IT - ITeS SSC NASSCOM

Skill India
कौशल भारत - कुशल भारत

N·S·D·C National Skill Development Corporation
Transforming the skill landscape

Model Curriculum

QP Name: DOMESTIC IT HELPDESK ATTENDANT

QP Code: SSC/Q0110

QP Version: 2.0

NSQF Level: 3

Model Curriculum Version: 1.0

IT-ITeS Sector Skills Council NASSCOM | Plot No – 7,8,9 & 10, Sector 126, Noida, UP.
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Training Parameters

Sector	IT-ITeS
Sub-Sector	IT Services
Occupation	IT Support Services/Helpdesk
Country	India
NSQF Level	3
Aligned to NCO/ISCO/ISIC Code	NCO-2015/ 3512.0101
Minimum Educational Qualification and Experience	12th Class OR 10th Class + ITI OR 10th Class with 2 years of relevant experience
Pre-Requisite License or Training	Training programs in customer orientation, dealing with difficult customers, telephone etiquettes, etc.
Minimum Job Entry Age	18 Years
Last Reviewed On	13-09-2021
Next Review Date	13-09-2024
NSQC Approval Date	27-01-2022
QP Version	2.0
Model Curriculum Creation Date	13-09-2021
Model Curriculum Valid Up to Date	13-09-2024
Model Curriculum Version	1.0
Minimum Duration of the Course	400 hours
Maximum Duration of the Course	400 hours

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Collate existing documents, language standards, templates related to service requests.
- Examine the methods to handle common service requests.
- Categorize and prioritize service requests from customers with justifiable resolution time.
- Demonstrate working on the various validation steps related to application management, installation, security hardening, etc.
- Design incident management process flow from 1st level till escalation level coordinating with specialist support groups.
- Demonstrate process knowledge on hardware and software utilities for raising escalation and fetching data.
- Analyse technicalities of service requests to identify the nature of incidents.
- Demonstrate error mitigation techniques related to access management, application installation, network installation, etc.
- Demonstrate application of source coding standards, ticketing tools and other IT related technologies.
- Explain the purpose and use of data configuration.
- Examine the outcome of rule-based analysis of the data/information for database management.
- Demonstrate effective work planning principles.
- Recognize the importance of using time and resources effectively.
- Describe how to maintain a health, safe and secure environment at workplace.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration (In Hours)	Practical Duration (In Hours)	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration (In Hours)
Module 1 (Bridge Module): IT-ITeS/IT support services industry – An Introduction – Bridge Module	02:00	04:00	00:00	00:00	06:00
SSC/N0202 Deal directly with IT service requests/incidents NOS Version No. 2 NSQF Level 4	85:00	239:00	00:00	00:00	324:00

Module 2: Concept of service requests/ incidents	12:00	34:00	00:00	00:00	46:00
Module 3: Monitoring and validation of Service Requests	12:00	34:00	00:00	00:00	46:00
Module 4: Technical Specifications related to Service Requests	10:00	36:00	00:00	00:00	46:00
Module 5: Deal directly with IT service requests/incidents	13:00	33:00	00:00	00:00	46:00
Module 6: Technical skills for handling Incidents	13:00	33:00	00:00	00:00	46:00
Module 7: Process of Database Management - SSC/N0202	13:00	33:00	00:00	00:00	46:00
Module 8: Skills for Incident Management	12:00	36:00	00:00	00:00	48:00
SSC/N9001 Manage your work to meet requirements NOS Version No. 2 NSQF Level 4	08:00	32:00	00:00	00:00	40:00
Nodule 9: Manage your work to meet requirements	08:00	32:00	00:00	00:00	40:00
SSC/N9003 Maintain a healthy, safe, and secure working environment NOS Version No. 2 NSQF Level 4	05:00	25:00	00:00	00:00	30:00
Module 10: Managing Health and Safety	05:00	25:00	00:00	00:00	30:00
Total Duration	100:00	300:00	00:00	00:00	400:00

Module Details

Module 1: IT-ITeS/IT Support Service Industry – An Introduction

Bridge Module

Training Outcomes:

- Comprehend various delivery models used in the IT-Support services industry.
- Examine the current growth and development standards of an IT helpdesk attendant.

