توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
	١. حاسبات رئيسية **Mainframes**	
Mini Computers : "midrange computer", such as the higher-end SPARC, POWER and Itanium-based systems from Oracle, IBM and Hewlett-Packard. (*)	٢. حاسبات متوسطة **Minicomputers**	
Servers and Central Processing Units	٣. خوادم ووحدات معالجة رئيسية **Servers and CPUs**	
	٤. حاسبات شخصية **Personal computer PCs**	
	٥. حاسبات محمولة **Laptops**	أجهزة الحاسب الآلي ملحقاتها ودعم فني
	٦. محطات عمل **Workstations**	
	٧. ملحقات الحاسب الآلي. **Apparatuses accessories**	**Apparatuses & Accessories (Supply, installation, maintenance, operation and Technical support)**
Visual display units : A monitor or screen which is an electronic visual display for computers. The display device in modern monitors is typically a thin film transistor liquid crystal display (TFT-LCD) thin panel & sc. Monitor.	• وحدات العرض المرئي. **Visual display units.**	
	• وحدات التخزين والاسترجاع. **Storage and retrieval**	
	• الطابعات باختلاف انواعها. **Various types of printers.**	
	• الماسحات الضوئية باختلاف انواعها. **Various types of scanners**	
Printers' ink and toners	• أحبار طابعات **Printers' inks and toners**	
أجهزة مرئية ومسموعة	• تجهيزات الوسائط المتعددة. **Multimedia preparation.**	
Embedded system equipment : it is embedded as part of a complete device often including hardware and mechanical parts, which control many devices in common use today, it contain processing cores that are either microcontrollers or digital signal processors (DSP).	• أجهزة النظم المتوارية. **Embedded system equipment.**	
	٨- دعم فني	

Brief Description	Specialized work field
User services support systems, Help Desk	• أجهزة دعم وخدمة المستفيدين. **User services support systems**
	• تركيب وصيانة أجهزة وقطع غيار
	• صيانة برامج
Providing human specialists : is the contract between an government organization and local privet company act as manpower service provider to support the government organization with consulting manpower in different IT categories and positions.	• توفير عمالة فنية بشرية متخصصة **Providing human specialists**

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
	1. البرامج المكتبية. **Office or libraries software.**	
	2. برامج علمية. **Scientific software.**	
	3. برامج مالية. **Financial software**.	
HR software : Human recourse which forms the basis for the artificial intelligence program HRL	4. برامج القوى البشرية. **HR software.**	البرامج الجاهزة **Software**
Engineering software : A variety of software programs which are available for the different specialized disciplines of engineering. Examples : AutoCAD-Autodesk - Civil Designer - …	5. البرامج الهندسية. **Engineering software.**	
Operating system : is a collection of software that manages computer hardware resources and provides common services for computer programs. Examples of popular modern operating systems include Android, BSD, iOS, Linux, Mac OS X, Microsoft Windows,[3] Windows Phone, and IBM z/OS. All these, except Windows and z/OS, share roots in UNIX. (*)	6. نظم التشغيل وبرامجها التابعة. **Operating systems and software**	
Utilities : is system software designed to help analyze, configure, optimize or maintain the infrastructure for a IT service, often also providing a service using that infrastructure. A programming tool or software development tool : is a program or application that software developers use to create, debug, maintain, or otherwise support other programs and applications. (*)	7. برامج الخدمات والأدوات المساندة. **Utilities and tools software.**	

Brief Description	Specialized work field
Graphics& image processing software: A program or collection of programs that enable a developer to manipulate visual images on a computer. Examples: Adobe Photoshop – Microsoft Publisher – Picassa _ …	8. برامج الرسومات ومعالجة الصور. Graphics& image processing software.
	9. البرامج الإحصائية. Statistical software.
	10. برامج التقنيات المتعددة الوسائط Multimedia technology software
Multimedia technology software: a combination of text, audio, still image, animation, video, interactivity contents forms. Areas of multimedia technologies strongly supports : Mobile Technologies - Computer animation 3D Computer games - Computer games - E-marketing - E-advertising - E-learning	● برامج مرئية ومسموعة Video & Audio software
Licenses Renewal	11. تجديد تراخيص Licenses Renewal

