HCIA-Routing & Switching V2.5 Exam Outline

Exam Overview

Certification	Exam Code	Exam Name	Language	Duration	Pass Score/Total Score
HCIA-Routing & Switching	H12-211	HCIA-Routing & Switching V2.5	Chinese Simplified/ English/Spanish-Modern/French/Russia	90 min	600/1000

Exam Outline

The HCIA-Routing & Switching V2.5 exam covers basic IP network connectivity, TCP/IP technologies, Ethernet technologies such as STP and RSTP, VLAN and Link Aggregation and their implementation within Huawei switches. Routing principles and OSPF routing protocol for IPv4 and IPv6 networks, WAN technologies, IP based security, network management as well as IPv4 and IPv6 based application services, MPLS and SR principles.

Key Points	Percentage
1. IP Network Principles	12%
2. LAN Technologies	24%
3. WAN Technologies	5%
4. Routing Technologies	21%
5. Network Security	5%
6. Network Management	5%
7. IPv6 Networks	25%
8.MPLS and Segment Routing	3%

1. IP Network Principles

1.1 Ethernet and IP based data forwarding processes.

1.2 TCP/IP network protocols and data encapsulation.

1.3 VRP commands for basic navigation and configuration.

1.4 IPv4 addressing principles, address design and subnetting.

1.5 TCP/IP supporting applications such as Ping, Tracert, FTP, and Telnet.

2. LAN Technologies

2.1 LAN switching operations.

2.2 Link Aggregation application and configuration.

2.3 VLAN principle, application and configuration.

2.4 STP and RSTP switching behavior, application and configuration.

3. WAN Technologies

3.1 Principles and application of serial technologies in wide area networks.

3.2 HDLC and PPP encapsulation principles and configuration.

3.3 PPPoE implementation at the customer edge.

4. Routing Technologies

4.1 Static and dynamic routing principles,

4.2 OSPF dynamic routing protocol function and implementation in VRP

5. Network Security

5.1 Traffic Filtering technologies and their application in the enterprise network

5.2 User management through authentication and authorization schemes.

5.3 IPsec VPN technologies for protecting user data.

5.4 How network security is ensured by using network security technologies and firewalls.

6. Network Management

6.1 Network Management protocols and technologies.

7. IPv6 Networks

7.1 IPv6 principles and technologies.

7.2 IPv6 routing technologies.

7.3 Application services for IPv6 networks.

8. MPLS and Segment Routing

8.1 MPLS basic principles

8.2 Segment Routing basic principles

Note:

The content mentioned in this article provides a general exam guide; the exam may contain additional related content that is not included here.

Reference

HCIA-Routing & Switching V2.5 Course

HCIA-Routing & Switching V2.5 Lab Guide

Recommended Training

HCIA-Routing & Switching V2.5 Training