



Certified Help Desk Senior Analyst

Standards

Introduction:

This document contains the Help Desk Institute's Help Desk Senior Analyst (HDSA) Certification objectives. This document provides adequate information, requirements and guidance necessary for test creators, curriculum developers, test takers and administrators.

Methodology:

The competencies for each of the HDI Certifications were identified and approved by the HDI International Individual Certification Committee. It is the committee's intent to recognize the breadth of knowledge required, document the skills required and provide leadership to the industry on the meaning of a Certification in Customer Services and Technical Support.

The HDI Certification is an open certification that is independent of any training curriculum. HDI Certification objectives are published to allow any organization or individual to develop curriculum that will enable individuals to pass the exam, which is independently administered. The Help Desk Institute is the administrator of the Standards, facilitator and arbitrator.

Help Desk Senior Analyst Certification Objectives:

The Help Desk Institute's Help Desk Senior Analyst certification will recognize an individual's knowledge of Customer Service competency, skills required and readiness to work in the Help Desk industry. A person that passes the certification exam can be expected to understand industry standard terminology, concepts, business processes, supervisory skills and technology that would normally take an average individual between eighteen and twenty-four months to master.

Certification Structure and Weightings:

Objective	Title	Weighting %
1	Customer Service Industry	4
2	Communications	13
3	Customer Service	21
4	Problem Solving	15
5	Teamwork	12
6	Ethics	5
8	Technical and Process Management	15
9	Help Desk Technology & Infrastructure	15
Total		100

Name of the Certification:

The Help Desk Institute's Certified Help Desk Senior Analyst

CSS is the acronym used for the Specialist

HDA is the acronym used for the Analyst

HDSA is the acronym used for the Senior Analyst

HDM is the acronym used for the Manager

Target Demographics and Prerequisites

The Help Desk Institute's Certified Help Desk Senior Analyst exam and training material should be aimed at individuals who have been working in the Customer Support profession for a minimum of 18 months, and are well versed in the standard processes, procedures and methods for implementing and operating a Help Desk operation. The Help Desk Analyst Certification program targets individuals that provide technical support over the telephone while the Help Desk Senior Analyst targets individuals who support telephone support professionals.

The Help Desk Senior Analyst has many common positions within the industry and job titles will vary greatly. However, the most common job titles include:

- Help Desk Senior Analyst II, III
- Technical Analyst II, III
- Technical Lead
- Technical Supervisor
- Lead Analyst

HDI expects that individuals interested in obtaining this certification will mirror the HDI membership demographics. Test takers will come from various industry sectors, as well as a range of large, mid and small various size Help Desk operations. The one thing they will all have in common is a desire to be recognized for demonstrating an understanding of the important support topics listed in these objectives in order to pursue employment and advancement opportunities.

Prerequisites for passing the certification exam will be a working and comprehensive understanding of the professional demands placed on a Help Desk Senior Analyst, the standard process requirements for most help desk operations and the technology available to all help desks. Individuals should not attempt certification unless they have worked in the support industry for one to three years and have a working knowledge of the concepts below OR they have successfully completed certification preparation course work and have a strong desire to work in the customer support profession.

Unit 1: Customer Service Industry		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. Profile of the Help Desk Senior Analyst	1. Explain the role of the Help Desk Senior Analyst	<ul style="list-style-type: none"> • Consistently deliver quality customer support • Understand and document customer needs • Manage customer expectations (as per SLA) • Resolve (or assist in resolution) of customer inquires and problems • Take ownership (as appropriate) of customer inquiries and problems • Mentor/Assist Help Desk Analysts • Assist Help Desk Manager/Supervisor <ul style="list-style-type: none"> ▪ Staffing & Scheduling ▪ Reporting ▪ Mentor other analysts and customers ▪ Supervise other analysts • Enhance customer relationship with the Help Desk and organization
	2. Describe the responsibilities of the Help Desk Senior Analyst	<ul style="list-style-type: none"> • Ensure Response Time and Resolution Time objectives are met • Provide technical support to resolve IT related service requests • Maintain technical product knowledge and learn new products as required • Maintain/Enhance Customer Satisfaction
2. Help Desk Services	1. Identify the responsibilities of the Help Desk and the customer	<ul style="list-style-type: none"> • The responsibility of the HDSA is to do what is necessary to satisfy the customer's needs within the guidelines of the organization. • The responsibility of the HDSA is to treat the customer in a respectful, courteous, positive manner • The responsibility of the caller is to treat the HDSA in a respectful, courteous, positive manner
	2. Describe the role of Help Desk Services	<ul style="list-style-type: none"> • Single Point of Contact (SPOC) • Quick, responsive, consistent • To keep the corporation and/or supported client performing at the highest level possible. • Strategic asset to the organization. • To provide customer and/or technical assistance services.

Unit 1: Customer Service Industry		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	3. Explain the evolution of Help Desk Services	<ul style="list-style-type: none"> • Paper based systems (phone based) • Automated call logging/tracking systems <ul style="list-style-type: none"> ▪ Phone based - voice and fax ▪ Internet/World Wide Web (WWW) ▪ Chat • Problem Management Systems • Customer Relationship Management (CRM) • Universal Queue/Agent <ul style="list-style-type: none"> ▪ Voice, Fax ▪ E-mail ▪ Chat, Internet/Web • Wireless
3. Help Desk Technologies & Tools	1. Describe the common technologies used in the Help Desk environment	<ul style="list-style-type: none"> • Phone <ul style="list-style-type: none"> ▪ Public Branch Exchange (PBX) ▪ Automatic Call Distribution (ACD) • Fax • Voice Mail • Integrated Voice Response (IVR) • E-Mail • Internet/World Wide Web (WWW) • Call Management System (CMS), Customer Relationship Management (CRM) • E-Mail Management System (EMS) • Knowledge Base Systems (KBS) • Wireless • Alert Systems • Broadcast Devices (display boards)
	2. Describe common measurements used in Help Desks	<ul style="list-style-type: none"> • Average Speed to Answer (ASA) • Abandon Rate (ABA) • Talk Time • Availability • First contact Resolution • Customer Satisfaction
4. Awareness of Customer Support Centre (CSC) Site Certification Elements	1. Explain the key elements of the Help Desk Institute's Site Certification	<ul style="list-style-type: none"> • Leadership • Policy and Strategy • People Management • Resources • Process • People Satisfaction • Customer Satisfaction • Performance results

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. Listening	1. Explain the principles of active listening	<ul style="list-style-type: none"> • Active listening means paying attention to the customer • Active listening is understanding and dealing with both the facts and feelings of the customer <ul style="list-style-type: none"> ▪ Don't make assumptions ▪ Demonstrate empathy • Active listeners ask questions and respond to the customer. <ul style="list-style-type: none"> ▪ Acknowledge the customer ▪ Paraphrase for verification/clarification ▪ Restate/repeat to ensure understanding (verification) ▪ Summarize and verify what you have heard ▪ Agree with the customer wherever possible • Active listeners recognize emotional words can distract, they are symbols for the message. • Active listeners use verbal attends <ul style="list-style-type: none"> ▪ Ah-huh, okay, umhm... • Active listeners understand that using the customers name helps build rapport • Active listeners minimise distractions • Active listeners make and refer to notes • Active listeners acknowledging the customer • Active listeners use questions to focus the discussion and obtain complete information • Active listeners pay attention to what is said and how it is said
	2. Describe the benefits of active listening	<ul style="list-style-type: none"> • Helps build rapport with customers, increasing Customer Satisfaction • Determines customer's emotional state allowing HDSA to acknowledge and address emotion • Helps build trust by responding to customer's priority/severity (impact on customer's business) • Increases credibility for HDSA and Help Desk <ul style="list-style-type: none"> ▪ Keeps call focused, optimize call time ▪ Reduces stress for HDSA and customer ▪ Demonstrates to customer's that they are important
	3. Identify barriers to communication	<ul style="list-style-type: none"> • Pace & Rate (delivery) of caller • Experience (HDSA & Customer) <ul style="list-style-type: none"> ▪ Previous poor experiences • Background • Education • Human Factors • Misunderstand – do the customer and HDSA understand what each other is saying?

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
2. Verbal	1. Explain the principles of Managing the Call	<ul style="list-style-type: none"> • Listen • Speak clearly & concisely • Address the emotional needs of the customer (empathy) • Match vocabulary to the customers' level of competence • Document problem/request clearly • Focus on actions to resolve customer query or problem • Ensure customers' understanding • Maintain professionalism
	2. Describe the benefits of Managing the Call	<ul style="list-style-type: none"> • Optimizes talk time • Increases Help Desk credibility • Increases confidence of HDSA • Reduces stress for both HDSA and customer • Results in improved Customer Satisfaction
	3. Explain why matching the caller's style is important	<ul style="list-style-type: none"> • Customers' initial perception of the Help Desks' service attitude can be set/modified • Increases understanding • Establishes a feeling of rapport and ease for the customer • Results in improved Customer Satisfaction
	4. Explain how to match a caller's style	<ul style="list-style-type: none"> • Style • Technical proficiency • Intonation • Vocabulary • Technical level/terminology
3. Call Handling Procedures	1. Explain the components of an organization's standard greeting	<ul style="list-style-type: none"> • Identify yourself • Identify your company and/or department • Use customers name • Offer assistance
	2. Explain the benefits of using a standard greeting	<ul style="list-style-type: none"> • Express willingness to help • Callers tend to match tone/attitude of the HDSA • Establishes atmosphere of trust and respect for each other
	3. Explain why using the customer's name during the call is important	<ul style="list-style-type: none"> • Sets the tone for the call • Builds rapport • It's human nature to like the sound of your own name • Contributes to a positive first impression