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
	1. أجهزة قراءة وطباعة. Reading and printing equipment	
	2. أجهزة تحويلية ومساعدة. Diversion and support equipment ROUTERS.	أجهزة مايكرو فيلمية **Microfilm equipment**
	3. أجهزة استرجاع مايكرو فيلمي. Microfilm retrieval equipment.	
	4. أجهزة طبع أفلام. Film copying equipment.	
	5. جميع أنواع الكاميرات المستخدمة في نظم حفظ الوثائق. Various types of cameras.	
	6. أجهزة مراقبة جودة الإنتاج المايكرو فيلمي. Microfilm quality production monitoring equipment.	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
Applied development environment : Software that provides comprehensive facilities to computer programmers for application development (Source code editor – compiler and/or interpreter – build automation tools – debugger).	1. أدوات وبرمجيات وبيئات التطوير للنظم التطبيقية. **Applied development environment (tools, utilities).**	
Data warehouse : is a database used for reporting and data analysis. It is a central repository of data which is created by integrating data from multiple disparate sources. (*)	2. إدارة قواعد البيانات **Database and warehouse management systems.**	
	3. حلول برمجية **Software solutions**	
Website or Web site : a site that functions as a point of access to information on the Internet., it b is a set of related web pages containing content such as text, images, video, audio, etc. A website is hosted on at least one web server, accessible via a network such as the Internet . (*)	• مواقع الانترنت **Sites**	نظم المعلوماتت **Information systems**
Portal: a gateway that unifies access to all enterprise information and applications. (*) 1 - **Web portal** = a site that functions as a point of access to information on the Internet. 2 - **Intranet portal, :** a gateway that unifies access to all enterprise information and applications. 3 - **Enterprise portal** = a framework to provide a single point of access to a variety of information and tools. 4 - **Portal rendering,** = an optimization technique in 3D computer graphics.	• البوابات الالكترونية **Portals**	
E-service : (short for electronic service), represents one prominent application of utilizing the use of Information and communication technologies (ICTs) in different areas. (*)	• الخدمات الالكترونية **E-services**	
Content management: is the set of processes and technologies that support the collection, managing, and publishing of information in any form or medium. (*)	• إدارة محتوى الكتروني **Content management**	
iCloud is a cloud service developed enables users to store and sync data across devices, including Mail, Calendar, Photos, Notes, contacts, settings, backups, and files.	• السحابة الالكترونية **iCloud**	
Mobile Application: Design and development Application for Android, iPhone.	4. تصميم وتطوير تطبيقات لأجهزة الآيفون والأندرويد. **Mobile Application**	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
LAN : Local Area Network : is a computer network that interconnects computers in a limited area using network media. Ethernet over twisted pair cabling, and Wi-Fi are the two most common technologies currently used to build LANs, ARCNET, Token Ring and other technology standards have been used in the past. (*) **WAN : Wide Area Network :** is a network that covers a broad area (i.e., any telecommunications network that links across metropolitan, regional, or national boundaries) using private or public network transports. The Internet can be considered a WAN as well. (*)	1. أجهزة ومكونات وعناصر شبكات حاسب آلي سلكية ولاسلكية. **LAN/WAN.**	شبكات الحاسب الآلي **Computer networks**
Cable : is most often two or more wires running side by side and bonded, twisted or braided together to form a single assembly, it used to carry electric currents. An optical cable contains one or more optical fibers in a protective jacket that supports the fibers. (*)	2. تمديدات شبكية. **Networking Cabling.**	
Network administration : Network management : refers to the activities, methods, procedures, and tools that pertain to the operation, administration, maintenance, and provisioning of networked systems. (*) **Capacity management:** These activities are intended to optimize performance and efficiency, and to plan for and justify financial investments. (*) **Network monitoring :** describes the use of a system that constantly monitors a computer network for slow or failing components and that notifies the network administrator (via email, SMS or other alarms) in case of outages. It is a subset of the functions involved in network management. (*) **Website monitoring :** is the process of testing and verifying that end-users can interact with a website or web application. Website monitoring is often used by businesses to ensure that their sites are live and responding., also used to verify that a domain (and web site) is not only responding properly, but has not been hacked, blacklisted or hijacked. (*) **Network load balancing :** is the ability to balance traffic across two WAN links without using complex routing protocols. This capability balances network sessions like Web, email, etc. over	3. برامج إدارة الشبكات والسعات ومراقبة الأداء ومتابعة الأحمال. **Network admin, capacity management, performance monitoring and load follow-up.**	

multiple connections in order to spread out the amount of bandwidth used by each LAN user, thus increasing the total amount of bandwidth available, it is commonly used to provide network redundancy. Finally, most network load balancing systems also incorporate the ability **to balance** both outbound and inbound traffic. Inbound load balancing is generally performed via dynamic DNS. (*)	
Load distribution devices: distribute workload across multiple computers or a computer cluster, network links, central processing units, disk drives, or other resources.	4. أجهزة توزيع الأحمال. **Load distribution devices.**

