



دائرة اللوازم والعطاءات  
Supplies and Tenders Department

جامعة عمان العربية  
دائرة اللوازم والعطاءات  
شارع الاردن - موبص  
العطاء رقم  
(2021-2020/3)

تجهيزات حاسوبية وكاميرات وسويتشات  
وألواح ذكية وتجهيزات أخرى لاستخدامها في  
قاعات التدريس لأغراض التدريس عن بعد.

سعر النسخة (150)

غير مُسترد

آخر موعد لتقديم العروض

الساعة الثانية بعد ظهر يوم الاثنين الموافق 2021/3/15

فعلى الراغبين المشاركة في هذا العطاء مراجعة مدير اللوازم والعطاءات في الجامعة للحصول  
على نسخة من هذا العطاء اعتباراً من صباح يوم الاثنين الموافق 2021/3/1 ولغاية الساعة الثانية  
بعد ظهر يوم الثلاثاء الموافق 2021/3/9



## دائرة اللوزام والعطاءات

Supplies and Tenders Department

## 1- Laptops

Model	Well-Known <u>Business</u> Brand Name
Quantity	50
Processor	10th Gen Intel® Core i7-10510U processor (1.8 GHz base frequency, up to 4.9 GHz with Intel® Turbo Boost Technology, 8 MB L3 cache, 4 cores)
Chipset	Intel Integrated with processor
Operating System	Free Dos
Memory	16GB DDR4 – upgradable
Hard Drive	512GB M.2 NVMe SSD
Screen	(15.6") diagonal FHD IPS anti-glare slim (1920 x 1080)
Webcam	Included
Output Ports	Min. 2x USB 3.1 Gen 1 Port Min. 1x USB Type-C 3.1 Gen 1 Port Min. 1x HDMI Min. 1x RJ-45
Fingerprint Reader	Included
Network	Ethernet controller 10/100/1000 Mbps
Wireless	Intel 802.11 ax wireless with Bluetooth
Graphics	Intel® UHD Graphics, Premium
Audio	Built in sound card with internal speakers
Battery	Min. 3 cell Battery
Warranty	Three years warranty including Labor & spare parts



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 2- Graphics Drawing Tablet (pad)

Quantity	50
Battery-free pen	Yes
Pressure-sensitive pen	YES
PC	Windows® 10
USB-A port and type c port (extra converter between USB-A port and type c port should be included if the pad does not support both ports)	YES
Size	At least 10*8 inches
Warranty	1-3 years



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

### 3- Interactive Whiteboard

Size:	86" minimum
Quantity	40
Surface:	Ceramic surface
Touch:	10-user finger touch
Writing style	Finger or Dry-Erase marker pen
Connection:	USB
Resolution:	4k
Operating System	Win XP, Win 10, Win 7
Record	Records all the work on PC in audio and video
Language support	Arabic & English
hand writing recognition	Yes
Works with any Projector	Yes
Warranty	3 years warranty



## دائرة اللوزام والعطاءات

Supplies and Tenders Department

## 4- Business high-end laptop specification

Model	Well-Known Business high-end Brand Name
Models preferred	HP Elite Dragonfly, Microsoft Surface Pro, HP EliteBook x360, Dell Precision 7730, Lenovo ThinkPad X1 Carbon, HP ZBook Studio x360 or better
Quantity	3
Processor	8th to 10th Gen Intel® Core i7
Privacy	Webcam screen blocker Integrated Privacy Screen
Security	Enterprise-grade protection with Windows Hello face sign-in
Display size	13-16" FHD touch screen preferred
Chipset	Intel Integrated with processor
Operating System	Free Dos Windows 10 supported
Memory	16GB DDR4 – upgradable
Internal storage	1Tera M.2 NVMe SSD
Webcam	HD webcam must be Included
Output Ports	Min. 2x USB 3.1 Gen 1 Port Min. 1x USB Type-C 3.1 Gen 1 Port Min. 1x HDMI



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

	Min. 1x RJ-45
Ports and Connectors	Thunderbolt headphone/microphone combo USB 3.1
Fingerprint Reader	Included
Network	Ethernet controller 10/100/1000 Mbps
Wireless	Wi-Fi 6: IEEE 802.11 a/b/g/n/ac/ax compatible
Bluetooth	Bluetooth Wireless 5.0 LE technology
Graphics	Intel® UHD Graphics, Premium
Audio	Built in sound card with internal speakers premium sound
Battery	at least 7 hours life Fast charging
Pen	Preferred If available
Backpack	Premium
Warranty	Three years warranty including Labor & spare parts