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	4. Explain why status updates to customers are important	<ul style="list-style-type: none"> • Potential to exceed the customer's expectation • Customer does not have to call to inquire on status, status updates are proactively provided to the customer • Reduces incoming calls, allows the HDSA to focus on new calls/requests
	5. Describe how to provide status updates to customers	<ul style="list-style-type: none"> • Phone, e-mail, written correspondence • Inform customer of the current status; next steps/tasks scheduled, timeframe, and the next status/update • Agree on a call-back time; e.g., Tuesday 2 PM. Saying you will call when you have found something is not acceptable. Customers need to be informed of progress on their call • Do what you say you will do (when you said you would do it), e.g., when you tell a customer you will call them, do it • Do not commit other organizations or personnel unless you have their agreement or the SLA (or operational processes/procedures) sets time frames for response • Communicate any changes to plans immediately and apologize if appropriate
	6. Describe techniques to keep the customer's attention focused on the resolution	<ul style="list-style-type: none"> • Walk the customer through the steps with you • Ask questions to direct conversation • Encourage paraphrasing of steps • Suggest the customer write down steps
	7. Describe ways to handle and redirect issues related to non-supported items	<ul style="list-style-type: none"> • Be positive • Explain what service is offered/supported • Provide alternatives to resolve the request if not a supported service
	8. List habits and situations to avoid when dealing with a caller	<ul style="list-style-type: none"> • Asking a customer to repeat information that is documented, e.g., description of the problem (HDSA should verify data in record is correct) • Eating, chewing gum • Continuing a conversation while answering a call • Background noise • Extended hold times • Multiple transfers • Acronyms, slang, colloquialisms, terms of endearment, i.e. 'honey', 'dear', 'love'

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
4. Call Documentation	1. List the primary reasons businesses log all calls (customer interactions)	<ul style="list-style-type: none"> • Audit trail of customer interactions • Provides information about how many times a problem was encountered and the resolution provided • Provides information about the frequency of calls from particular customers or departments
	2. List the steps in logging a call	<ul style="list-style-type: none"> • Identify/Name of caller • Verify eligibility/entitlement for service • Identify priority/severity of the call • Document callers request • Identify any special requirements • Confirm facts/details with the caller • Resolve or set callers expectations for next contact • Provide call reference (tracking) number
	3. Describe what information should be logged for calls	<ul style="list-style-type: none"> • Name of caller • Contact information <ul style="list-style-type: none"> ▪ Phone number ▪ E-mail address • Priority/Severity of the call • Caller's description of the request/problem • Platform specifics <ul style="list-style-type: none"> ▪ Hardware ▪ Operating system ▪ Applications ▪ Network • All information pertaining to attempted and successful resolutions • Conversation with the customer as it pertains to the problem • Steps taken during the call, steps that will be taken after the call • Next contact date • Commitments made to the customer
	4. Explain what variables are involved in determining the priority/severity for a call	<ul style="list-style-type: none"> • Definition in SLA or Help Desk Operating procedures • If there are no definitions: <ul style="list-style-type: none"> ▪ Number of personnel affected ▪ Impact to the organization (business) ▪ Workload at Help Desk • Ability to provide workaround

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	5. List the steps to close a call	Using the customer's name: <ul style="list-style-type: none"> • Recap to ensure all relevant data collected • Verify customer data is correct and complete • Provide call reference (tracking) number • Summarize problem resolution and/or steps to take, if any • Set expectations for follow up (resolution or status) • Ask if the customer has any other questions • Thank the customer for calling
	6. Describe what information is included when leaving a message for a customer	<ul style="list-style-type: none"> • HDSA name, contact info • Ticket (reference) number • Date & time of the call • Purpose of the call <ul style="list-style-type: none"> ▪ Information request ▪ Status update • Customer action required (if any)
	7. Describe why grammar and spelling are important in documenting calls	<ul style="list-style-type: none"> • Many people outside the Help Desk may view the information, the quality of the documentation reflects on the organization and the individual • Facilitates reuse of data without extensive editing, e.g., searching for similar conditions/situations • Perceptions are important
	8. List behaviours to avoid while documenting calls	<ul style="list-style-type: none"> • Acronyms, emoticons, slang, colloquialisms • Terms of endearment, i.e. 'honey', 'dear' • Any negative references to the customer or the company's products and services
	9. Explain what E-Mail etiquette means	<ul style="list-style-type: none"> • Use Business style writing • Messages should be clear, concise • Avoid excessive punctuation, e.g.,!!!! • Use plain text, avoid fancy fonts, colours, RTF or HTML specific formatting • Avoid abbreviations, e.g., BTW (by the way) • Avoid Emoticons (smilies), e.g. :) • Standard headers or footers approved by management • Avoid single work replies/responses, e.g., Yes, I agree, etc • Normally include original message with replies • Avoid all UPPER CASE since this is the equivalent of YELLING

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
5. Presentation Skills	1. Identify preparation elements necessary for an effective presentation	<ul style="list-style-type: none"> • Determine the purpose and audience for the report • Research <ul style="list-style-type: none"> ▪ Collect data • Develop visual aids <ul style="list-style-type: none"> ▪ Charts ▪ Graphs ▪ Tables • Write draft • Revise for style, grammar & spelling • Write concisely <ul style="list-style-type: none"> ▪ Choose effective wording ▪ Be as precise as possible • Use parallel words/phrases in lists • Use a confident, courteous, sincere tone • Avoid abbreviations/acronyms • Proofread and spell-check • Practice aloud for timing and delivery
	2. List standard presentation equipment and their operation	<ul style="list-style-type: none"> • Overhead projectors/slides • Projection (LCD) devices • Flip charts • whiteboards
	3. Explain considerations for using presentation media	<ul style="list-style-type: none"> • Colour of font and background • Content • Font type and size • Item limit per slide • Projecting slides high enough so the back of the room audience can see
	4. Identify techniques for getting audience participation	<ul style="list-style-type: none"> • Ask questions designed for a response (verbal) • Ask questions designed for a show of hands • Give the audience a mental picture • Ask the audience to create a mental picture • Repeat a word/phrase, have the audience repeat the work/phrase back to you

Unit 2: Communications		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
6. Writing skills	1. Identify considerations for preparing a written management report that summarizes a sample issue	<ul style="list-style-type: none"> • Determine the purpose and audience for the report • Research <ul style="list-style-type: none"> ▪ Collect data • Develop visual aids <ul style="list-style-type: none"> ▪ Charts ▪ Graphs ▪ Tables • Write draft • Revise for style, grammar & spelling • Write concisely <ul style="list-style-type: none"> ▪ Choose effective wording ▪ Be as precise as possible • Vary sentence structure • Avoid run-on sentences • Use active voice • Develop unified and coherent paragraphs • Use a confident, courteous, sincere tone • Avoid abbreviations/acronyms • Proofread & spell-check
7. Electronic communication	1. Describe common errors in using electronic communication	<ul style="list-style-type: none"> • Unnecessarily broad distribution lists • Too informal or casual • Text not formatted for easy reading or understanding <ul style="list-style-type: none"> ▪ Inappropriate paragraph breaks ▪ Bullets • Inappropriate capitalization
8. Briefing	1. Describe the concept of briefing	<ul style="list-style-type: none"> • Briefing is a quick meeting used to quickly communicate a status or update on several issues appropriate to the audience • Briefings are typically used to ensure that the incoming shift is fully aware of the ongoing and potential customer issues they may encounter during their shift

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. Interpersonal Skills	1. Describe the characteristics of a Service Attitude	<ul style="list-style-type: none"> • Willingness to take ownership of the problem/request and see it to resolution • Willingness to help • Positive attitude • Respectful and courteous behaviour
	2. Explain the impact of a Service Attitude	<ul style="list-style-type: none"> • Sets the customer's expectations • Contributes to a positive impression of the Help Desk • Contributes to confidence and trust from your customer • Encourages repeat customers by building rapport with them • Customer's attitude may change to match yours • Increases the probability that future calls will be smoother
	3. Describe the Help Desk Senior Analyst's customers	<ul style="list-style-type: none"> • Other Help Desk Analysts • Other IT associates responsible for resolving customer calls • Management • End Users • Everyone to whom assistance is provided
	4. Explain what empathy means and describe why you would use empathy statements	<ul style="list-style-type: none"> • Empathy is letting the customer know you understand how they feel • Empathy creates a rapport with the customer because you have felt the same way they feel • An empathy statement acknowledges the emotion of the customers, e.g. 'I understand how you feel...', 'Oh, this is time critical for you...', 'I appreciate the criticality of the situation • Empathy statements need to be followed up with the actions the HDSA is taking to assist in the resolution, e.g., Here is what we need to do...
	5. Describe how to encourage and/or praise problem solving attempts by client	<ul style="list-style-type: none"> • Be respectful • Ask questions • Get clarification of steps taken • Use positive reinforcement, such as, 'That's a good idea...' 'How did that work for you...'