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
Internet service providers (ISPs) : is a company that provides organizations with consulting, legal, real estate, education, communications, storage, processing, and many other Internet services, it is more generally used to refer to third party or outsourced suppliers. (*)	1. مزود خدمة الانترنت. **Service provider.**	خدمات الانترنت **Internet services**
	2. مقدم انترنت. **Sub-ISP**.	
Web Hosting: A service that allows you to display and publish your site's content on the web.	3. استضافة موقع (Cloud) **Web Hosting.**	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
Network switch : is a computer networking device that links network segments or network devices. (*) **1.Hub, or Repeater :** is a simple network device. Hubs do not manage any of the traffic that comes through them. Any packet entering a port is flooded out or "repeated" on every other port, except for the port of entry. Hub's operate at OSI Model/ Layer 1 (physical layer - end-to-end connection). (*) **2.Bridge** = is to interconnect a small number of devices in a home or the office. Bridge's operate at OSI Model/ Layer 2 (data link layer). (*)	1. أجهزة اتصالات ونقل بيانات. **Data transfer and communication devices.**	

3. Router : is a device that forwards data packets between computer networks, creating an overlay internetwork. A router is connected to two or more data lines from different networks. When a data packet comes in one of the lines, the router reads the address information in the packet to determine its ultimate destination. Then, using information in its routing table or routing policy, it directs the packet to the next network on its journey. Router's Bridge's operate at OSI Model/ Layer 3 (network layer). (*) **4. Firewall : is** used to keep a network secure. Its primary objective is to control the incoming and outgoing network traffic by analyzing the data packets and determining whether it should be allowed through or not, based on a predetermined rule set. Firewalls operate at OSI Model/ Layer 4 (transport layer). **Note:** Firewall can also be software-based. (*) **Modem :** is a device that modulates an analog carrier signal to encode digital information, and also demodulates such a carrier signal to decode the transmitted information. The goal is to produce a signal that can be transmitted easily and decoded to reproduce the original digital data. Modems. (*) **Satellite Modem or Sat Modem :** is a modem used to transform an input bit stream to a radio signal and vice versa, using a communications satellite as a relay. (*)		نقل المعلومات **Data transfer**

Data transmission, digital transmission, or digital communications : is the physical transfer of data over a point-topoint or point-to-multipoint communication.
The data are represented as an electromagnetic signal, such as an electrical voltage, radio wave, microwave, or infrared signal. While analog transmission is the transfer of a continuously varying analog signal, digital communications is the transfer of discrete messages, SMS. (*)
 	
Data transfer can be done in any of three modes: -
  •   **Stream mode:** Data is sent as a continuous stream, relieving FTP from doing any processing. Rather, all processing is left up to TCP.
  •   **Block mode:** FTP breaks the data into several blocks (block header, byte count, and data field) and then passes it on to TCP, End-of-file indicator is needed.
	2. نظم اتصالات ونقل معلومات.
	Communication and information transfer systems.
	
	● الرسائل النصية .
	SMS.
	
	● اتصال مرئي.
	Video Conference.	

