Huawei Academy ICT Skill Competition Mexico 2017

I. Introduction

A. Huawei Academy ICT Skills Competition 2017-2018

Huawei runs an annual global ICT Skills competition, providing a platform for young people to showcase their skills. Finalist gets an opportunity visit China to compete against the best of the best students from around the world and get global recognition for their knowledge, hard work and achievements. All finalists get an opportunity to meet with other students from around the world to share ideas and experiences as well as get an understanding of Chinese culture and cuisine.

B. Competition Stages

- Stage 1: Huawei Academy ICT Skills Competition Mexico 2017
  Successful country and regional winners will be put forward to the global finals.
- Stage 2: Global finals
  If you successfully complete stage 1 you will be entered into stage 2 where you will compete against finalists from around the world. The final will take place in Shenzhen, China in Spring 2018.

C. Free HCNA Certification Exam Voucher Program

Huawei is currently running a special promotion where you will be able to apply for a free HCNA Certification Exam Voucher if you meet the ALL following criteria:

- 4 or more hours of online learning
- 60+ points for the online mock test

This promotion has been designed to help young people achieve industry standard qualifications that are globally recognized by the ICT industry and provide employable skills to help young people kick-start their career.

II. Registration and schedule

A. Target Participants

- Universities and vocational schools that have become Huawei ICT Academies or are willing to become Huawei ICT Academies in the future.
- Universities and vocational schools can recommend candidates. Only students can participate in the competition. It is recommended that junior and senior students attend the Huawei Academy ICT Skill Competition Mexico 2017.
- You must be between the age of 16 and 30 years

B. Competition Schedule and Form

Phase	Competition Form	Place	Time	Remarks
Registration	Online registration	https://www.huaweiacad.com/webapps/hw-toboo-BBLEARN/portal/exec.do?operation=match	Till January 31, 2018	Mexico ICT skills competition website page
Preliminary Competition	Offline, paper tests, 1 Direction(R&S) ,1.5 hours, 60T	Appointed Test Center， Mexico CGUTyP	February 10, 2018	1.Top 50 into next round. 2.The text will be e-transfer to the HW regional manager and the academy. 3.Academies' teacher will be for the censor and scrolling
Semi-Final Competition	Online test, elearning ,5 directions(R&S, Cloud, Storage, Security, WLAN), 1.5hours, 60T	Huawei GTAC Center Queretaro	March 3, 2018	Test results are given on the site. The first award, second award, third award are set.
Final Competition	Hands-on lab experiment (1 question; 8 hours)	Huawei HQ	April, 2018	3 candidates from same country work as a group (2 Groups)

C. Registration

- **Registration Time**

  December 1, 2017 to January 31, 2018

- **Incentive policy- Point Earning**

  Students holding the HCIE certificate can win 20 additional points in the competition.
  Students holding the HCNP certificate can win 15 additional points in the competition.
  Students holding the HCNA certificate can win 10 additional points in the competition.
  Students with multiple certificates can win additional points based on the highest-level certificate only.
  Note: For the entrants who got the Huawei certification will add points only one time under the percentage system, either in preliminary or semi-final.

- **Registration Methods-Online Registration**

  Registration link:
  https://www.huaweiacad.com/webapps/hw-toboo-BBLEARN/portal/exec.do?operation=match

III. Competition outline

The Preliminary Stage outline for the Huawei ICT Skill Competition.
The Preliminary Stage exam covers two modules: IP and IT

IP module 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 technologies including RIP and OSPF for IPv4 and IPv6 networks, WAN technologies, IP based security, network management as well as IPv4 and IPv6 based application services.(NA)

IT module covers storage and cloud computing technologies. Namely, storage exam covers storage basics; RAID technologies; storage protocol basics; backup and DR basics, OceanStor V3 series products technologies. Cloud computing exam covers basic cloud computing technologies, configuration, and maintenance, includes cloud computing theory, key cloud computing technologies, Huawei cloud computing hardware and software architecture, and deployment & management. (NA)

A. **Knowledge Points of IP module：(NA)**

IP Network Principles
1). Ethernet and IP based data forwarding processes.
2). TCP/IP network protocols and data encapsulation.
3). VRP commands for basic navigation and configuration.
4). IPv4 addressing principles, address design and subnetting.
5). TCP/IP supporting applications such as Ping, Tracert, FTP, and Telnet.

LAN Technologies
1). LAN switching operations.
2). Link Aggregation application and configuration.
3). VLAN and GVRP and behavior, application and configuration.
4). STP and RSTP switching behavior, application and configuration.

WAN Technologies

1). Principles and application of serial technologies in wide area networks.
2). HDLC and PPP encapsulation principles and configuration.
3). Frame Relay and PPPoE implementation at the customer edge.

Routing Technologies
1). Static and dynamic routing principles,
2). RIP and OSPF dynamic routing protocol function and implementation in VRP

Network Security
1). Traffic Filtering technologies and their application in the enterprise network
2). User management through authentication and authorization schemes.
3). IPsec VPN technologies for protecting user data.
4).How network security is ensured by using network security technologies and firewalls.

Network Management
1). Network Management protocols and technologies.
IPv6 Networks
1). IPv6 principles and technologies.
2). IPv6 routing technologies.
3). Application services for IPv6 networks.

B. Knowledge Points of IT module：(NA)

Storage knowledge points:
1). Storage system components, storage media type and features, HDD and SSD basic knowledge, backup and disaster tolerance concept.
2). RAID principle and different RAID levels (0, 1, 2,0+, 5, 6, 10) features and typical application scenario.
3). DAS, SAN, NAS concepts, features and architectures. SCSI, FC, iSCSI, CIFS, NFS technology.
4). Technologies of backup and disaster recovery.
5). Background and application scenarios of big data.
6). Status quo and key technologies of cloud computing.
7). SAN storage: OceanStor V3 products function, hardware, interface and typical network.
8). Installation and SAN storage configuration (Storage pool, LUN, hosts, mapping etc.). Using DeviceManager.
9). SAN storage connection with Windows, Linux OS platform, Ultrapath installation and configuration
10). Huawei storage products introduction and typical application.
11). Introduction to some Huawei Licensed Features.

Cloud Computing knowledge points:
1) Basic concept and values of cloud computing.
2) Basic knowledge and technical theory of cloud computing.
3) Principles, features and related applications of virtualization technologies.
4) Components, deployment and basic configuration of FusionCloud.
5) Functionality and architecture of FusionCompute.
6) Functionality and architecture of FusionManager.

7) Functionality and architecture of FusionAccess.
8) Deployment management and configuration of cloud computing solutions.
Note:
The content mentioned in this article provides a general exam guide; the exam may contain additional related content that is not included here.

IV. Awards

- **Awards in Semi-Final Competition**

  In the Semi-Final competition, the top 10 participates in the semi-final competition will be granted with related certificates. Moreover, each of them will be granted with Huawei smart phone P10 Lite, P9 Plus and Honor 8.

  Besides, we will also select the 3 Excellent Universities. They will be granted with Crystal Cup. And the Excellent instructor will be granted with Huawei P10 Lite.

Award	Rank/No.	Honor Certificate	Prize (for Each Person)
First Award	Top 3	Certificate & Trophy	Huawei P10 Lite
Second award	Top 4-6	Certificate & Trophy	Huawei P9 Plus
Third award	Top 7-10	Certificate & Trophy	Huawei Honor 8
Excellent Universities	3	Crystal Cup	-
Excellent Instructor	1	-	Huawei P10 Lite