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	6. Explain the benefits of encouraging or mentoring callers	<ul style="list-style-type: none"> • Builds rapport and increases customer's confidence in themselves and the Help Desk • Encourages customer to use all available resources • Confirms policies and procedures • Fosters a team approach to problem solving with the customer
2. Conflict Resolution and Negotiation	1. Identify signs that a caller is frustrated or conflict is developing	<ul style="list-style-type: none"> • Change in tone of voice • Change in volume (louder or softer) • Change in pitch of voice (higher/lower) • Change in rate of speech • Customer withdraws • Interrupting, sighing, etc. • Change in verbiage
	2. Describe appropriate techniques to reduce/eliminate conflict	<ul style="list-style-type: none"> • Let the customer vent • Do not interrupt • Empathise (unless the customer is irate) • Separate fact from fiction • Separate problem from person • Deal with others objectively • Work without discrimination or bias • Be respectful • Offer assistance, drive towards a resolution or identify the next step • Maintain your own composure • Be positive
	3. Describe the types of words in an e-mail (web submission) that would indicate the customer is frustrated or the problem is a high priority/severity	<ul style="list-style-type: none"> • Emotion words <ul style="list-style-type: none"> ▪ Tired of, displeased, need, frustrated, afraid • Priority/Severity words <ul style="list-style-type: none"> ▪ Important, critical, ASAP
	4. Describe principles of negotiation	<ul style="list-style-type: none"> • Seek the 'win-win' solution • Determine the underlying need • Separate the person from the problem <ul style="list-style-type: none"> ▪ Acknowledge the benefit of the customer's idea, from the customer's perspective ▪ Recognize the emotions (your and customer's) ▪ Discuss each others perceptions • All parties must participate • Set objective criteria to measure results • Seeks compromise acceptable to all parties

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	5. Identify characteristics of a good negotiator	<ul style="list-style-type: none"> • Viewed as a problem solver • Develops multiple options to choose from • Explains concerns about customer's idea • Focuses on what is needed, not how to get there • Steps to the customer's side for understanding • Doesn't blame anyone • Develops well-planned and realistic commitments
	6. List behaviours to use and avoid in negotiation	<ul style="list-style-type: none"> • Avoid terms like reasonable, fair, when describing your proposal/recommendations • Ask questions • Remain calm, avoid emotions • Let the other person vent • Offer suggestions or recommendation vs. final offers • Focus on items in agreement vs. disagreement
	7. Describe the steps for disengaging from a reluctant caller	<ul style="list-style-type: none"> • Use close-ended questions to lead them closure • Set the expectation for next contact • Recap customer actions • Recap Help Desk actions (steps)
	8. Identify the requirements for collaboration	<ul style="list-style-type: none"> • Understand personalities • Look for compromise • Acknowledge diversity of perspectives • Understand skills required • Acknowledge need to address the issues concerned, irrespective of personal stances/opinions
3. Rapport and Relationships	1. Describe techniques for establishing effective relationships with other parts of the service organization	<ul style="list-style-type: none"> • Treat others in your organization as if they were your customer • Treat others as you'd like to be treated • Try to understand the responsibilities and roles of the other organizations. • Educate other organizations on the role and responsibilities of your group • Do not blame others; focus on the steps necessary to resolve the request. • Recognize others (individuals and groups) for their achievements and assistance to customers, you and your team

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Describe the characteristics of a trusting relationship	<ul style="list-style-type: none"> • Credibility <ul style="list-style-type: none"> ▪ Meet your commitments ▪ Ensure commitments are clearly understood ▪ Demonstrated competence ▪ Continually strive to improve yourself • Mutual Respect <ul style="list-style-type: none"> ▪ Respect others opinions ▪ Open communication with team members ▪ No hidden agendas • Actively listen to others
4. Flexibility	1. Describe techniques to assist in creative thinking	<ul style="list-style-type: none"> • Change your perspective; look at the situation from the customers' perspective • Focus on the real need, what is the desired end-result? • Assess the risks of other approaches • Take the simple approach
	2. Explain what multi-tasking means in a Help Desk environment	<ul style="list-style-type: none"> • Ability to switch topics frequently • Ability to deal with frequent changes • Ability to prioritize tasks throughout the day with minimal supervision • Knowledge (understanding) of SLA and Help Desk processes and procedures
	3. Describe steps to take when situations are not covered by documented procedures	<ul style="list-style-type: none"> • Determine the underlying need • Develop options/alternatives • Take initiative and ownership • Be proactive • Document results for the next occurrence • Advise management of the situation and the steps taken • Escalate/elevate if necessary
5. Confidence	1. Explain why demonstrating confidence is important	<ul style="list-style-type: none"> • Establishes credibility • Encourages repeat customers • Enhances the reputation of the Help Desk • Increases Customer Satisfaction

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Describe how confidence is demonstrated over the phone	<ul style="list-style-type: none"> • Speak with assurance (not tentative) • Use a positive tone of voice • Smile and exhibit good posture • Use your available resources <ul style="list-style-type: none"> ▪ Documentation ▪ On-Line ▪ Co-workers • Admit what you don't know (without compromising confidence), and identify the next step or steps for resolution • Take ownership of the request
	3. Explain why demonstrating confidence to the customer is important	<ul style="list-style-type: none"> • Establishes Help Desk and individual credibility • Encourages repeat customers • Enhances the reputation of the Help Desk
	4. Describe how confidence is demonstrated over the phone	<ul style="list-style-type: none"> • Speak without being tentative • Positive tone of voice • Use available resources • Admit what you don't know without compromising confidence
	5. Explain the difference between assertiveness and aggressiveness	<ul style="list-style-type: none"> • Assertiveness demonstrates knowledge of your rights and the rights of others and respect for both • Aggressiveness demonstrates knowledge of your rights and the rights of others and a disregard of the rights of others
	6. Stress	1. Explain what stress is
	2. Identify common physical symptoms of Stress	<ul style="list-style-type: none"> • Increased heart rate • Increased blood pressure • Perspiration • Muscle Tenseness • Shortness of breath • Withdrawing from the conversation • Defensiveness • Short tempered, irritable • Sarcasm/Cynicism

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	3. Describe causes of Stress	<ul style="list-style-type: none"> • Change • Too much work • Not enough time • Burnout • Job pressure • Lack of knowledge/training • Feeling out-of-control • Lack of confidence in mgmt/co-workers • Tight scheduling • Inadequate rest • Personal life situations
	4. Identify methods for managing stress	<ul style="list-style-type: none"> • Recognize positive aspects of stress • Recognize signs of stress in yourself and customers • Review/analyze your diet (nutritional intake) • Increase exercise and rest
	5. Describe the positive effects of stress on a person	<ul style="list-style-type: none"> • Provides motivation and energy • Increases productivity • Optimizes performance level
	6. Describe the negative effects stress on a person	<ul style="list-style-type: none"> • Fatigue • Tight neck and shoulders • Higher incidence of Flu, Colds • Backache • Sleep problems • Irritability, short-tempered
7. Cultural Sensitivity	1. Explain the impact of language barriers when handling calls	<ul style="list-style-type: none"> • The problem may be misunderstood • Instructions may be misunderstood • Frustration on both parts • Poor customer satisfaction
	2. Describe when to obtain assistance when dealing with caller whose primary language is different from yours	<ul style="list-style-type: none"> • When there is little or no understanding • When the frustration levels are increasing • When there may be a significant impact to the organization

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	3. Describe techniques for communicating cross-culturally	<ul style="list-style-type: none"> • Use proper/standard language expressions (avoid slang/colloquial expressions) • Moderate the pace, use simple sentences vs. complex • Speak slowly and clearly, but not loudly • Tell the caller you are having difficulty understanding them • Listen for key words, not for pronunciation • Don't interrupt, take notes, and ask questions when the speaker is finished • Pause to verify understanding • Encouraging the caller to ask for clarification • Use email or fax to reinforce conversation
	4. List some options for language assistance	<ul style="list-style-type: none"> • Translation services <ul style="list-style-type: none"> ▪ Web ▪ PC tools ▪ Translation applications ▪ Interpreter • Other Help Desk staff • Other customers
8. Customer Satisfaction Surveys	1. Explain the purpose of customer satisfaction surveys	<ul style="list-style-type: none"> • Understand customer's perception of the products and services • Understand if the products and services are meeting customer expectations • Understand what the customer feels is important • Identify areas for improvement • Benchmark and trend Customer Satisfaction • Assist in developing new products and services based on customer needs

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Describe the three most common types of surveys and the importance of each type	<ul style="list-style-type: none"> • On-going (event) survey <ul style="list-style-type: none"> ▪ Survey is completed as soon after a call is closed as possible ▪ Typically is a short (5-8 questions) and can be completed quickly ▪ Measures the quality of a single call/incident ▪ Used to trend customer satisfaction between annual surveys and measure the impact of changes in process, products or services ▪ Can be completed using various media: e-mail, web, phone, written • Annual (periodic) survey <ul style="list-style-type: none"> ▪ Planned, scheduled on periodic basis, (normally annual) ▪ Used to evaluate overall satisfaction levels with the products, service offerings and personnel ▪ Identify changes to products, services, processes that customers feel would improve the relationship and meet their needs better ▪ Based on the customers' perception of the company over the last year (period) • One-Time surveys <ul style="list-style-type: none"> ▪ Appropriate for evaluating satisfaction levels with current products, service offering or identifying changes that customers feel are important ▪ Not completed in regularly scheduled intervals ▪ Schedule for a specific reason
9. Political Skills/Diplomacy	1. Identify methods used to work across the organization vertically and horizontally	<ul style="list-style-type: none"> • Networking • Grapevine • Organizational charts • Cross functional teams
	2. Identify tools used to promote understanding of the role and value of the Help Desk to the organization	<ul style="list-style-type: none"> • Mission/Vision statements • Organizational charts • List of products & organizations supported • Service level agreements (SLA) • Corporate newsletters, e.g. write feature articles • Published handouts to be included in new employee packets, include services, hours, contact numbers