Duration: *02:00(In Hours)*	**Duration:** *04:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss the relevance of the IT-ITeS support services. • Identify the career path for an IT Helpdesk attendant. • List the various sub-sectors of the IT support services industry.	• Collate information, evidence, and articles regarding the IT- ITeS/Support services through internet browsing. • Evaluate key applications where IT Helpdesk services are used.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated)	

Module 2: Concept of Service Requests/Incidents

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Collate existing documents, language standards, templates related to service requests.
- Examine the methods to handle common service requests.

Duration: *12:00(In Hours)*	**Duration:** *34:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List general policies, procedures, and processes for dealing with basic IT service requests or incidents. • Discuss the guidelines for categorizing and prioritizing service requests.	• Evaluate the nature and types of service requests. • Demonstrate methods to resolve common incidents related to account maintenance/ access problems networking, connectivity problems, hardware problems. • Demonstrate key operating principles for incidents related to operating system, installation/ configuration problems.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 3: Monitoring and Validation of Service Requests

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Categorize and prioritize service requests from customers with justifiable resolution time.
- Demonstrate working on the various validation steps related to application management, installation, security hardening, etc.

Duration: *12:00(In Hours)*	**Duration:** *34:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Collate service requests/incidents using technical tools and procedures. • Discuss the variety of service requests. • Identify solutions/workarounds for service requests/incidents.	• Monitor automated alerts and customer service requests through IT systems. • Validate automated alerts to ensure they are genuine incidents and report for alerts that are false. • Demonstrate the process flow for rule-based transactions for validated incidents.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 4: Technical Specifications related to Service Requests

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Design incident management process flow from 1st level till escalation level coordinating with specialist support groups.
- Demonstrate process knowledge on hardware and software utilities for raising escalation and fetching data.

Duration: *10:00(In Hours)*	**Duration:** *36:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Identify latest changes and procedures in the field of expertise pertaining to service level escalations. • List the organization's tools and processes for incident management and escalation support.	• Demonstrate proper process knowledge related to the functioning of technologies related to hardware devices (e.g., laptops, desktops, Blackberries, routers, switches, LAN cables, RAM, mother board, server, RAID, blade server, storage media, printers, other peripherals and drivers), operating systems (e.g., Windows, UNIX, Macintosh), networks (e.g., LAN, WAN, VPN, IP, wireless, network devices). • Analyse the correct level of escalation required for remote troubleshooting tools (e.g., PC Anywhere, DameWare, WebEx, Live Meeting, Radmin), productivity tools (e.g., MS Office), IT service management tools, etc.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 5: Deal Directly with IT Service Requests/Incidents

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Analyse technicalities of service requests to identify the nature of incidents
- Demonstrate error mitigation techniques related to access management, application installation, network installation, etc.

Duration: *10:00(In Hours)*	**Duration:** *36:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• List the guidelines and standard scripts to resolve service requests/incidents within your level of competence and authority. • Discuss technicalities of service requests/incidents outside the level of competence and authority with experts.	• Design suitability of solutions/ workarounds, for handling direct service requests. • Demonstrate error mitigation techniques related to access management, application installation, network installation, etc. • Construct a documented resolution of service requests/incidents accurately. • Create a confirmation process to capture that service requests/incidents have been resolved.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 6: Technical Skills for Handling Incidents

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Demonstrate application of source coding standards, ticketing tools and other IT related technologies.
- Explain the purpose and use of data configuration.

Duration: *13:00(In Hours)*	**Duration:** *33:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss how to store and retrieve information related to service requests. • List the latest changes, procedures, and practices in incident management process.	• Evaluate the mechanism of source coding standards, ticketing tools and utilities/tools for handling service requests. • Deploy information technology effectively to input and/or extract data. • Identify methods and importance of data configuration for disseminating relevant information.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 7: Process of Database Management

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Examine the outcome of rule-based analysis of the data/information for database management.
- Discuss the purpose and specifics of CRM database.

