



MICTSETA

118699 Cloud Administrator
EISA Mock Exam Memo
PRACTICAL



Cloud Administration Practical Exam Rubric	VM created with exact specs (1 vCPU, 2GB RAM, 15GB disk); network in Bridged Mode; instance running; all evidence clear.	VM created but with minor spec deviations; network active; evidence provided but slightly unclear.	Failed to meet hardware specs or network requirements; insufficient evidence of running state.
	Static IP (10.0.0.50 or 192.168.x.50) correctly set; Nginx/Lighttpd running and accessible via browser.	Static IP set but in wrong subnet; web server running but browser verification missing.	Networking remains dynamic; web server not installed or failing to serve pages.
Total Marks: 30 Focus: VM Deployment, Networking, and Storage	8GB disk added, partitioned, formatted as ext4, and permanently mounted to /var/traffic_logs.	Disk added and mounted, but missing permanent configuration or incorrect filesystem type.	Secondary disk not detected or mounted to the wrong directory.
	camera_bot user created; cam_feed_01.log exists in the new mount with correct ownership/permissions.	Log file created but in the root partition; user created but permissions are incorrect.	Failed to create system user or generate test log files.
Task	Exemplary (Full Marks)	Proficient	Beginning
1.1.1 System Setup (8 Marks)	VM created with exact specs (1 vCPU, 2GB RAM, 15GB disk); network in Bridged Mode; instance running; all evidence clear.	VM created but with minor spec deviations; network active; evidence provided but slightly unclear.	Failed to meet hardware specs or network requirements; insufficient evidence of running state.
1.1.2 Connectivity (8 Marks)	Static IP (10.0.0.50 or 192.168.x.50) correctly set; Nginx/Lighttpd running and accessible via browser.	Static IP set but in wrong subnet; web server running but browser verification missing.	Networking remains dynamic; web server not installed or failing to serve pages.
1.1.3 Storage (8 Marks)	8GB disk added, partitioned, formatted as ext4, and permanently mounted to /var/traffic_logs.	Disk added and mounted, but missing permanent configuration or incorrect filesystem type.	Secondary disk not detected or mounted to the wrong directory.
1.1.4 Testing (6 Marks)	camera_bot user created; cam_feed_01.log exists in the new mount with correct ownership/permissions.	Log file created but in the root partition; user created but permissions are incorrect.	Failed to create system user or generate test log files.
Scenario 2: The Gaming Tournament			

(Maintenance & Monitoring)			
Total Marks: 30 Focus: Performance Diagnosis and Resource Scaling			
Task	Exemplary (Full Marks)	Proficient	Beginning
2.1.1 Monitoring (10 Marks)	Stress successfully generated; bottleneck correctly identified using tools like htop or iostat (>90% load shown).	System stress attempted but load is low; tool used but bottleneck identification is vague.	Monitoring tool used incorrectly; no evidence of high resource utilization captured.
2.2.2 Maintenance (8 Marks)	OS update check performed; specifically identified kernel or security patches; detailed documentation provided.	General update check performed but failed to highlight critical security or kernel packages.	Failed to check for updates or provide a list of upgradable packages.
2.2.3 Storage Expansion (12 Marks)	Sequential evidence showing 12GB (Before) -> Resize in Hypervisor -> Resize in OS -> 25GB (After) with no data loss.	Disk resized in hypervisor but student struggled to expand the partition/filesystem within the OS.	No "Before" documentation; failed to expand filesystem; evidence is non-sequential or missing.
Scenario 3: The Law Firm (Security & Compliance)			
Total Marks: 30 Focus: Hardening, Vulnerability Research, and Firewalls			
Task	Exemplary (Full Marks)	Proficient	Beginning
3.1.1 Access Control (8 Marks)	Permissions explicitly changed from 755 to 700; verified that only root has access; before/after evidence clear.	Permissions changed but not to the exact 700 requirement; evidence only shows final state.	Directory permissions remain insecure (others still have read/execute access).

3.1.2 Vulnerability (7 Marks)	Correctly identified ProFTPD 1.3.3c Backdoor; cited CVE ID and severity from an appropriate database.	Identified a vulnerability for ProFTPD but not the specific version-related exploit.	Search results are irrelevant or for the wrong software version.
3.1.3 Remediation (7 Marks)	Professional memo includes risk description, 24-hour action, long-term fix, and verification steps.	Remediation plan provided but lacks professional formatting or misses long-term recommendations.	Memo is incomplete or provides technically unsound security advice.
3.1.4 Port Hardening (8 Marks)	Port 21 correctly identified and blocked via firewall; SSH (Port 22) remains active; rule verified via status command.	Port 21 blocked but student inadvertently blocked SSH access or failed to verify the rule.	Wrong port identified; firewall remains inactive or open to the internet.
General Submission & Professionalism (Deduction Criteria)			
File Naming: Files must follow the [StudentID]_Scenario_Task convention.			
Screenshot Quality: Must include timestamps, visible usernames, and full command prompts.			
Cloud Hygiene: Failure to terminate resources after the exam may result in administrative penalties.			



MICTSETA

SHAPING SKILLS, PIONEERING INDUSTRIES, EMPOWERING FUTURES

Media, Information And
Communication Technologies
Sector Education And Training Authority

© 2025 MICTSETA Version 1.0.0. All rights reserved. No part of this book
may be reproduced or transmitted in any form or by any means,
electronic or mechanical, including photocopying, recording or any
information storage and retrieval system, without permission in writing
from MICTSETA Developed by CVTS (Pty) Ltd