		نقل المعلومات **Data transfer**
• **Compressed mode:** Data is compressed using a single algorithm (usually run-length encoding). **Web service :** is a method of communication between two electronic devices over the World Wide Web. A Web service is a software function provided at a network address over the web or the cloud, it is a service that is "always on" as in the concept of utility computing. (*) **Video conference or Video teleconference :** are set of telecommunication technologies which allow two or more locations to communicate by simultaneous two-way video and audio transmissions, it is designed to serve a conference or multiple locations. (*)		
Electronic corresponded system: generically it is a system for any electronic document transmission, of exchanging digital messages from an author to one or more recipients. Some packages used to help enterprises for managing their correspondent, content and business processes framework for developing custom enterprise systems and offering much functionality out of the box and capable of being customized to manage a specific business process. DAW	٣. أنظمة التراسل الالكتروني. **Electronic corresponded system.**	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
	١. غرف حاسب وتمديدات أرضية. **Computer room preparation and Cablings.**	تجهيز مواقع **Site preparation**
	٢. الخدمات الالكترونية. **Electronic services**.	
Electronic services portlets and units : are interface software components that are managed and displayed in a web portal. A portal page is displayed as a collection of non-overlapping portlet windows, where each portlet window displays a service portlet. Some examples of portlet applications are email, weather reports, discussion forums	• أجهزة وأنظمة الخدمة الذكية	
KIOSK Self-Service KIOSKs **KIOSK provides hardware & software**	• منافذ تقديم خدمات الكترونية **KIOSK**	
Smart building equipment : A building directed by control system. The control system is a computerized, intelligent network of electronic devices designed to monitor and control the mechanical, electronics, and lighting systems in a building. It is automation may include centralized control of lighting, HVAC	٣. تجهيزات المباني الذكية. **Smart building equipment.**	

Brief Description	Specialized work field	
(heating, ventilation and air conditioning), appliances, and other systems, to provide improved convenience, comfort, energy efficiency and security.		
UPS	4. البطاريات الصناعية..	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
IT Research, studies, and experimental development: is formal work undertaken systematically to increase the stock of knowledge, and the use of this stock of knowledge to devise new applications. It is used to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support theorems, or develop new theories. A research project may also be an expansion on past work in IT. (*)	1. تنفيذ الدراسات والأبحاث في مجال تكنولوجيا المعلومات. **IT research and studies.**	الاستشارات **Consultancy**
Consultancy services : is an Information technology consulting (also called Computer consultancy, Computing consultancy, technology consulting business and technology services or IT advisory) is a field that focuses on advising IT businesses on how best to use information technology to meet their business objectives. In addition to providing advice, IT consultancies often estimate, manage, implement, deploy, and administer IT systems on businesses' behalf, known as Outsourcing. (*)	2. تقديم الخدمات الاستشارية. **Providing consultancy services.**	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
	1. تدريب تخصصي. **Specific training.**	التدريب **Training**
	2. تدريب مساند. **Supportive training.**	

توضيح موجز **Brief Description**	مجال العمل التخصصي **Specialized work field**	
Document imaging system : is an information technology category for systems capable of replicating documents commonly used in business. It is a software-based computer systems that capture, store and reprint images. Document imaging systems can take many forms including microfilm, on demand printers, facsimile machines, copiers, multifunction printers, document scanners, computer output microfilm (COM) and archive writers. (*)	1. إدارة الوثائق والأرشفة الالكترونية. **Image systems.**	
The Documents Preservation and Retrieval System stores images of documents in the computer using scanners, and then retrieves them upon request.	2. نظام حفظ واسترجاع الوثائق **A document preservation and retrieval system**	
Computer-aided design (CAD), also known as computer-aided drafting (CAD) or computer-aided design and drafting. **(CADD) :** is the use of computer systems to assist in the creation, modification, analysis, or optimization of a design. (*) **Computer-aided manufacturing (CAM) :** is the use of computer software to control machine tools and related machinery in the manufacturing of work pieces **CAM :** is a subsequent computer-aided process after computer-aided design (CAD) and sometimes computer-aided engineering (CAE), as the model generated in CAD and verified in CAE can be input into CAM software, which then controls the machine tool. (*)	3. التصميم الهندسي. **CAD/CAM.**	النظم الخاصة **dedicated System**
Geographic information system (GIS): is a system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data. In a general sense **GIS** describes any information system that integrates, stores, edits, analyzes, shares, and displays geographic information for informing decision making. **GIS** applications are tools that allow	4. المعلومات الجغرافية وأنظمة خرائط. **GIS system.** **GPS**	

users to create interactive queries (user-created searches), analyze spatial information, edit data in maps, and present the results of all these operations. (*)

Global Positioning System (GPS) : is a satellite-based radionavigation system .