Duration: *13:00(In Hours)*	**Duration:** *33:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Design the appropriate data/information that needs to be provided, the formats in which it should be provided. • Discus the purpose and specifics of CRM database for extracting information.	• Examine outcome of rule-based analysis of data/information for database management. • Compile documentation of the data/ information into requisite formats. • Deliver complete, accurate and up-to-date data/information for review. • Perform validation and updating of data into database, once approved.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 8: Skills for Incident Management

Mapped to SSC/N0202, v2.0

Training Outcomes:

- Demonstrate application of source coding standards, ticketing tools, rule-based analysis, and other IT related technologies.
- Organize 1st level and 2nd level incident management support program to evaluate outcomes.

Duration: *13:00(In Hours)*	**Duration:** *33:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Identify the various types of IT components related to incident management, like servers, storage, network, databases, applications, etc. • Identify the process flow chart of a service desk team.	• Construct a demo incident management process flow with any disruption of IT services. • Create cross support group process for coordination of a service request. • Organize 1st level and 2nd level incident management support program to evaluate possible outcomes.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools, Equipment and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools CRM application/LMS tool to enable blog posts or discussion board, Instant messenger, chat, and email tools to enable mock exercises.	

Module 9: Manage your Work to meet Requirements

Mapped to SSC/N9001, v2.0

Terminal Outcomes:

- Define the scope of work.
- Demonstrate effective work planning principles.
- Recognize the importance of using time and resources effectively.

Duration: *08:00(In Hours)*	**Duration:** *32:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss the role, responsibilities, and limits of the responsibilities. • Discuss the importance of gathering detailed work requirements and prioritizing work areas. • Identify commonly made mistakes in the prioritized work areas. • Explain the importance of completing work accurately.	• Analyse needs, requirements, and dependencies in order to meet the work requirements. • Apply resource management principles and techniques. • Demonstrate the ways to maintain an organized work area. • Apply effective time management principles.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools	

Module 10: Managing Health and Safety

Mapped to SSC/N9003, v2.0

Terminal Outcomes:

- Describe how to maintain a health, safe and secure environment at workplace.

Duration: *05:00(In Hours)*	**Duration:** *25:00(In Hours)*
Theory – Key Learning Outcomes	**Practical – Key Learning Outcomes**
• Discuss the importance of complying with organizational health, safety and security policies and procedures. • Discuss possible roles and responsibilities that an employee can take up with respect to workplace safety management. • Evaluate sample organizational emergency procedures. • Identify mechanisms to improve workplace health, safety, and security. • Label appropriate personal protective equipment needed for a job role.	• Demonstrate the identification of possible breaches in health, safety, and security policies. • Document health, safety, and security breaches. • Design a contingency plan for emergency situations like fire, short circuit, accidents, earthquake, etc. • Demonstrate the use of First Aid, CPR, and safety evacuation process as part of routine operations.
Classroom Aids:	
Whiteboard and Markers Chart paper and sketch pens LCD Projector and Laptop for presentations	
Tools and Other Requirements:	
Labs equipped with the following: PCs/Laptops Internet with Wi-Fi (Min 2 Mbps Dedicated) Microphone / voice system for lecture and class activities Computer Lab with 1:1 PC: trainee ratio and having internet connection, MS Office / Open office, Browser, Outlook / Any other Email Client, and chat tools A sample health and safety policy document, Emergency broadcast system and mock emergency signage in the appropriate areas of the training institute	

Annexure

Trainer Requirements

Trainer Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Minimum 12th Standard	Preferred Master's degree in any discipline.	Minimum 2 years' experience in the IT support services.		1 year preferred	Minimum 2 years' experience in the IT helpdesk domain	Additional certification in customer orientation, dealing with difficult customers, written communication etc. will be an added advantage.

