V19 Computer Assembly

1. Final Task Assignment

Assemble a personal computer with reference to the diagram, configure the BIOS setting and install the OS Windows 10.
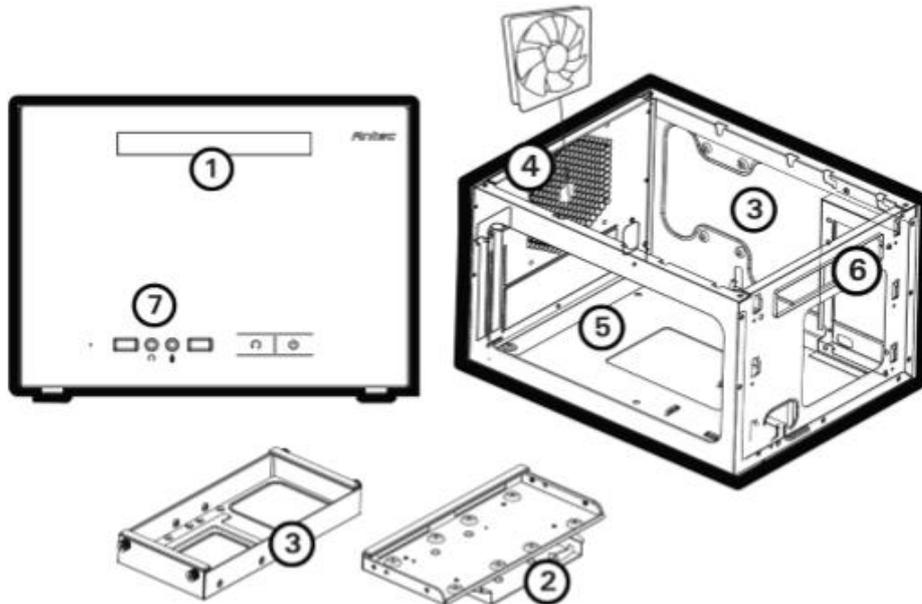
2. Allocated time: 4h00

4 hours of competition.

3. Requirements

- Requests for replacement due to defective products or missing parts will be accepted prior to the contest. Once the contest has started, no part replacement requests will be accepted.
- Contestants who damage any pieces or make any part unusable should notify the jury. Each piece replacement will cause points to be deducted from the final score.
- At the beginning of each task, the jury will collect all communication devices (cell phone, connected watch, digital tablet…) which will be restituted at the end of each task.
- Contestants must respect the safety rules. Any incident must be immediately notified to the jury.
- Contestants will notify the jury when they complete the task.

Module 1

☐ Assembly Task (refer to the below figure)

1. Slim optical drive bay
2. 2 x 2.5" HDD bays
3. 3 x 3.5" HDD bays
4. 1 x 120 mm rear fluid dynamic bearing(FDB) fan
5. Motherboard Mount: Mini-ITX
6. PSU mount: ATX standard PSU
7. Front I/O Ports: 1 x USB 3.0, 1 x USB 2.0, Audio I/O

1) SDD is assigned as follows;

      C Drive: OS installed, 120 GB

2) HDD 500 GB is composed of 2 partitions (250GB) which are assigned as follows;

      D Drive: Area for storing data and files

      E Drive: Area for storing data shared on the network

3) Slim optical Disk is assigned as follows;

      F Drive: DVD-R/W (slim optical Disk driver)

4) SDD and HDD will be placed in a correctly position in the system.

5) VGA card shall be installed firmly in the slot.

6) Parts layout and wiring bundling shall be demonstrated considering air ventilation.

Module 2

□ Setting of BIOS

1) After loading the default setting set the date and time.

2) Change the booting order as specified below before installing the OS.

    ① USB

    ② HDD

    ③ DVD

3) After installation, choose the best configuration.

4) Remove the motherboard boot screen.

5) Enable support for Windows 8/8.1.

6) Enable startup on the keyboard ps2

7) Set the language to French

□ Installation of Windows

1) Install window 10Pro

2) User name, computer name and workgroup as specified below shall be input.

    ① User Name: contestant's name in English

    ②Computer name: PCA + Contestant number

    ③Working Group: PC Assembly

3) Install the drivers required for motherboard.

4) Set Monitor resolution as 1920X1080.

5) Set to enable LAN 192.168.3.(n°contestant).

6) Install MS-Office program in D drive.

7) Connect network printer.

8) Install FileZilla Client and configure to connect to the server at 192.168.3.100

With User = « Abilympics » and password = « 2016 »

9) Prepare your resume in English using MS-word.

10) Store resume in D drive. Print using network printer and handover.

4. Procedure

- J-1 (March 24th): On the day before the competition, contestants will be welcomed by members of the jury. A briefing about the organization of the competition will be arranged. Due to the large number of registered contestants, the competition will be organized into 2 groups. Each group will go on a mandatory organized trip while the other is competing. Caution: any contestants from group n°2 caught observing contestants from group n°1 as they compete will suffer a minimum penalty of 5 points.

J1 (March 25th): Contestants from group n°1 will have 4 hours to complete the task. Contestants from group n°2 will go on an organized trip.

J2 (March 26th): Contestants from group n°2 will have 4 hours to complete the task. Contestants from group n°1 will go on an organized trip.

Abilympics France has drawn lots in order to determine the composition of the two groups.

GROUP 1 : 11 contestants	GROUP 2 : 10 contestants
France, 2 contestants	Austria, 1 contestant
Finland, 2 contestants	Bangladesh, 1 contestant
Japan, 2 contestants	China, 1 contestant
Kenya, 2 contestants	Czech republic, 1 contestant
Korea, 1 contestant	Hong Kong, 1 contestant
Mongolia, 2 contestants	Indonesia, 1 contestant

	Malaysia, 1 contestant	
	Taiwan, 1 contestant	
	Thailand, 1 contestant	
	Pakistan, 1 contestant	

N°	5. Items to be evaluated	Scoring scale
Module 1		**50**
01	Method (static electricity, …)	3
02	Organization of the work station	2
03	Screwing of the various elements (fans, motherboard, hard drives, SSD, disk drive, PSU). -1.5 points per element insufficiently screwed	9
04	RAM in DIMM1	2
05	USB in front in the specified order	2
06	Front connectors: start button, reset button, USB ports, LED and audio connected properly	5
07	Power connectors and ribbon cables connected properly	5
08	Ribbon and round cables passage and storage (use of Serflex)	2
09	Presentation of the computer case and of the various elements (fingerprints, impacts, scratches….)	10
10	Safety tags warning against opening the case	2.5
11	Company logo (Abilympics) placed in front center	2.5
12	Power up testing	5
Module 2		**50**
13	Configuration of BIOS with USB boot	10
14	HDD partitioning into 2 identical partitions	5
15	Installing WIN10 on the SSD	5
16	Drivers VGA card + audio + screen	5
17	Installing Office 2013	5
18	Installing FTP client	5
19	Printer + driver	5
20	Operation sheet	10
TOTAL POINTS		**100**

Abi wishes you a good competition!