نظام متكامل لإدارة مكان العمل يتميز بمنصة برمجية تدمج خمسة وظائف رئيسية، يتم تشغيلها من منصة تقنية واحدة **Integrated Systems** An integrated workplace management system featuring a software platform that integrates five key functions, operated from a single technology platform.	**5. النظم المتكاملة** **Integrated Systems**	
Information security (sometimes shortened to InfoSec) : is the practice of defending information from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction. It is a general term that can be used regardless of the form the data may take (electronic, physical, etc...). (*)	**6. الأمن المعلوماتي.** **Information security.**	
Protection Mechanisms : are built into a computer architecture to support the enforcement of security policies. A simple definition of a security policy is "to set who may use what information in a computer system". - **Antivirus or anti-virus software :** is software used to prevent, detect and remove malware (of all descriptions), such as: computer viruses, malicious BHOs, hijackers, ransomware, key loggers, backdoors, rootkits, Trojan horses, worms, malicious LSPs, dialers, fraud tools, adware and spyware. - **Anti-spyware :** Software Spyware is software that aids in gathering information about a person or organization without their knowledge and that may send such information to another entity without the consumer's consent, or that asserts control over a computer without the consumer's knowledge. - A spyware infestation can create significant unwanted CPU activity, disk usage, and network traffic. Stability issues, such as applications freezing, failure to boot, and system-wide crashes are also common. Spyware, which interferes with networking software, commonly causes difficulty connecting to the Internet. Anti-spyware is a number of techniques have emerged to counteract spyware. These include programs designed to remove or block spyware, as well as various user practices which reduce the chance of getting spyware on a system.	● **برامج وحزم الحماية .** **Protecting packages.**	النظم الخاصة **dedicated System**

- **Anti-Spam software :** To prevent email spam (aka unsolicited bulk email), both end users and administrators of email systems use various anti-spam techniques. Some of these techniques have been embedded in products, services and software to ease the burden on users and administrators. No one technique is a complete solution to the spam problem, and each has tradeoffs between incorrectly rejecting legitimate email vs. not rejecting all spam, and the associated costs in time and effort.

Anti-spam techniques can be broken into four broad categories: those that require actions by individuals, those that can be automated by email administrators, those that can be automated by email senders and those employed by researchers and law enforcement officials.

- **Anti-spam appliances :** are computer hardware appliance devices integrated with on-board software that implement anti-spam techniques (e-mail) and/or anti-spam for instant messaging (also called "spim") and are deployed at the gateway or in front of the mail server. They are normally driven by an operating system optimized for spam filtering. They are generally used in larger networks such as companies and corporations, ISPs, universities, etc.
- **Encryption software :** is software whose main task is encryption and decryption of data, usually in the form of files on (or sectors of) hard drives and removable media, email messages, or in the form of packets sent over computer networks.

Encryption software executes an algorithm that is designed to encrypt computer data in such a way that it cannot be recovered without access to the key. Software encryption is a fundamental part of all aspects of modern computer communication and file protection and may include features like file shredding.
The purpose of encryption is to prevent third parties from recovering the original information. This is particularly important for sensitive data like credit card numbers.

النظم الخاصة
dedicated System

- **Firewall =** is used to keep a network secure. Its primary objective is to control the incoming and outgoing network traffic by analyzing the data packets and determining whether it should be allowed through or not, based on a predetermined rule set. Note : Firewall can also hardware-based operate at OSI Model/ Layer 4 (transport layer).
- **An intrusion detection system (IDS) :** is a device or software application that monitors network or system activities for malicious activities or policy violations and produces reports to a management station. Some systems may attempt to stop an intrusion attempt, but this is neither required nor expected of a monitoring system. Intrusion detection and prevention systems (IDPS) are primarily focused on identifying possible incidents, logging information about them, and reporting attempts.

