General requirements for the Personal Computer: Hardware requirements and potential suppliers are specified in this technical assignment, all The proposed characteristics of the equipment must comply with or exceed the minimum technical specifications specified in this technical specification. In order to compare the bids of potential suppliers and determine their compliance with the requirements of the terms of reference, the potential supplier must provide, as part of its bid, the name of the model and the brand of the product, the name of the manufacturer, the country of origin of goods and the detailed technical specification of the proposed product. Manufacturing: The equipment of the world's leading manufacturers should be presented for purchase. The equipment must be assembled (the assembly includes all the components stipulated by the terms of reference).

1).Form factor Not more than Microtower Body Dust filter front panel.

2).Processor At least: The base clock speed of the processor is 3.50 GHz;

3).Number of cores 2;

4).Number of threads 4;

5).Cache memory 3 MB;

6).System bus frequency 8 GT / s DMI3;

7).Set of Chips Not less than: System bus frequency - 8 GT / s DMI3;

8).Number of DIMMs per channel - 2;

9).The configuration of RAID PCIe * - 0,1,5 / SATA 0,1,5,10;

10).Revision PCI Express - 3.0;

11).Max. Number of channels PCI Express - 20;

12).Virtualization technology for directional I / O (VT-d);

13).The maximum amount of memory is not less than DDR4-2400 SDRAM, 32 GB;

14).Operating system At least Windows 10 Pro;

15).Slots for memory modules At least 2 DIMM slots;

16). Memory size At least 4GB (1x4GB) DDR4 2400;

17).Internal compartments for drives At least: 1 thin optical drive 9 mm;

18).one bay with compatible hard drive support of 2.5 or 3.5 inches;

19).one 3.5-inch hard drive bay;

20).Internal disk 1 TB (7200 rpm) SATA;

21).Optical drive Slim DVD writer;

22).Graphics At least Number of threads - 12;

23).The clock speed is 350-1100 (Boost) MHz;

24).Ports Not less Front panel: 1 SD memory card reader;

25).Universal headphone jack; 2 USB connectors 3.1 Gen 1;

26).Rear panel: 1 audio input; 1 audio output;

27).1 DisplayPort 1.2 port;

28).1 power connector;

29).1 RJ-45 port;

30).1 VGA port;

31).2 USB ports 3.1 Gen 1;

32).4 USB 2.0 ports;

33).Expansion slots At least: 1 M.2 PCIe;

34).1 M.2 connector for connecting the wireless module;

35).PCI Express x16 expansion slot (version 3.0) (wired x4);

36).PCI Express x16 expansion slot (version 3.0);

37).Audio Universal audio connector and internal 2 Watt speaker, headphone and headphone jacks on

the front panel (3.5 mm), multi-stream output capability;

38).Network interface Built-in network controller 10/100 / 1000M;

39).Power supply unit Not more than 180 W;

40).Keyboard USB Keyboard (rus / kaz / eng) (the manufacturer should not differ from the manufacturer of the system unit);

41).Mouse USB Optical Mouse (the manufacturer should not differ from the manufacturer of the system unit);

42).Monitor At least: 20.5 "(manufacturer should not differ from the manufacturer of the system unit);

43).Display type TN matrix with LED backlight;

44).Aspect ratio 16: 9;

45).Resolution (original). Not less than: Full HD (1920 x 1080 at 60 Hz) Pixel size Not more than: 0.238 mm Brightness Not less than 200 cd / m² Contrast Ratio: 600: 1 (static), 5,000,000: 1 (dynamic) Viewing angle: Not less than: 90 ° horizontally ; 65 ° vertical Response time Not more than: 5 ms (on / off);

46).Angle of inclination and rotation;

47).Not less than: Angle of inclination: -5 to +11;

48).Monitor characteristics Anti-reflection coating Language selection, LED backlight, screen controls, Plug and Play technology, support for user settings, antistatic coating, Screen controls Brightness, color management, contrast, output, image control, information, control buttons, language, control, menu, power;

49).Protection at the physical level Supports the installation of a security lock;

50).Multimedia Two built-in speakers with a power of at least 1 W per channel;

51).Power consumption At least 28 W (maximum), 23 W (standard), 0.5 W (standby);

52).Delivery requirements When delivering computers, a full set of drivers for installed devices on electronic media (CDs / floppy disks) should be attached.

53).Devices must be assembled (the assembly includes all components specified by the technical specification).

54). Requirements for support of purchased equipment.

55). Warranty not less than 1 (one) year.

56). Additional requirements: 1) Upon delivery, the Supplier shall provide originals or notarized copies of the factory certificate of quality and / or technical passport of the Goods issued by the manufacturer, or other document issued by the manufacturer, containing information about the completeness of the Goods, their technical characteristics, operating rules, warranties and other information, necessary to determine the quality of the Goods and its compliance with regulatory- technical documents recognized in the Republic of Kazakhstan with the exception of cases where the information is indicated on the Product itself and / or its packaging or the quality of the Goods is confirmed by the stamp of the manufacturer or other designation on the Goods and / or its packaging with the interpretation of these designations;

57). The guarantee obligation is granted when the goods are delivered to official form of the Supplier;

58). The term of delivery of equipment, within 60 calendar days from the date of the conclusion of the Agreement.

59). Warranty for equipment must be at least 12 months from the date of delivery of the goods.