Trainer Certification	
Domain Certification	**Platform Certification**
Minimum accepted score in SSC Assessment is 80% per NOS being taught in QP "SSC/Q0110, V 2.0"	Recommended that the trainer is certified for the Job role "Trainer" mapped to the Qualification Pack "MEP/Q2601". Minimum accepted score is 80% aggregate

Assessor Requirements

Assessor Prerequisites						
Minimum Educational Qualification	**Specialization**	**Relevant Industry Experience**		**Training/Assessment Experience**		**Remarks**
		Years	***Specialization***	***Years***	***Specialization***	
Graduate in any discipline		2	Experience that involves client interaction	1-2	Experience that involves client interaction	

Assessor Certification	
Domain Certification	**Platform Certification**
Not Applicable	

Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the learner on the required competencies of the program.

Assessment System Overview

A uniform assessment of job candidates as per industry standards facilitates progress of the industry by filtering employable individuals while simultaneously providing candidates with an analysis of personal strengths and weaknesses.

Assessment Criteria

Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down the proportion of marks for Theory and Skills Practical for each PC.

The assessment for the theory part will be based on a knowledge bank of questions created by the SSC. Assessment will be conducted for all compulsory NOS, and where applicable, on the selected elective/option NOS/set of NOS.

Guidelines for Assessment			
Testing Environment	**Tasks and Functions**	**Productivity**	**Teamwork**
• Carry out assessments under realistic work pressures that are found in the normal industry workplace (or simulated workplace). • Ensure that the range of materials, equipment, and tools that learners use are current and of the type routinely found in the normal industry workplace (or simulated workplace) environments.	• Assess that all tasks and functions are completed in a way, and to a timescale, that is acceptable in the normal industry workplace. • Assign workplace (or simulated workplace) responsibilities that enable learners to meet the requirements of the NOS.	• Productivity levels must be checked to ensure that it reflects those that are found in the work situation being replicated.	• Provide situations that allow learners to interact with the range of personnel and contractors found in the normal industry workplace (or simulated workplace).

Assessment Quality Assurance framework

NASSCOM provides two assessment frameworks NAC and NAC-Tech.

NAC (NASSCOM Assessment of Competence)

NAC follows a test matrix to assess Speaking & Listening, Analytical, Quantitative, Writing, and Keyboard skills of candidates appearing for assessment.

NAC-Tech

NAC-Tech test matrix includes assessment of Communication, Reading, Analytical, Logical Reasoning, Work Management, Computer Fundamentals, Operating Systems, RDBMS, SDLC, Algorithms & Programming Fundamentals, and System Architecture skills.

Methods of Validation

To pass a QP, a trainee should score an average of 70% across generic NOS' and a minimum of 70% for each technical NOS. In case of unsuccessful completion, the trainee may seek reassessment on the Qualification Pack.

Method of assessment documentation and access

The assessment agency will upload the result of assessment in the portal. The data will not be accessible for change by the assessment agency after the upload. The assessment data will be validated by SSC assessment team. After upload, only SSC can access this data.

References

Glossary

Term	Description
Key Learning Outcome	Key learning outcome is the statement of what a learner needs to know, understand and be able to do in order to achieve the terminal outcomes. A set of key learning outcomes will make up the training outcomes. Training outcome is specified in terms of knowledge, understanding (theory) and skills (practical application).
Training Outcome	Training outcome is a statement of what a learner will know, understand and be able to do **upon the completion of the training**.
Terminal Outcome	Terminal outcome is a statement of what a learner will know, understand and be able to do **upon the completion of a module.** A set of terminal outcomes help to achieve the training outcome.
National Occupational Standard	National Occupational Standard specify the standard of performance an individual must achieve when carrying out a function in the workplace
Persons With Disability	Persons with Disability are those who have long-term physical, mental, intellectual, or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.
Integrated Development Environment	An integrated development environment is a software application that provides comprehensive facilities to computer programmers for software development.

Acronyms and Abbreviations

Term	Description
QP	Qualification Pack
NSQF	National Skills Qualification Framework
NSQC	National Skills Qualification Committee
NOS	National Occupational Standards
SSC	Skill Sectors Councils
NASSCOM	National Association of Software & Service Companies
PwD	Persons with Disability
IDE	Integrated Development Environment