Unit 3: Customer Service		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	3. Identify some of the strategic advantages of the Help Desk	<ul style="list-style-type: none"> • Impact on organization's productivity • Impact on organization's bottom line • Impact on organization's market position and service reputation • Repository of information that enables organization learning
10. Organizational Acumen	1. Identify the variables considered when developing a mission statement for the Help Desk	<ul style="list-style-type: none"> • Organizational vision and strategic goals • Management priorities • Impact to the bottom line • Budget • Products supported or produced
	2. Identify business needs that affect prioritisation	<ul style="list-style-type: none"> • Service Level Agreements (SLA) • Impact on the financial performance of the company • Key points of productivity
	3. Identify factors that affect professionalism	<ul style="list-style-type: none"> • Industry perspective • Personal/Professional Networking • Professional Affiliations • Personal appearance • Visibility • Experience • Dedication • Desire to advance the industry
	4. Describe the process for implementing a customer survey	<ul style="list-style-type: none"> • Identify target groups to be surveyed • Select methodology for conducting survey <ul style="list-style-type: none"> ▪ Identify medium to conduct survey, i.e., web, phone, etc. ▪ Identify customers to be surveyed • Conduct and monitor the survey • Analyze and evaluate the survey results • Compile results and develop recommendations • Present results and recommendations • Develop and market internal change implementation plan

Unit 4: Problem Solving Techniques and Concepts		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. Reasoning	1. Explain the difference between inductive and deductive reasoning	<ul style="list-style-type: none"> • Inductive reasoning is based on experience and is more intuitive • Deductive reasoning is based on process of elimination, local steps and analysis
	2. Explain basic critical thinking skill concepts	<ul style="list-style-type: none"> • Critical thinkers critique in order to redesign, remodel and make better • Critical thinkers recognize that ultimate authority rests with reason and evidence • Critical thinkers can listen so as to enter sympathetically and analytically into the perspective of others • Critical thinkers organize a problem resolution into a series of logical, orderly steps
2. Creative Thinking	1. Describe the concept and benefits of creative thinking	<ul style="list-style-type: none"> • Creative thinkers have the ability to think 'out of the box', work with a blank-sheet of paper • Creative thinkers are able to generate more viable options, resulting in more alternatives/backup plans • Creative thinkers can usually generate quicker actions under unusual circumstances
	2. Describe when it is appropriate to take risks in order to find viable solutions	<ul style="list-style-type: none"> • When a high degree of effectiveness is likely to be the direct result of a risk • When the risk is not expressly connected to your delivery of service • Customer understands the probability of success, and understands the consequences of failure • Restoration time/resources is understood. • Risk is to the individual, not to the organization or a large number of individuals • Appropriate risk analysis has been carried out
3. Problem Solving Methodology	1. Explain the concept of logical problem solving	<ul style="list-style-type: none"> • Ability to organize a problem into a series of rational, consistent, coherent, orderly steps

Unit 4: Problem Solving Techniques and Concepts		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Explain the steps in Problem Solving	<ul style="list-style-type: none"> • Problem Identification <ul style="list-style-type: none"> ▪ Document the problem ▪ What is occurring? ▪ What did the customer expect? ▪ Gather detailed data as appropriate • Identify the possible causes of the problem <ul style="list-style-type: none"> ▪ Prioritize the possible causes ▪ Identify the most probable cause • Develop a plan (based on probable cause) <ul style="list-style-type: none"> ▪ Evaluate and prioritize possible solutions • Implement the Plan <ul style="list-style-type: none"> ▪ Make only one change at a time ▪ Minimize impact to the customer ▪ Understand how to back-out changes implemented • Observe and Evaluate the results of the plan • Repeat (process) if the plan did not resolve the problem • Document what you did to solve the problem
	3. Describe the common forms of reference documentation that exist and how each is used at a Help Desk	<ul style="list-style-type: none"> • Books <ul style="list-style-type: none"> ▪ User Guiders ▪ Reference Manuals ▪ Training Materials • Conferences, Shows, Exhibits • Vendors • Industry Associations • Industry Publications • E-Mail <ul style="list-style-type: none"> ▪ Often used because HDSA store tips, notes, etc., on common solutions ▪ Query other HDSA, power users or vendor • Web/Internet <ul style="list-style-type: none"> ▪ FAQ's ▪ Knowledge base • On-Line Help <ul style="list-style-type: none"> ▪ Index or key word search • Peers <ul style="list-style-type: none"> ▪ Tacit knowledge of peers, customers or IT staff
	4. Explain what Root Cause Analysis means and how it is used in a Help Desk	<ul style="list-style-type: none"> • Methodical approach to determine the cause (most basic reason) of a problem, which when/if eliminated/corrected would prevent the problem from existing/occurring • Typically used by Subject Matter Experts (SME) responsible for developing improvement plans, training programs, etc.

Unit 4: Problem Solving Techniques and Concepts		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	5. Explain the benefits of Root Cause Analysis	<ul style="list-style-type: none"> • Root cause analysis allows the Help Desk to determine why problems are occurring and take actions to eliminate similar problems • Reduces problem resolution time • Allows rapid prioritization of alternative solutions/workarounds • Information on workaround is made available to all users until a permanent solution is provided
4. Questioning	1. Describe three information-gathering techniques	<ul style="list-style-type: none"> • One-Way • Structured • Unstructured
	2. Explain what One-Way information gathering means and provide examples	<ul style="list-style-type: none"> • Customer provides problem description without any interaction with the Help Desk • Voice Mail, E-Mail and facsimile
	3. Explain what Structured information-gathering means and provide examples	<ul style="list-style-type: none"> • A structured information gathering technique asks questions in a predetermined sequence • Structured information gathering identifies issues related to a problem • Structured questioning identifies what happened vs. what the customer expected
	4. Explain what unstructured information gathering means and provide examples	<ul style="list-style-type: none"> • With unstructured information gathering questions are asked in a free-form manner • Customers volunteer information in an unstructured information gathering environment • The unstructured technique is the technique used most commonly in Help Desks
	5. Explain the difference between Open and Closed questions	<ul style="list-style-type: none"> • Open question <ul style="list-style-type: none"> ▪ Seek elaboration (description) or narrative ▪ Intended to draw someone out • Closed question <ul style="list-style-type: none"> ▪ Seek Yes or No responses ▪ Focus the caller ▪ Obtain specific information
	6. Provide examples of Open questions	<ul style="list-style-type: none"> • 'Tell me more about...' • 'Please describe what you see on your screen' • 'Describe what led up to the problem'
	7. Provide examples of Closed questions	<ul style="list-style-type: none"> • 'What application are you using?' • 'Has this happened before?'

Unit 4: Problem Solving Techniques and Concepts		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	8. Describe the types of questions that need to be asked when resolving a Help Desk call	<ul style="list-style-type: none"> • Who • What • When • Where • Why • How
	9. Describe what clarifying questions are and how/when you should use them	<ul style="list-style-type: none"> • Clarifying questions are used to ensure understanding • Clarifying questions are used to uncover hidden information <ul style="list-style-type: none"> ▪ Has it ever happened before? ▪ When was the last time it worked? • Clarifying questions need to cover both sides of a situation <ul style="list-style-type: none"> ▪ When does it happen? When doesn't it happen? ▪ Who is affected? Is there anyone not affected?
	10. Explain what Paraphrasing is and why you should use it	<ul style="list-style-type: none"> • Paraphrasing is repeating/explaining what the customer said in your own words • Purpose is to show the caller you are listening and understand what they said
	11. Describe the techniques used in Paraphrasing	<ul style="list-style-type: none"> • Use synonyms • Varied sentence patterns • Change the order of ideas • Use simple sentences vs. complex sentences • Make abstract ideas concrete
5. Research	1. Identify key elements of effective research	<ul style="list-style-type: none"> • Clear definition of the topic to be researched • Documented list of requirements • List of related topics • Identification of the tools available • Utilization of scientific/statistical methods • Scope the issue to narrow the list of possibilities

Unit 5: Teamwork		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. The Workplace	1. Describe characteristics of a friendly and supportive workplace environment	<ul style="list-style-type: none"> • Rapport among team members • Empowerment from management • Willingness to help each other on a team • Responsible and trustworthy team members • Good communication between team members • Synergistic decision making
	2. Explain the importance of documented processes and procedures	<ul style="list-style-type: none"> • Ensures consistent service • Contributes to a resourceful atmosphere • Builds confidence in HDSA ability to handle calls professionally • Encourages adherence to policies and procedures
	3. Explain formal and informal communication in the workplace and the differences between them	<ul style="list-style-type: none"> • Formal communication: <ul style="list-style-type: none"> ▪ Customer's family name and title are used ▪ Terminology and language is business oriented ▪ Little or no social discussions • Informal communication: <ul style="list-style-type: none"> ▪ Customer's first name is used ▪ Titles are not used ▪ Social discussion occurs
	4. Explain the difference between shared workspace and private workspace	<ul style="list-style-type: none"> • A shared workspace environment is where staff utilizes the same work area; E.g., 1st and 2nd shift HDSA share the same desk, phone, computer, etc. • A private workspace is where only 1 person utilizes the work area
	5. List the things people must take into account when sharing workspace	<ul style="list-style-type: none"> • Do not make changes to shared workspace without obtaining the agreement of others • Maintain clean environment • Use discretion and courtesy when decorating and organizing the workspace
2. Team Player	1. Explain the basic concepts of teamwork	<ul style="list-style-type: none"> • Working together to accomplish common goals • Working together to share ideas • Actively listening to each other • Team members doing their share • Team members not taking advantage of others on the team