• **Anti keylogger (or anti keystroke logger) :** is a type of software specifically designed for the detection of keystroke logger software; often, such software will also incorporate the ability to delete or at least immobilize hidden keystroke logger software on your computer. In comparison to most anti-virus or anti-spyware software, the primary difference is that an anti keylogger does not make a distinction between a legitimate keystroke logging program and an illegitimate keystroke logging program (such as a virus); all keystroke logging programs are flagged and optionally removed, whether they appear to be a legitimate keystroke logging software or not. • **Anti-Subversion Software :** Software subversion is the process of making software perform unintended actions either by tampering with program code or by altering behavior in another fashion. Anti-Subversion Software detects subversion and attempts to stop the effects of the hack.		
Security software : is a generic term referring to any computer program or library whose purpose is to (help to) secure a computer system or a computer network. (*) **Computer security** =The field covers all the processes and mechanisms by which computer-based equipment, information and services are protected from unintended or unauthorized access, change or destruction. This included not only protection from unauthorized activities or untrustworthy individuals, but also from unplanned events and natural disasters. **Network security :** consists of the provisions and policies adopted by a network administrator to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources. Network security involves the authorization of access to data in a network, which is controlled by the network administrator. Users choose or are assigned an ID and password or other authenticating information that allows them access to information and programs within their authority. Types of security software like: (*) **Information privacy, or data privacy :** is the relationship between collection and dissemination of data, technology, the public expectation of privacy, and the legal and political issues surrounding them. Privacy concerns exist wherever personally identifiable information is collected and stored – in digital form or otherwise. Improper or non-existent disclosure control can be the root cause for privacy issues. Data privacy issues can arise in response to information from a wide range of IT data sources. (*)	• برامج السرية والخصوصية . **Security & privacy software.**	النظم الخاصة **dedicated System**

Information Assurance: The act of ensuring that data is not lost when critical issues arise. These issues include but are not limited to; natural disasters, computer/server malfunction, physical theft, or any other instance where data has the potential of being lost. Since most information is stored on computers in our modern era, information assurance is typically dealt with by IT security specialists. One of the most common methods of providing information assurance is to have an off-site backup of the data in case one of the mentioned issues arise. (*) **Internet security :** is a branch of computer security specifically related to the Internet, often involving browser security but also network security on a more general level as it applies to other applications or operating systems on a whole. Its objective is to establish rules and measures to use against attacks over the Internet. The Internet represents an insecure channel for exchanging information leading to a high risk of intrusion or fraud, such as phishing. Different methods have been used to protect the transfer of data, including encryption. Intrusion (IDS).		
A system monitor (SM) in systems engineering = is a process within a distributed system for collecting and storing state data. This is a fundamental principal supporting Application Performance Management. (*) The performance of the monitoring system has two aspects: • Impact on system domain or impact on domain functionality: Any element of the monitoring system that prevents the main domain functionality from working is in-appropriate. Ideally the monitoring is a tiny fraction of each application's footprint, requiring simplicity. The monitoring function must be highly tunable to allow for such issues as network performance, improvements to applications in the development life cycle, appropriate levels of detail, etc. Impact on the systems' primary function must be considered. • Efficient monitoring or ability to monitor efficiently: Monitoring must be efficient, able to handle all monitoring goals in a timely manner, within the desired period. This is mostly related to scalability. Various monitoring modes are discussed below. There are many issues involved with designing and implementing a system monitor. Here are a few issues to be dealt with: • CCTV • Configuration. • Protocol. • Performance. • data access.	• أنظمة وبرامج أجهزة المراقبة الأمنية والتحكم. **Monitoring and control systems.**	النظم الخاصة **dedicated System**

ID Card Readers : are electronic devices that can read plastic cards embedded with either a barcode, magnetic strip, computer chip or another storage medium. (*) **Memory Card Reader** : is a device used for communication with a smart card or a memory card. (*) **Magnetic Card Reader** : is a device used to read magnetic stripe cards, such as credit cards.[1] A business card reader is a device used to scan and electronically save printed business cards. (*) **ID Card Printers** : are used worldwide to print secure identification cards, payment cards, authorization cards, and visitor badges for corporate, educational, and other uses. These electronic card printers come with a Card Feeder and Output card hopper to facilitate bulk printing, reduce resource utilization, and automate volume printing. The Card Feeder can fed cards into the Printer, one-by-one, while the output card hopper can hold printed cards. Different card printers can accept different card thickness and dimensions. The most common dimensions are 85.60 x 53.98 mm, where most of the printers can accept variable dimensions at the same time. (*) ID card Printers Types: - Single Sided ID Card Printer. - Double Sided ID card Printer. Different ID Card Printers use different encoding techniques to facilitate disparate business environments and to support security initiatives, like: - Contact Smart Card. - Contactless Smart Card. - ISO Magnetic Stripe. - HiD Proximity. **Smart products:** In general, physical worlds and digital representations become tightly interconnected, so that manipulations in either would have effect on the other. Integration of information and communication technologies into products anywhere and anytime enable new forms of mobile marketing in respect to situated marketing communication, dynamic pricing models and dynamic product differentiation models. Recent innovations in mobile and sensor technologies allow for creating a digital representation of almost any physical entity and its parameters over time at any place. RFID technologies, for instance, are used to ground digital representations, which are used to track and geo-reference physical entities.	● أنظمة وأجهزة قراءة وطباعة البطاقات الذكية. **Reading / printing devices and smart ID solutions.** النظم الخاصة **dedicated System**	

