HCIP-Optical Solution Architect V1.0 Exam Outline

Huawei HCIP-Optical Solution Architect V1.0 Certification Exam

Exam Name	HCIP-Optical Solution Architect V1.0
Exam Code	H31-321
Language	CHS/ENG
Question Type	True or false, single-choice, multiple-choice, blank-filling, drag-and-drop
Cost	300USD
Duration	90min
Pass/Total Score	600/1000

Exam Contents

The HCIP-Optical Solution Architect V1.0 exam covers advanced knowledge of optical network.

The optical transmission domain includes WDM & OTN Networking and Site Signal Flow Diagram, WDM & OTN Protection Technology, MS-OTN Features, WDM & OTN Advanced Features and Technologies and WDM Network Planning and Design.

The optical access domain includes PON Network Protection, PON VoIP and Multicast Service Principles, PON System Security Features, PON Advanced Features and Principles, PON QoS Feature, POL Planning and Design and POL ODN Planning and Design.

Key Content Distribution

Key Content	Percentage
WDM & OTN Networking and Site Signal Flow Diagram	10%
WDM & OTN Protection Technology	10%
MS-OTN Features	10%
WDM & OTN Advanced Features and Technologies	10%
WDM Network Planning and Design	10%
PON Network Protection	5%
PON VoIP and Multicast Service Principles	5%
PON System Security Features	10%
PON Advanced Features and Principles	5%
PON QoS features	5%
POL Planning and Design	10%
POL ODN Planning and Design	10%

Knowledge Points

1 WDM & OTN Networking and Site Signal Flow Diagram

1.1 Site Type Overview

1.2 OTM Site

1.3 OLA Site

1.4 FOADM Site

1.5 ROADM Site

1.6 OEQ Site

2 WDM & OTN Protection Technology

2.1 Optical Line Protection

2.2 Intra-Board 1+1 Protection

2.3 Client 1+1 Protection

2.4 ODUk SNCP Protection

2.5 ASON Principles and Applications

3 MS-OTN Features

3.1 Common Protection Schemes for SDH Networks

3.2 Introduction to the EoS Plane

3.3 MPLS & PWE3

3.4 Packet Services

3.5 Common Protection Schemes for Packet Transport Networks

4 WDM & OTN Advanced Features and Technologies

4.1 Ultra-High Rate and Ultra-High Bandwidth Technologies

4.2 fgOTN

4.3 OXC

4.4 FD System

4.5 OD System

4.6 Ultra-Long-Haul Transmission

4.7 Clock Synchronization

4.8 L1 Service Encryption

5 WDM Network Planning and Design

5.1 Network Design Elements

5.2 Network Design Process

5.3 Network Planning and Design Tool

6 PON Network Protection

6.1 PON Line Protection Mechanisms

6.2 OLT Upstream Protection Technics

7 PON VoIP and Multicast Service Principles

7.1 PON VoIP Service

7.2 PON Multicast Service

8 PON System Security Features

8.1 PON System Protection

8.2 User Access Control

8.3 Remote Access and Management

9 PON Advanced Features and Principles

9.1 OLT Stacking

9.2 Type C Load Sharing

9.3 WLAN Roaming and Optimization

9.4 Slicing Technology

9.5 PoE and PoF Technology

10 PON QoS Feature

10.1 QoS Technology Overview

10.2 PON QoS Features

10.3 PON QoS E2E Implementation

11 POL Planning and Design

11.1 POL Design Process

11.2 POL Network Planning

11.3 POL Data Planning

11.4 POL Network Performance Planning

11.5 POL Typical Solutions

12 POL ODN Planning and Design

12.1 ODN Planning

12.2 Pre-connection ODN Planning

Reference

HCIP-Optical Solution Architect V1.0 Training Course

Recommended Training

HCIP-Optical Solution Architect V1.0 Training