Unit 5: Teamwork		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Describe the characteristics of an effective team player	<ul style="list-style-type: none"> • Participation • Courtesy and respect for others • Open-mindedness to other ideas • Promptness • Sharing knowledge
	3. Explain why teamwork is important in a Help Desk environment	<ul style="list-style-type: none"> • There are too many products to support for any single individual • Continuous changes in technology are too much for any individual to remain current • Both business knowledge and technical knowledge required at the Help Desk
	4. List the benefits of Teamwork.	<ul style="list-style-type: none"> • Team members buy-in to decisions • Team members have higher motivation and job satisfaction • Increased flexibility of team members • Higher service quality • Team members provide emotional as well as technical support for each other
	5. List characteristics of successful teams	<ul style="list-style-type: none"> • Clear goals, objectives, and expectations • Trust among team members • Management support • Training • Authority and accountability matches team responsibilities • Subordinate individual goals for team goals • Incentives/recognition • Communication within/out the team • Diversity among team members • High morale among team members • Atmosphere fostering professional growth • Processes to ensure quality • Process for dealing with conflict • Participation in decision making
	6. List characteristics of unsuccessful teams	<ul style="list-style-type: none"> • Lack of clear goals • Insufficient time allocated for tasks • De-motivated, poor morale • Low productivity, e.g. clock watchers, perform minimum required • Avoids responsibility, lack of ownership • Organizational culture does not reward team players • Management not committed to goals/objectives

Unit 5: Teamwork		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	7. Describe the benefits of peer to peer mentoring	<ul style="list-style-type: none"> • Contributes to team rapport • New team members learn faster when shown and coached rather than having to rely on experience only • Builds trust among team members
3. Team Building	1. Describe group exercises used in team building	<ul style="list-style-type: none"> • Problem solving • Physical activities • Personality profiling • Social activities
	2. Identify skills required for team building	<ul style="list-style-type: none"> • Interpersonal • Meeting skills • Facilitation • Collaboration • Conflict resolution • Sense of humour
4. Job-based (On-the-Job) training	1. Explain the concept and benefits of job-based training	<ul style="list-style-type: none"> • Instruction is linked directly to job duties • Real-world experience, not theoretical or conducted in a classroom • Rapid learning curve, typically better knowledge retention due to performance reinforcement • Job focused • Pace is adapted to learning rate of the individual
5. Leadership	1. Describe the characteristics of a good leader	<ul style="list-style-type: none"> • Maintains positive perspective within the team. • Encourages participation • Discourages one person dominating • Provides effective incentives that are challenging yet attainable • Delegates effectively • Encourages others to be creative • Encourages others to take initiative • Practices and encourages fairness • Makes decisions, even when they may be unpopular • Successfully executes plans
	2. Identify the skills for effective Influence Management	<ul style="list-style-type: none"> • Ability to determine the customer's needs • Knowledge of what motivates people to act or decide • Knowledge of techniques to propose or persuade others • Understands that each situation and individual is different.

Unit 5: Teamwork		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
6. Cross-functional teams	1. Explain how cross-functional teams differ from single-function teams	<ul style="list-style-type: none"> • Address broader and more complex problems (cross department/company) • Composed of members from varying disciplines, business units, and/or other organizations. • Requires special team skills • Requires each individual to focus on team objectives vs. individual organizational objectives
	2. Identify members of a cross-functional team	<ul style="list-style-type: none"> • Members from different disciplines • Members from different departments • Members from different companies • Members with different skill sets
	3. Identify considerations when forming cross-functional teams	<ul style="list-style-type: none"> • Organizational structure and roles • Skills (competencies) required for the task • Individual ability to communicate with other team members • Time required for the task • High facilitation skills

Unit 6: Ethics		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. Fairness	1. Explain the concept of providing consistent service	<ul style="list-style-type: none"> • Everyone on the Help Desk provides the same level of service <ul style="list-style-type: none"> ▪ Based on SLA or Operating procedures • Priority and severity levels are consistently assigned
	2. Describe the benefits to customers following standard procedures	<ul style="list-style-type: none"> • Faster, more efficient service • Traceability/Audit trail of Help Desk activities • Optimizes Help Desk resources • Minimizes customer interruptions
	3. Identify typical expectations of customers	<ul style="list-style-type: none"> • Quick and responsive service • Fair treatment • Consistent and courteous service
2. Integrity	1. Explain personal accountability	<ul style="list-style-type: none"> • Ownership of call and follow-up • Ability to admit errors
	2. Explain the purpose of a Code of Conduct	<ul style="list-style-type: none"> • Ensure that all employees understand what the company expects of them • Documents the company's moral/ethics • Documents behaviour expected of employees • Resource for employees for grey/questionable areas
	3. List areas affected by commitments made to customers, team members and organizations	<ul style="list-style-type: none"> • Credibility • Trust • Customer satisfaction of service • Employee morale • Accountability
3. Privacy	1. Explain the importance of confidentiality	<ul style="list-style-type: none"> • Protects customer and company from theft, and/or abuse of information
	2. Identify key types of information that require confidentiality from the Help Desk	<ul style="list-style-type: none"> • Customer data • Personal contact information • Social security number/National identification • Individual and Corporate financial information • Corporate/company information • Product development plans • Strategic plans

<p>4. Loyalty</p>	<p>1. Explain concept of protecting and enhancing image of the organization while supporting customers</p>	<ul style="list-style-type: none"> • Customers need to be aware of the steps being taken to resolve their problem/request • Customers do not need to know the rationale for all the steps, i.e., internal workings of the Help Desk • Customers should not hear an HDSA blaming any other organization; • Focus on the steps to resolution • Increase customer confidence in the Help Desk by demonstrating results and HDSA professionalism
<p>5. Legality (Software Piracy)</p>	<p>1. Explain what software piracy is</p>	<ul style="list-style-type: none"> • Software piracy is the unlawful reproduction or violation of software licenses
	<p>2. Explain the process for reporting suspected piracy incidents</p>	<ul style="list-style-type: none"> • Notify IT/HD management • Notify Finance/Legal Department • Notify Security Department • Notify Business Software Alliance (www.bsa.org) or FAST (Federation Against Software Theft)
	<p>3. Identify methods for controlling software distribution</p>	<ul style="list-style-type: none"> • Change Management Systems • Asset Management Systems • License controls • Software License Keys
	<p>4. Describe ways in which an understanding of the laws and rules regarding software use may be obtained</p>	<ul style="list-style-type: none"> • Reading and understanding product licenses • Reading and understanding disclaimers • Knowing usage of versions and copies • Checking vendor sites for clarification • Checking your organizations operating policies and procedures and/or legal department • Including paragraph on software usage in organizations code of conduct

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
1. Telephone Support	1. Explain the role of telephone support in a Help Desk environment	<ul style="list-style-type: none"> • Telephone support is the traditional, most common method of Help Desk support • Telephone support can typically resolve the majority of problems for customers on the phone on the initial contact • Problems/Requests not resolved over the phone are typically escalated to desk-side support • Remote Support tools are used by Telephone support • Telephone support typically provides Level I and Level II support
	2. Describe the variables used in deciding if Telephone, Desk-Side or Remote Support will be used	<ul style="list-style-type: none"> • Complexity of the request • Type of request • Product/Application • Service Level Agreement (SLA) • Expertise (skill level) of HD staff on-site • Location of customer • Time zones • Hours of operation • Business impact
2. Desk-Side support	1. Explain what Desk-Side support means in a Help Desk environment	<ul style="list-style-type: none"> • Desk-Side support means that a Support professional goes to the customers location to respond to a request vs. resolving the request over the phone • Desk-Side support is typically used when the problem/request cannot be resolved remotely
	2. Describe the skill level required for the support professional delivering desk-side support.	<ul style="list-style-type: none"> • Medium to high level of expertise in PC hardware diagnostics and troubleshooting • Medium to high level expertise in PC operating systems (OS) • General understanding of site specific network configuration • Working knowledge of domain and server configuration issues • Customer facing interpersonal skills
	3. Describe situations when Desk-side support is applicable	<ul style="list-style-type: none"> • When a physical presence is required, i.e., hardware failure/replacement • When the Service Level Agreement requires a physical presence • When it improves productivity for Help Desk • When telephone or Remote Support is not effective or applicable

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	4. Explain the benefits of using Desk-Side support	<ul style="list-style-type: none"> • One-on-One, Face-to-Face communication with the customer builds rapport • Ability to view the environment from the customer’s perspective
3. Remote Support	1. Explain what Remote Support is and how it is used in a Help Desk environment	<ul style="list-style-type: none"> • Remote Support is a set of tools/technologies and processes that facilitates resolution of customer problems via interconnectivity • Remote Support eliminates or significantly reduces the requirement for desk-side support • Remote Support is used to solve “How To” questions, configuration issues, etc.
	2. Describe the benefits of using Remote Support tools	<ul style="list-style-type: none"> • Remote Support allows the Help Desk to view and take control of the customers’ workstation facilitating problem resolution <ul style="list-style-type: none"> ▪ HDSA can see what the customer sees ▪ Customer can watch (learn) how the HDSA solves the problem • Resolves Problem Requests quicker, significantly reducing the need for desk-side support • Allows training over-the-phone for simple questions/requests • Significantly reduces the Resolution Time for requests that previously required desk-side support
	3. Describe the limitations of Remote Support tools	<ul style="list-style-type: none"> • The tools can be complex, and require infrastructure improvements • Accounts must be created at the desktop • Performance of the tools may require additional infrastructure, effecting other users • Customers may be concerned about security issues
4. Problem Management	1. Explain what Problem Management means in a Help Desk environment	<ul style="list-style-type: none"> • Process that tracks and resolves incidents, questions, service disruptions, system outages, or inquiries (problems) • Process that identifies trends (problem reoccurrence) • Process that identifies steps for problem-avoidance and prevention

