



Malaysia Abilympics Competition

6. Computer Assembly

1. Task Assignment

Assemble a personal computer with reference to the diagram, configure the BIOS setting and install the OS Windows 10.

2. Allocated Time

4 hours of competition.

- Module n°1 : 2 hours and 30 minutes.
- Module n°2 : 1 hour and 30 minutes.


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.
- All computers will be provided with an AZERTY keyboard. However, before the beginning of the contest, the contestants will be able to install their own keyboard.
- Any contestant caught cheating, talking to someone from the public or using a communication device will suffer a penalty of 5 points for the first transgression. A second transgression will lead to an exclusion from the contest.

4. Procedure

On the day of the competition, contestants will be welcomed by the members of the jury. A briefing about the organization of the competition and the safety rules will be arranged. Contestants will draw lots to be assigned to a work station.

5. List of the provided equipment

No.	Material	Picture	Specifications	Qty per contestant	Total Qty
1	Case		Mini case ITX	1	22

2	Motherboard			1	22
3	Processor			1	22
4	RAM			2	44
5	Graphics card			1	22
6	DVD player			1	22
7	Hard disk SSHD			1	22
8	Hard disk			1	22
9	Power supply			1	22
10	Keyboard			1	22
11	Optical mouse			1	22
12	Screen			1	22

6. List of tools to be brought for each contestant

No.	Tool	Specifications	Qty	Notes
1	Native country keyboard		1	
2	Screwdrivers		1 set	
3	Multimeter		1	

7. List of facilities installed at the contest site

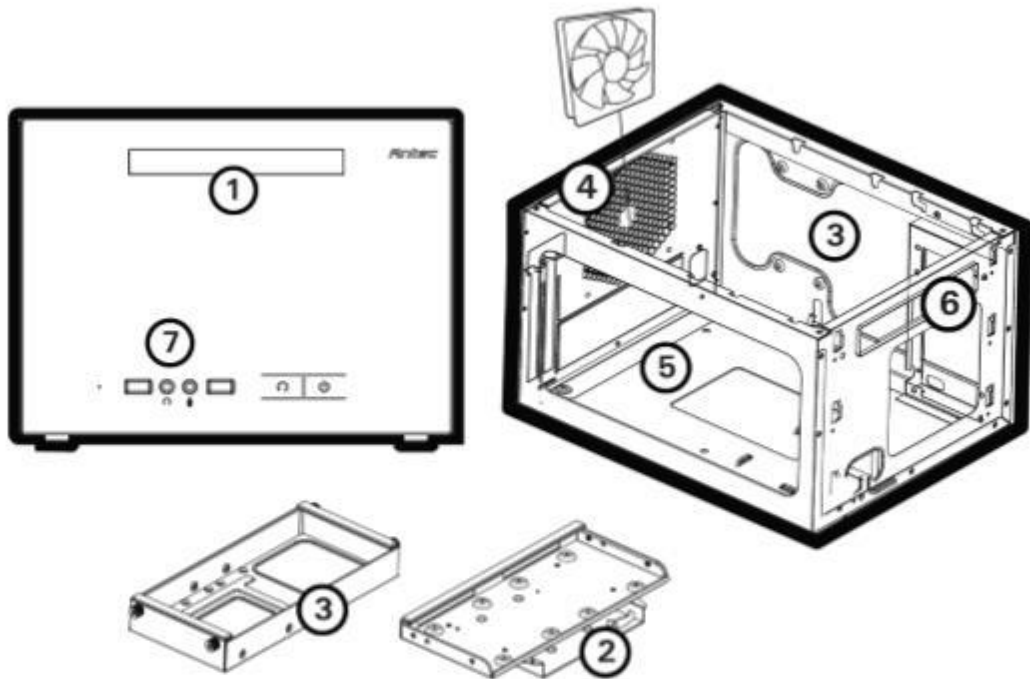
No.	Equipment	Specifications	Qty
1	Printer	Network printer	1
2	Server		1
3	Jury's laptop		4
4	Antistatic carpet		
5	Protective gloves		

8. Evaluation Criteria

No.	Evaluation Criteria	Scoring scale
Module 1 : 50		
1	Method (static electricity, ...)	3
2	Organization of the work station	2
3	Screwing of the various elements (fans, motherboard, hard drives, SSD, disk drive, PSU). -1.5 points per element insufficiently screwed	9
4	RAM in DIMM1	2
5	USB in front in the specified order	2
6	Front connectors: start button, reset button, USB ports, LED and audio connected properly	5
7	Power connectors and ribbon cables connected properly	5
8	Ribbon and round cables passage and storage (use of Serflex)	2
9	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

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
- ② Computer name: PCA + Contestant number
- ③ Working Group: PC Assembly

3) Install the drivers required for motherboard.

4) Set Monitor resolution as 1920X1080.

5) Set to enable LAN192.168.3.(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

WithUser = «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.