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 5- Switch

Model	Aruba 2930F 24G PoE+ 4SFP+ Switch(JL255A)
Quantity	1
SFP+	2X
wireless access points	Aruba wireless access points compatible with JL255A
Warranty	Three years warranty including Labor & spare parts for switch and AP

## 6- Ethernet Cable roll

Length	305 meter
Quantity	1
Type	Shielded Cat 6e or Shielded Cat 7 Shielded Cat 8



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 7- Network tool kit

Must include	RJ11/12/45 modular plug crimper with cutter and stripper Punch down tool with 66 & 110/88 blades UTP/STP cable stripper Utility knife 4 1/2" diagonal cutting pliers 2-in-1 reversible screwdriver LAN cable tester & Molded plastic hard case
Quantity	1

## 8- Raspberry pi

Quantity: 1





دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 9- Bluetooth Headset

Bluetooth Version	V 5.0
Quantity	50
Operation Range	at least 10M
Battery Capacity	180maH
Working Time	About 12 H
Charge Base must be included	Yes
USB charging cable must be included	Yes
Included microphone	Yes
microphone NOISE CANCELLING feature	Yes
One ear headset	Yes
Warranty:	1 year
Bluetooth USB Adapter must be included and should be compatible with the headset	Yes



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 10- Monitoring Cameras

Network Camera	5MP WDR IR Mini-Dome Network Camera
Must be combatable with the NVRs and the Auto tracking Cameras	YES
Quantity	40

## 11- NVR

Network Video recorder	64 Channel Super Network Video Recorder
4K h.265	Yes
Quantity	1



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 12- Switch

Switch	10/100/1000Mbps RJ-45 PoE+Port 370 W×24  PoE budget  10/100/1000Mbps uplink RJ-45 +Port×2  1/10Gbe uplink/stacking SFP/SFP Port×4  24P Switch
Quantity	3

## 13- SFP Fiber Optical Transceivers

SFP Fiber Optical Transceivers (10 Gig)	
Quantity	6

## 14- شاشة LED

شاشة LED	42 Inch
Quantity	2



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 15- PTZ Auto Tracking Teacher Camera

**Goal: tracking for the instructor and for the board in the class room**

PTZ Auto Tracking Teacher Camera	<ul style="list-style-type: none"> <li>- 1/2.8 inch high-quality 4K CMOS sensor</li> <li>- Support at least four streams</li> <li>- Support multiple video output: SDI, USB 3.0, LAN Gig</li> <li>- At least 3x zoom lens.</li> <li>- Support MJPG/H.264/H.265 video compression.</li> <li>- Built-in leading image recognition and tracking algorithm</li> <li>- Ability to track on distance up to 9 m</li> <li>- Supports multiple ways of installation (network installation is a must)</li> <li>- Supports Dual audio channel</li> <li>- Audio Compression AAC, MP3, G.711A</li> <li>- Supports network protocols: RTSP, RTMP, ONVIF, GB/T28181</li> <li>- POE Support</li> <li>- Can be connected to NVRs and VMS systems</li> <li>- At least have 8-megapixel resolution</li> <li>- Ethernet port</li> <li>- USB 3 Port</li> <li>- Auto tracking and Auto Focus capabilities</li> <li>- Can be Integrated with Video Conferencing platforms (Zoom and MS Teams integration is a must)</li> </ul>
Quantity	40



## دائرة اللوزام والعطاءات

Supplies and Tenders Department

## 16- Switcher & Recording & Live Streaming Devices and software:

**Goal: control the tracking camera in the class room and collect the instructor tracking camera with board, and the video conference system (teams, zoom) in one screen**

Switcher & Recording & Live Streaming Devices and software	<ul style="list-style-type: none"> <li>- Supports up to 6 video sources.</li> <li>- Supports direct SDI input source</li> <li>- Ability to switch, capture, and overlays between videos.</li> <li>- Ability to add backgrounds, effects, texts.., to video sources.</li> <li>- Ability to mix multi video sources.</li> <li>- Ability to record the videos in 4K resolution.</li> <li>- Easily share and stream the desktop screen</li> <li>- Supports 4K videos</li> <li>- Integrated with Skype, Facebook live, YouTube</li> <li>- Supports multiple picture-in-picture layers during your live broadcasts</li> <li>- Supports Multiple Channel Broadcasting</li> <li>- Supports to stream on any streaming platform. (RTMP)</li> <li>- Ability to control cameras settings directly.</li> <li>- Ability to share video source from mobile via mobile app.</li> <li>- Supports integration with third party system.</li> </ul>
Quantity	1 (to install and configure all PTZ Auto Tracking cameras)



دائرة اللوزام والعطاءات  
Supplies and Tenders Department

## 17- Installation and configuration

Installation and configuration	For items number ,11,12,13,14,15,16
--------------------------------	-------------------------------------