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Explain the difference between Problem Tracking and Problem Management	<ul style="list-style-type: none"> • Problem Tracking deals with individual problems from logging through resolution • Problem Management reviews all problems to ensure: <ul style="list-style-type: none"> ▪ Timely resolution • Similar problems do not reoccur • Organizational learning
	3. Describe the basic components of a request or Problem Management process	<ul style="list-style-type: none"> • Problem Received • Priority of the problem assessed • Problem logged (acknowledged) • Problem diagnosed • Problem (cause) isolated • Problem resolved or actions plan developed • Problem resolution provided • Resolution verified • Completion communicated • Management Review/Analysis
	4. Explain the benefits of a Problem Management system	<ul style="list-style-type: none"> • System wide view of the type of problems encountered • Problems are managed end-to-end, ensuring continuity and resolution, eliminating items dropping into a black-hole • Identifies points-of-failure • Facilitates proactive communication • Allows similar problems to be prevented • Facilitates continuous improvement
	5. Describe the role of the Help Desk in the Problem Management process	<ul style="list-style-type: none"> • Log and document problem requests • Resolve the request or involve the appropriate group to respond • Follow up on reported problem • Ensure service was complete and bring to closure

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
5. Service Level Agreements (SLA)	1. Explain what a Service Level Agreement (SLA) is and the purpose of an SLA	<ul style="list-style-type: none"> • SLA is an agreement between the customer and the service provider that: <ul style="list-style-type: none"> ▪ Documents the type of services provided ▪ Documents the level of services, e.g., response time, hours of operation ▪ Documents the methods for measuring and reporting compliance with the agreement ▪ Identifies the process for dealing with conflict between the customer and the service provider • The goal of an SLA is to set the expectations of the customer and service provider, minimizing conflicts and improving satisfaction
6. Escalation	1. Explain possible circumstances under which escalation is appropriate	<ul style="list-style-type: none"> • Customer requests to speak to a manager • An outage that is revenue impacting • Senior level or executive support personnel issue • No existing workaround and the problem affects the business • Required by the Service Level Agreement (SLA) • Multiple people/departments are affected • Critical business impact
	2. Explain why keeping the customer informed of activities and status changes are important for an escalated request/incident	<ul style="list-style-type: none"> • Customer knows they are important, someone is addressing their situation • While the problem may not be resolved, the customer is aware that resources are addressing the situation • Customer satisfaction is improved because the customer recognizes they are important, resources are allocated to them • Reduces the number of interruptions due to status update requests, resulting in better time management
7. Help Desk Metrics	1. Describe the purpose for Help Desk metrics	<ul style="list-style-type: none"> • Determine scheduling • Develop staffing plans • Measure productivity and performance • Cost analysis • Understand Customer Satisfaction • Understand Employee Satisfaction • Trend analysis

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Identify and explain how common Help Desk metrics are used	<ul style="list-style-type: none"> • Average Speed to Answer (ASA) <ul style="list-style-type: none"> ▪ Average amount of time that a caller is waiting (in a queue) before the call is answered. ▪ Used to determine how long customers wait to speak to Had ▪ Used to evaluate and adjust staffing levels • Hold Time <ul style="list-style-type: none"> ▪ Average time in queue for customers who are routed to a hold queue • Abandon(ment) Rate (ABA) <ul style="list-style-type: none"> ▪ Percentage of customers that terminate a call (hang-up) before the call answered by a HDSA. ▪ Used to evaluate and adjust staffing levels • Talk Time <ul style="list-style-type: none"> ▪ Average time spent talking to a customer on each call ▪ Used to evaluate and adjust staffing and training needs • Availability <ul style="list-style-type: none"> ▪ Percent of total time HDA was available to take incoming or make outgoing calls. ▪ Used to measure productivity of the Help Desk and HDA • One Call Resolution (OCR)/First Contact Resolution <ul style="list-style-type: none"> ▪ Percentage of calls resolved on the initial contact with the customer. ▪ Used to measure knowledge level of HDSA ▪ Used to measure complexity of calls relative to HDSA knowledge level • Cost per Call <ul style="list-style-type: none"> ▪ Average cost per call for the Help Desk ▪ Total Help Desk Costs/Total Number of Calls • Cost per Ticket <ul style="list-style-type: none"> ▪ Average cost per ticket for the Help Desk ▪ Total Help Desk Costs/Total Number of Tickets • Customer Satisfaction <ul style="list-style-type: none"> ▪ Measures overall customer satisfaction with the Help Desk's products and services, typically measure on a scale of 1-5 or 1-10. ▪ Used to evaluate performance of Help Desk staff, infrastructure and management.
	3. Identify the key sources of metrics for the Help Desk	<ul style="list-style-type: none"> • Automatic call distributor (ACD) and phone switch (PBX) • Problem Management/Tracking systems • Network monitoring systems • Knowledge Management System

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
8. Knowledge Management	1. Explain what Knowledge Management means	<ul style="list-style-type: none"> • Knowledge management is the processes developed by organizations to manage some or all of the knowledge within the organization as a resource, much as they manage real estate, inventory, and human resources • Knowledge Management is the capture and reuse of business and technical information in an organization
	2. Describe the benefits of Knowledge Management in a Help Desk environment?	<ul style="list-style-type: none"> • Enables Help Desk staff and customers to work more effectively and efficiently • Ensures expertise is accessible • Reduces training time for new personnel • Solve a problem once, use the solution many times • Promotes a culture of self-sufficiency through self-help tools/technology • Sharing knowledge within the Help Desk can help build rapport and credibility between the various teams supporting the customer
	3. Explain the steps to develop/maintain a knowledge base	<ul style="list-style-type: none"> • Capturing (record) record the tacit knowledge within an organization • Review/Evaluation of the information for accuracy and conformance to standards • Revision of existing data to improve accuracy and ensure conformance to standards • Approval and cataloguing the approved information in a central repository • Making the content available to customers and employees when and where they need it
	4. Identify the sources of content for the knowledge base	<ul style="list-style-type: none"> • Call logs • Personal experience • Training classes • Vendor FAQ's • Other IT groups <ul style="list-style-type: none"> ▪ Developers ▪ Administrators ▪ Other technical support groups • Users • Early users (beta, prototype) • Third party knowledge bases • Web sites

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
9. Change Management	1. Explain what Change Management means	<ul style="list-style-type: none"> • Change Management is a set of processes designed to influence the human and organizational variables associated with a change to achieve a desired results
	2. Explain the purpose of a Change Management process	<ul style="list-style-type: none"> • Develop an understanding of why the change is necessary • Obtain input from stakeholders (individuals impacted) on developing plans • Obtain buy-in (commitment) from the shareholders affected • Facilitate the implementation of the change • Bring structure to the change process • Improve organizational performance • Improve probability of success for change implementation
	3. Describe the basic components of an IT Change Management process	<ul style="list-style-type: none"> • Identification of the proposed change • Technical assessment <ul style="list-style-type: none"> ▪ Impact of change ▪ Risk of change • Business Assessment <ul style="list-style-type: none"> ▪ Timing and compatibility with business plans • Management Approval <ul style="list-style-type: none"> ▪ Accept/Reject/Defer change • Test/Evaluation <ul style="list-style-type: none"> ▪ Verify change has no negative impact to environment • Installation <ul style="list-style-type: none"> ▪ Change implemented, all effected parties notified • Review <ul style="list-style-type: none"> ▪ Ongoing evaluation of the Change Management process
	4. Describe the benefits of a Change Management process	<ul style="list-style-type: none"> • Improved organizational performance • Personal and professional growth • Only approved, authorized changes are implemented • Managed Risk • Stakeholders involved in developing plans • Stakeholder buy-in
	5. Describe the role of the Help Desk in change management	<ul style="list-style-type: none"> • Publicise and prepare for the change (upgrade, installation, new operations procedures, etc.) • Document and track the changes • Document and track the customer impacts • Summarize and publish results of the change

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	6. Describe appropriate interactions between Change Management and Problem Management	<ul style="list-style-type: none"> • Problem reports can be associated and tracked with the change • Reports provided to appropriate parties • Information to improve future changes • Trending and analysis of change history
	7. Describe the potential impact to the Help Desk of the roll out of new technologies	<ul style="list-style-type: none"> • Call volume increases as roll out progresses • Early feedback on problems can spot improvement opportunities • Change has impact on organization productivity - lowering it at first and then improving it
10. Quality	1. Describe common Quality Assurance (QA) practices in a Help Desk	<ul style="list-style-type: none"> • Call Monitoring • Ticket monitoring • KPI monitoring • Customer surveys • Round tables • Focus groups
	2. Explain how Call Monitoring benefits the customer, the HDA and company	<ul style="list-style-type: none"> • Ensures Call Documentation process is followed • Validates the information provided to customers • Provides feedback to HDA on their job performance • Coaching opportunity – Identifies strengths and weaknesses of individuals and the organization • Verifies consistency in Call Management • Identifies areas where processes are not meeting expectations or not being followed • Opportunity to identify improvements earlier • Results in improved quality of services
	3. Identify some mechanisms for Call Monitoring.	<ul style="list-style-type: none"> • Live service observation - Reviewer sits with HDSA and listens-in on the call (side-by-side) • Remote service observation <ul style="list-style-type: none"> ▪ Reviewer listens to calls live; however the HDSA is not aware the call is being evaluated ▪ Call is recorded and played back at a later time and evaluated • Follow-up calls or customer satisfaction surveys
	4. Identify some mechanisms for ticket monitoring	<ul style="list-style-type: none"> • Review of Tickets for completeness and accuracy <ul style="list-style-type: none"> ▪ Online with the HDSA and caller ▪ After ticket is closed • Follow-up calls or customer satisfaction surveys

