task	Prepare a process flow diagram for creating and editing the tasks	Enlist the created tasks that can be edited with save options	Describing the procedure of creating and editing a task	Hands on Computer Laboratory
8	Create and edit a note	Prepare a process flow diagram for creating and editing the Note	Prepare a process flow diagram for editing and saving the Note	Describing the procedure of creating, editing and saving the Note	Hands on Computer Laboratory
9	Create and edit a journal entry	Enlist the entries that can be recorded in a Journal	Create and edit Journal entries	Demonstration of creating, editing and saving Entries	Hands on Computer Laboratory

Unit Code	Unit Title	Duration	Location	Teaching & Training Method
IT 207	Database Development (Basic)	10 Hours	Classroom and Computer Lab	Interactive Lecture & Practical Activity

Sn	Learning Outcomes	Knowledge Evaluation	Performance Evaluation	Interactive Lecture	Practical Activity
1	Introduce with database concepts	Introduce with DBMS and Database concepts	Creating table as per DBMS	Introduce with DBMS and Database concepts	Create table as per DBMS
2	Store data in table	How to store Data in a table Concept of row, column, database fields, data types, primary key etc	Store data in tables as per data types (Numeric, alphanumeric, binary type, date & time, other variable types), Create data fields with primary key	Explain Data storage in table, Concept of row, column, database fields, data types, primary key	Store data in tables (according to data types like: Numeric Type, Alphanumeric Type, Binary Type, Date & time, Other Variable types)
3	Manipulate with data	Describe data manipulation and retrieval mechanism	Demonstrate the commands to retrieve the records as per the requirement	Explain Data manipulation and retrieval	retrieve the records as per the requirement
4	Create a database object	What is database objects How to create database objects	Creating database objects	What is database objects, Creating database objects	Create database objects
5	Create a table	What is table and how to Create a Table creating a table	Creating table in DBMS	Explain what is table and how to create a table	Create table in DBMS
6	Build forms	What is form and how to Create form	Creating forms in DBMS	Explain what is form and how to create a form	Create form
7	Create and manage queries	Describe the procedure to create and manage Queries	Creating and executing the queries in the database	Explain how to create and manage the queries	Execute query on the database
8	Design reports	What is report, Designing a report from database	Designing a report	What is report, Designing a report from database	Design report

Assessment Guide

Assessment is a process used for determining an individual's progress or level of mastery/competence in an occupational area. It may be formative (continuous) and/or summative (final). It is a process of collecting evidence and making judgement about the extent to which a person demonstrates the knowledge and skills set out in the standards or learning outcomes of a unit of competency. Assessment should be done on the basis of information or evidence about the individual's ability against clearly stated objectives or standards. A diversity of assessment methods is required to achieve the multiple purposes and to satisfy the requirements of competency based assessment. Appropriate evidence is to be collected from activities that can be clearly related to the Units of Competency. It should cover all the elements and performance criteria/indicators in the competency standards. Student's achievements should be assessed by using the following methods of assessment.

Sn	Method of Assessments	Weightage (Max.marks)	Evaluator
1.	Written test	30	Teacher
2.	Practical test	30	Certified Assessor #
3.	Oral test/viva voce	10	Teacher/Ext. Examiner
4.	Portfolio	10	Teacher
5.	Project	10	Teacher/Trainer
6.	Direct Observation	10	Teacher/Trainer
Total		100	

Assessors will be certified by the State Education Board.

- Written test:** It allows candidates to demonstrate that they have the knowledge and understanding of a given topic.
- Practical test:** It allows candidates to demonstrate application of skills in simulated or real work conditions against competency standards (skill and academic standards).
- Oral test/viva voce:** It allows candidates to demonstrate communication skills and content knowledge. Audio or video recording can be done at the time of oral test or viva voce.
- Portfolio:** It is a compilation of documents that supports the candidate's claim of competence that was acquired from prior learning and experience. Documents (including photo's, newspaper articles, reports, etc.) of practical experience in the workplace or the community and photographs of the products prepared by the candidates related to the units of competency should be included in the portfolio.
- Project:** Projects (individual or group projects) are a great way to assess the practice skills on a deadline, but these 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.
- Direct Observation –** Direct observation requires a considerable degree of commitment from the observer and those being observed. Employability skills evaluation listed below in the table should be evaluated through direct observation by the teacher/trainer and appropriate records should be maintained for transparency in evaluation.

Employability Skill Area	Sn	Competencies and Performance Standards	Y	N
Communication	1.	Questions appropriately		
	2.	Writes clearly and legibly		
	3.	Demonstrates good listening and responding skills		
	4.	Informs about the absence and reasons of absence		
Responsibility	5.	Organizes work		
	6.	Manages time effectively and efficiently		
	7.	Complete assignments timely		
	8.	Displays care for tools and equipment		
	9.	Accepts responsibility pleasantly		

Competent = 0.5 marks , Not yet competent = 0

List of Tools, Equipment and Materials

The list of tools, equipment and materials given below is suggestive and an exhaustive list should be prepared by the teacher/trainer. Only basic tools, equipment and accessories should be procured by the Institution for performance of routine tasks or activities by the students.

I. Computer Hardware, Software and Peripherals

HARDWARE

- Pentium system with multimedia and Combo drives, Zip drives and DAT drives (Latest configuration)
- Notebooks
- Inkjet printer
- Laser printer
- Spare memory, Processor, cables, connectors, power pack, battery.
- NIC cards.
- WEB Camera
- One Dot Matrix printer for dismantling, demonstration and reassembly.
- Inkjet/Desk jet for dismantling, demonstration and reassembly.
- LaserJet for dismantling, demonstration and reassembly.
- Line printer.
- External Hard disk drives.
- Different types, makes and capacities of HDD in IDE/ATA and SCSI.
- Flash/Thumb/Pen drives of different makes and capacities.
- Different types, makes and sizes of monitors for dismantling, demonstration and reassembly
- Different types of Keyboards including wireless keyboards.
- Different types of Mice including wireless mouse.

SOFTWARE

- Operating systems- full and legal versions.
- Windows MS office/OpenOffice package.
- Linux OS.

TOOLS

- Tool kit
- Cable connectors
- Crimping tools
- RJ45 connectors and Crimping tool.
- Vacuum cleaner
- Air blower

OTHER DEVICES

- UPS 5 KVA
- Multimedia Projector
- External HDD
- DVD writer
- UTP 5/5e/6 cable.

FURNITURE

- Computer maintenance table
- Lab stools/chairs
- Computer tables

CONSUMABLES

- Paper
- Printer Cartridges

II. Training materials

1. Teacher's handbook
2. Reference books
3. Student workbook
4. Brochures
5. Slides for presentations
6. Recorded Compact Discs
7. Video tapes

Teacher's Qualifications

Qualification, competencies and other requirements for appointment of Graduate Teacher (IT/ITeS) on contractual basis should be as follows:

Qualifications: BCA/B.Sc. (Computer Science)/ B.Sc. (IT) from any UGC recognized University OR 3 years Diploma in Computer Science/ Engineering or IT/ITES or DOEACC A level

Desirable: 1 year experience in industry

Minimum Competencies: Effective communication skills (oral and written) , Basic computing skills.

Age Limit:18-37 years, relaxation to be provided as per Govt. rules.

List of Contributors

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