HCIA-Transmission V3.0 Exam Outline

1 Huawei HCIA-Transmission V3.0 Certification Exam

Subject	HCIA-Transmission V3.0
Exam Code	H31-311
Language	Chinese/English
Question Type	True or false, single-answer question, multiple-answer question, fill-in-the-blank question, and drag-and-drop question
Exam Fee	200 USD
Exam Duration	90 min
Pass Score/Total Score	600/1000

Exam Content

The HCIA-Transmission V3.0 exam covers the basics of the optical transmission network, including the basics of optical fiber communication, optical transmission network overview, optical transmission technology basics, mainstream optical transmission network products, networking and application, hardware installation, NMS introduction, single-site commissioning, network system commissioning, and routine maintenance.

Knowledge Point Proportion

Knowledge Point	Proportion
Basics of Optical Fiber Communication	10%
Overview of Optical Transmission Networks	5%
Basics of Optical Transmission Technologies	25%
Overview of Optical Transmission Network Products	10%
WDM and OTN Networks and Site Signal Flows	5%
Hardware Installation Basics of Optical Transmission Products	10%
Overview of the Optical Transmission Network Management System	5%
Basics of Optical Transmission Device Commissioning and Configuration	20%
Routine Maintenance Basics of Optical Transmission Devices	10%

Knowledge Points of the Theory Exam

1. **Basics of Optical Fiber Communication**
   - 1.1. Optical Fiber Communication Principles
   - 1.2. Fiber Types
   - 1.3. Fiber Attenuation and Dispersion
   - 1.4. Optical Fiber Communication Components
2. **Overview of Optical Transmission Networks**
   - 2.1. Basic Concepts of Optical Transmission Networks
   - 2.2. Introduction to Optical Transmission Technologies
   - 2.3. Application Scenarios of Optical Transmission Networks
3. **Basics of Optical Transmission Technologies**
   - 3.1. SDH Technology Basics
   - 3.2. Ethernet Technology Basics
   - 3.3. WDM Technology Basics
   - 3.4. OTN Technology Basics
4. **Overview of Optical Transmission Network Products**
   - 4.1. Subrack Specifications of Optical Transmission Devices
   - 4.2. Functions of Optical Transmission Device Boards
5. **WDM and OTN Networks and Site Signal Flows**
   - 5.1. WDM/OTN Network Layers and System Architecture
   - 5.2. Typical WDM/OTN Site Types and Signal Flows
6. **Hardware Installation Basics of Optical Transmission Products**
   - 6.1. Preparations and Installation Process for Optical Transmission Device Installation
   - 6.2. Procedure and Precautions for Installing Optical Transmission Devices
7. **Overview of the Optical Transmission Network Management System**
   - 7.1. Basic Concepts and Components of the DCN
   - 7.2. Introduction to the Web LCT

7.3. iMaster NCE-T System Architecture and Basic Functions

8. **Basics of Optical Transmission Device Commissioning and Configuration**

8.1. Single-Site Commissioning of Optical Transmission Devices

8.2. SDH/MS-OTN Network System Commissioning

8.3. SDH Service Configuration

8.4. SDH Protection Configuration

8.5. WDM/OTN Network System Commissioning

8.6. OTN Service Configuration

9. **Routine Maintenance Basics of Optical Transmission Devices**

9.1. Onsite Maintenance Operations

9.2. Routine Maintenance Operations on the NMS

NOTE

The exam content includes but is not limited to the topics mentioned in this document.

References

Huawei HCIA-Transmission V3.0 Courses

Recommended Training

Huawei HCIA-Transmission V3.0 Training