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
11. System Security Management	1. Describe the importance of Security policies	<ul style="list-style-type: none"> • Protect the company and customer from unauthorized access <ul style="list-style-type: none"> ▪ Data integrity ▪ Protection of corporate assets
	2. Give examples of some types of security policies	<ul style="list-style-type: none"> • Unique login name and password parameters • Password reset requirements • Visibility to credit card information • Access to personal information • Identification badge requirements
	3. Describe typical levels of access rights	<ul style="list-style-type: none"> • Guest • User • Administrator • System Administrator • Owner
	4. Give examples of some types of security policies	<ul style="list-style-type: none"> • Unique login name and password parameters • Password reset requirements • Visibility to credit card information • Access to personal information • Identification badge requirements
	5. List some types of data that should be protected	<ul style="list-style-type: none"> • Customer names/ID • Social security number • Individual or corporate financial information • Personal information
	6. Explain the importance of reporting security compromises	<ul style="list-style-type: none"> • Protect the company and the customer • Identify offender and prevent from occurring again • Damage control/limitation • Alert users to present-day security threats, increasing vigilance for the organization • Problem resolution

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
12. IT Asset Management Concepts	1. Explain what IT Asset Management is and what it means to a Help Desk	<ul style="list-style-type: none"> • Asset Management is Lifecycle Management for IT equipment based on a balanced implementation of people, processes, and technology • Track all property and resources of an organization <ul style="list-style-type: none"> ▪ Computer hardware and software ▪ Software licenses ▪ Equipment, furniture ▪ Vehicles ▪ Patents ▪ Leased equipment • Aware of what assets are being utilized and which are available for reallocation • Allows the organization to determine the Total Cost of Ownership (TCO), depreciation, licensing and, maintenance costs, and appropriate insurance coverage
	2. List the advantages of an IT Asset Management program	<ul style="list-style-type: none"> • Ability to reuse equipment and licenses vs. purchasing new equipment and licenses • Identify illegally installed or unlicensed software • Proper cost accounting
	3. List the disadvantages of an IT Asset Management program	<ul style="list-style-type: none"> • Complex • Labour intensive, all add/move/changes must be recorded • Automated tools immature • Costs may outweigh return
13. Outsourcing	1. Explain what outsourcing means and why an organization would consider outsourcing its Help Desk	<ul style="list-style-type: none"> • Contracting with another company to provide services which the organization might otherwise have employed its own staff to perform • Better manage the overall cost for supporting end-users as well as increase productivity, quality of deliverables and customer satisfaction

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. List the advantages of Outsourcing	<ul style="list-style-type: none"> • Eliminate time consuming day-to-day supervision of the Help Desk • Focuses management resources on core competencies and quality of the Services provided • Reduced capital expenditures and headcount • Increased staffing flexibility • Service Levels defined/documentated • Allows current staff to be reassigned to other tasks • Increased customer satisfaction
	3. List the disadvantages of Outsourcing	<ul style="list-style-type: none"> • Loss of control of day-to-day operations • Loss of corporate identify
	4. Explain what Insourcing means and why an organization would consider Insourcing	<ul style="list-style-type: none"> • Leveraging an organization's existing or internal staff to provide support services to a customer base outside their customary areas, e.g., Help Desk taking calls after hours from another division (that has its own Help Desk) • Insourcing can facilitate higher productivity, resulting in improved customer service. It may also release staff to focus on new, higher value initiatives
	5. Describe advantages of Insourcing	<ul style="list-style-type: none"> • Improves productivity for the organization • Increased flexibility for staffing peak/off peak periods • Service Levels defined/documentated • Improved customer satisfaction
	6. Describe disadvantages of Insourcing	<ul style="list-style-type: none"> • New services may result in loss of focus to the primary business • Increases in workload may not be result in • Increased/adequate staffing
14. Data Security	1. Explain the importance of documented policies relating to data security and personal back-ups	<ul style="list-style-type: none"> • Protect business operations and ensure the on-going viability of the organization • Essential to limit access to sensitive resources • Software piracy
15. Business Continuity Planning (Disaster Recovery)	1. Explain the purpose of Business Continuity Planning for a Help Desk	<ul style="list-style-type: none"> • Maintain critical services to customers with minimal disruptions • Eliminate Single Point of Failure for delivering services • Provide both short and long term workarounds

Unit 7: Technical and Process Management		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Identify key factors that impact continuity plans	<ul style="list-style-type: none"> • Business requirements • Mission critical application requirements • SLA requirements • Cost of downtime
	3. Identify the factors to consider when setting up an off-site facility	<ul style="list-style-type: none"> • Location • Ease of access during times of disaster (transportation) • Storage/space capacity • Human comfort features (availability of food, water, housing, etc) • Cost • Public utilities – electricity, gas, water, telephone • Communication and system capabilities • Staffing mobility and alternatives • Data transfer recovery mechanisms
	4. Describe the purpose of hot, warm and cold continuity sites	<ul style="list-style-type: none"> • Hot <ul style="list-style-type: none"> ▪ Available immediately, transfer of control transparent to customers ▪ No disruption to customer • Warm <ul style="list-style-type: none"> ▪ Allows quick transfer to secondary location ▪ Minimal disruption to customer • Cold <ul style="list-style-type: none"> ▪ Facility identified ▪ Requires equipment to be procured, delivered, and/or installed • Disruption to customer
16. Benchmarking	1. Explain what Benchmarking is and the goal of Benchmarking in a Help Desk environment	<ul style="list-style-type: none"> • Benchmarking is a comparative evaluation of Help Desks performance that provides an understanding of the relative differences and similarities between the Help Desks benchmarked • Benchmarking can be completed only through the use of consensus methodologies and robust metrics that enable consistent data collection and true peer group comparisons • The goal of Help Desk benchmarking is to provide meaningful, implementable recommendations that are determined by analyzing an enterprise's IT support results against "best class" organizations

Unit 7: Technical and Process Management

Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Describe the benefits of Benchmarking	<ul style="list-style-type: none"> • Link Customer Satisfaction with Service Levels • Continuous Improvement initiatives • Develop Best Help Desk Practices • Evaluate Outsourcing alternatives
	3. Identify common methods used to analyze help desk measurements	<ul style="list-style-type: none"> • Root Cause analysis • Gap analysis • Trend analysis

Unit 8: Help Desk Technology & Infrastructure

Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
<p>1. Desktops, notebooks/laptops and handheld computers</p>	<p>1. Define components (hardware and software) of desktop, notebook/laptops, handheld systems</p>	<ul style="list-style-type: none"> • Processor (CPU) • Memory • Hard drive • Monitor (display device) • Keyboard (input device) • Mouse (pointing device) • Operating systems • Application Software, e.g., E-mail, browser, Word Processing, Spreadsheets, Presentation, Calendaring, Scheduling, Publishing, Graphics, etc.)
	<p>2. Explain what hardware and software platforms are and how they work together</p>	<ul style="list-style-type: none"> • Hardware platforms are the physical components of a Hardware platforms are the physical components of a system • Software platforms are the operating system and application software used to complete business transactions
<p>2. Servers</p>	<p>1. Explain the purpose of a server and how it is different from a desktop system</p>	<ul style="list-style-type: none"> • Desktop system is typically a single user system (though it may have multiple users, only 1 user at a time) • Servers are designed to have multiple users • Servers typically have a single functional purpose, e.g., print, e-mail, etc.
	<p>2. Identify the different categories (purposes) for servers</p>	<ul style="list-style-type: none"> • Application server • Database server • File/Print server • E-Mail server • E-Commerce server • Internet/Web server • Remote Access server • Storage server
<p>3. Peripheral Devices</p>	<p>1. Explain what peripheral devices are for desktop systems</p>	<ul style="list-style-type: none"> • Devices that are connected to the computer and typically external in relation to the processing unit, e.g., keyboard, mouse, monitor
	<p>2. Explain what peripheral devices are for Notebook/Laptop and Handheld systems</p>	<ul style="list-style-type: none"> • Devices that are connected to the computer and typically external in relation to the system and devices that are swappable (removable), e.g., diskette, battery, CD are peripherals for a Laptop

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	3. Describe common peripheral devices	<ul style="list-style-type: none"> • Monitor • Keyboard • Pointing device <ul style="list-style-type: none"> ▪ Mouse ▪ Touch pad ▪ Track ball ▪ Pointer • Printer • Backup devices <ul style="list-style-type: none"> ▪ Optical, Tape, Disk • Scanner • Uninterrupted Power Supply (UPS) • LCD Projection devices
4. Telephony	1. Describe the purpose of an ACD and PBX	<ul style="list-style-type: none"> • PBX/ACD – routes calls to Help Desk personnel based on predefined processes/algorithms • Provides basic telephony functions to Help Desk
	2. Describe common Help Desk telephone (PBX/ACD) features	<ul style="list-style-type: none"> • Hold • Conference • Transfer • Voicemail • Agent status/availability <ul style="list-style-type: none"> ▪ Available ▪ Working ▪ Unavailable • Generate Call information <ul style="list-style-type: none"> ▪ Number of call to Help Desk ▪ ASA, Abandons, Hold, Talk Times ▪ Frequency of calls ▪ Agent availability • Night/Unattended Service
	3. Describe the types of equipment that are typically integrated with Help Desk telephony systems	<ul style="list-style-type: none"> • Call recording equipment • Management reporting servers • E-mail routing servers • Customer management systems • Problem or request management systems

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	4. Explain what Computer Telephony Integration (CTI) is and how it is used in a Help Desk	<ul style="list-style-type: none"> • CTI is the integration of Information Technology (IT) and Telephony equipment to facilitate efficient processing of customer contacts, i.e., more effective and efficient customer service. • Application of business rules for delivering personalized service <ul style="list-style-type: none"> ▪ Identifies callers to HDSA, e.g., Screen pop has caller name, etc. • Provides customer management statistics and reporting data across multiple platforms • Allows Help Desk management to view KPI in real time
	5. Describe some common features and benefits of CTI	<ul style="list-style-type: none"> • Screen Pop • Password reset • Automated Customer Profile • Call Handling Efficiency and Accuracy • Customisation capability • Auto-dial • Automated dispatch
	6. Explain some of the common problems encountered when integrating CTI with Problem Management Systems	<ul style="list-style-type: none"> • CTI integration is a systems integration project, CTI is not an off-the-shelf application • Problem Management (Ticketing) systems integration is complex and costly • Screen-Pop may delay the time it takes the Help Desk to answer a call; ASA increases • Screen-pops typically require customers to input identification; accurate databases are required
5. Self-Help Technology	1. Explain what Self-Help technology means to a Help Desk and how it is utilized	<ul style="list-style-type: none"> • Allows customer to resolve simple requests without direct Help Desk interaction/involvement • Allow customers to resolve specific types of requests regardless of whether the Help Desk is open or closed • Allows Help Desk staff to focus on more complex issues with customers • The objective of self-help tools is that the customer can resolve their request faster with self-help than waiting for an HDSA • The goal of self-help tools is to utilize information sources to benefit the customers productivity, effectiveness, efficiency • Maximize Help Desk resources

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Describe the types of problems/requests that can be solved by customers using self-help systems	<ul style="list-style-type: none"> • Documentation <ul style="list-style-type: none"> ▪ Policies, Procedures, SLA • Training <ul style="list-style-type: none"> ▪ On-Line Tutorials ▪ Training schedules • Problem Solving <ul style="list-style-type: none"> ▪ FAQ's ▪ Knowledge base • Information/Updates <ul style="list-style-type: none"> ▪ Service outages ▪ Upcoming scheduled changes ▪ Maintenance windows • Call Logging <ul style="list-style-type: none"> ▪ Log new requests/problems ▪ Check status of current requests ▪ Update information on current requests • Update contact information
	3. Describe some common examples of self help technology	<ul style="list-style-type: none"> • Fax-back systems <ul style="list-style-type: none"> ▪ Forms ▪ Procedures • IVR-based systems <ul style="list-style-type: none"> ▪ Banking transactions ▪ Airline/Train arrival/departure • Password reset systems • Web-based self help (Knowledge bases) systems <ul style="list-style-type: none"> ▪ Specific information about products/services listed ▪ FAQ's • Application on-line help systems <ul style="list-style-type: none"> ▪ Help systems found with most applications
	4. List advantages of self help technology	<ul style="list-style-type: none"> • Faster problem resolution • Available 24/7, regardless of Help Desk operating hours • More consistent response to repetitive requests • Preferred method for some customer segments • Lower call volume for the Help Desk
	5. List disadvantages of self help technology	<ul style="list-style-type: none"> • System maintenance may be high • May take customer longer to resolve the request than contacting the Help Desk directly • Higher complexity of requests to Help Desk; time per call will increase • Perception of loss of personalised service • Customer Satisfaction may be impacted if not introduced/implemented properly

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
6. Self-Healing Technology	1. Explain what Self-Healing tools are and what they mean to a Help Desk	<ul style="list-style-type: none"> • Tools that can identify when a problem has occurred and initiate remedial action • Tools that maintain an understanding of the distinct system and desktop profiles and can restore or heal the systems to a functioning state
	2. Provide an example the type of problems Self-Healing tools addresses in a Technical Support environment	<ul style="list-style-type: none"> • Registry Settings <ul style="list-style-type: none"> ▪ System recognizes corruption and restores from backup • Application executables <ul style="list-style-type: none"> ▪ If / When corrupted can be reset either automatically or by a call to a Help-Desk analyst who "hits the recover button." • Anti-Virus applications • Reset key files (e.g., DLLs) every time a user executes an application
7. On-line, chat, instant messaging help	1. Describe how and why a Help Desk would use Chat or Instant Messaging	<ul style="list-style-type: none"> • Communicate with customers or other Help Desk staff • Quick access to in-house experts • Private dialogue with colleagues • Instant Messaging allows identified individuals to send messages directly to your computer in real time (immediate response) • Can easily ignore or reply quickly if busy • Link remote workers easily/quickly • Foster relationships with remote colleagues/customers
8. System Administration	1. Describe the basic responsibilities of a System Administrator	<ul style="list-style-type: none"> • Administer User logins/access rights • Monitor system performance • Recommend/install OS and application upgrades/updates
	2. Describe the basic functions (tasks) of a System Administrator	<ul style="list-style-type: none"> • Administer Access rights/privileges • License management • Backup/Restore files • Administer directory structures • Storage management • Recommend upgrades/updates • Install authorized upgrades/updates
	3. Describe the most common types of backups	<ul style="list-style-type: none"> • Full or System – backup of all files on the system • Incremental – backup files changed since the last Full/System backup

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	4. Explain the purpose of backups	<ul style="list-style-type: none"> • Simplify system recovery • Prevent against data loss and corruption • Satisfy legal requirements, e.g., audits • Safeguard corporate assets • Meet unforeseen requirements
9. Networking Administration	1. Describe the basic responsibilities of Network Administrators	<ul style="list-style-type: none"> • Proactively administer network resources • Monitor network performance • Recommend OS (network) upgrades
	2. Describe the basic functions (tasks) of a Network Administrator	<ul style="list-style-type: none"> • Administer User logins/access rights • Troubleshoot/Resolve print issues • Administer Network resources • Access and privileges (authority)
	3. List basic components of a network	<ul style="list-style-type: none"> • Hubs • Routers • Domain Name Servers (DNS) • Channel Service Unit/Data Service Unit (CSU/DSU)
	4. List common interconnectivity topologies	<ul style="list-style-type: none"> • Ethernet • Token Ring • Fibre Data Distribution Interface (FDDI)
	5. Describe most common types of network problems	<ul style="list-style-type: none"> • Collisions, congestion and delays • Cannot reach a specific server on the network • Network outage
	6. Describe basic networking troubleshooting tools	<ul style="list-style-type: none"> • Ping, telnet, trace route and other network status tests • Diagnostics on a network interface card (NIC) • Loop-back tests
10. Networking	1. Identify the common Network Operating Systems	<ul style="list-style-type: none"> • Netware • MS NT/2000/XP • Unix (all variations)
	2. Describe basic components of a network	<ul style="list-style-type: none"> • Routers • Hubs • Wiring • Clients • Servers

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	3. Describe most common interconnectivity	<ul style="list-style-type: none"> • Ethernet • Token Ring • Fibre Data Distribution Interface (FDDI)
	4. Explain what Remote Access means	<ul style="list-style-type: none"> • Remote access enables the user to make a Local Area Network (LAN) workstation connection from a remote location (computer) • Remote Access is accomplished via a telephone communication link (modem), DSL or Broadband connection • User has access to all the functionality as if they were in their office
11. Wireless Technologies	1. Explain what Wireless Technology is	<ul style="list-style-type: none"> • Wireless technology allows equipment to communicate by use of the electromagnetic spectrum (no external wiring/connections)
	2. List common wireless devices	<ul style="list-style-type: none"> • Cell phones • Pagers • Personal Digital Assistant (PDA) • Laptops (wireless LAN card) • Radio
12. Self-Diagnosing Technology	1. Explain what Self-Diagnosing tools are and what they mean to a Help Desk	<ul style="list-style-type: none"> • Tools that enable an end user to analyze the cause or nature of a problem, along with the ability to offer solutions to resolve the problem • Presents potential "what to try" options when a user has an error • Can also be invoked to assist in "How To" solutions (such as changing a printer driver and updating new virus software)
13. Remote Control Technology	1. Explain what Remote Control technology is and how it is used in a Help Desk environment	<ul style="list-style-type: none"> • Remote control enables the HD to view the customers system (see what the customer sees on their monitor) and take control of the system from their location • Enabling technology for Remote Access/Support tools

Unit 8: Help Desk Technology & Infrastructure		
Element	Criteria	Range of knowledge and understanding for criteria (not exhaustive)
	2. Explain the benefits of using Remote Control tools	<ul style="list-style-type: none"> • Help Desk staff can view what the customer sees • Help Desk staff can take control of the customers system immediately vs. dispatching desk-side support • Help Desk staff can view exactly what the customer is doing • Help Desk staff can show the customer how to resolve the problem • Audit trail for all Help Desk actions • Faster problem identification and resolution • Increase customer satisfaction
	3. Explain Remote Control tool limitations	<ul style="list-style-type: none"> • Infrastructure for the tools can be complex • Tools require infrastructure resources, lack of recourses may result in slow response • Customers may be reluctant to allow HD access to confidential/secure systems
14. Wireless Technologies	1. Explain what Wireless Technology is	<ul style="list-style-type: none"> • Wireless technology allows equipment to communicate by use of the electromagnetic spectrum (no external wiring/connections)
	2. List common wireless devices	<ul style="list-style-type: none"> • Cell phones • Pagers • PDA • Laptops (wireless LAN card) • TV/Radio
15. Monitoring and Alerting Systems	1. Describe common Help Desk monitoring tools	<ul style="list-style-type: none"> • Broadcast boards, e.g., Symon • Monitoring applications linked to PBX/ACD • Monitoring applications linked to E-Mail, web, etc. • Monitoring applications linked to problem management and SLA performance
	2. Identify common tools used to communicate alarm information	<ul style="list-style-type: none"> • Pager, cell phones (wireless devices) • E-mail applications • Broadcast digital display boards • Website alerts • Voicemail group lists