Smart products are specializations of hybrid products with physical realizations of product categories and digital product descriptions. (*)		
Electronic authentication (E-authentication): is the process of establishing confidence in user identities electronically presented to an information system. E-authentication presents a technical challenge when this process involves the remote authentication of individual people over a network, for the purpose of electronic government and commerce. (*) **Electronic Identity Card ("eID" or "EIC"):** is a government-issued identity card for online and offline identification. Apart from online authentication many EICs also give users the option to sign electronic documents with a digital signature. The EIC has the format of a regular bankcard, with printed identity information on the surface (such as personal details and a photograph) as well as an embedded microchip. (*) **QR code (Quick Response Code):** is a type of matrix barcode (or two-dimensional barcode). A barcode is a machine-readable optical label that can contain information about the item to which it is attached.	• نظم وحلول التصديق الالكتروني والهويات الالكترونية. **Electronic authentication and Electronic ID's.** **QR Code**	
Intrusion prevention systems (IPS), also known as **intrusion detection and prevention systems (IDPS)**, are network security appliances that monitor network and/or system activities for malicious activity. The main functions of intrusion prevention systems are to identify malicious activity, log information about said activity, attempt to block/stop activity, and report activity. Intrusion prevention systems are considered extensions of intrusion detection systems because they both monitor network traffic and/or system activities for malicious activity. The main differences are, unlike intrusion detection systems, intrusion prevention systems are placed in-line and can actively prevent/block intrusions that are detected. (*)	• نظم كشف الاختراقات. **Intrusion detection prevention system (IDPS).**	
Attendance systems	7. أنظمة الحضور والانصراف. البصمة. **Fingerprint system.**	
Interactive voice response (IVR) : is a technology that allows a computer to interact with humans through the use of voice and DTMF tones input via keypad. In telecommunications, IVR allows customers to interact with a company's host system via a telephone keypad or by speech recognition, after which they can service their own inquiries by following the IVR dialogue. (*) **IP telephony** : refers to all use of IP protocols for voice communication by digital telephony systems, while VoIP is one technology used by IP telephony to transport phone calls. (*)	8. أنظمة الاستعلام الصوتي. **IVR IP telephony.**	النظم الخاصة **dedicated System**

Note: The terms (IVR) are distinct and mean different things to traditional telecommunications professionals, whereas emerging telephony and VoIP professionals often use the term IVR as a catch-all to signify any kind of telephony menu, even a basic automated attendant. The term voice **response unit (VRU)** is sometimes used as well. (*)	
Payment System: is a system used for transferring money. What makes it a "system" is that it employs cash-substitutes; traditional payment systems are negotiable instruments such as drafts (e.g., checks) and documentary credits such as letter of credits. With the advent of computers and electronic communications a large number of alternative electronic payment systems have emerged. These include debit cards, credit cards, electronic funds transfers, direct credits, direct debits, internet banking and e-commerce payment systems. Some payment systems include credit mechanisms, but that is essentially a different aspect of payment. Payment systems are used in lieu of tendering cash in domestic and international transactions and consist of a major service provided by banks and other financial institutions. Payment systems may be physical or electronic and each has their own procedures and protocols. Standardization have allowed some of these systems and networks to grow to a global scale, but there are still many country and product specific systems. Examples of payment systems that have become globally available are credit card and automated teller machine networks. Specific forms of payment systems are also used to settle financial transactions for products in the equity markets, bond markets, currency markets, futures markets, derivatives markets, options markets and for transfer funds between financial institutions both domestically using clearing and Real Time Gross Settlement (RTGS) systems and internationally using the SWIFT network. The term **electronic payment** can refer narrowly to e-commerce - a payment for buying and selling goods or services offered through the Internet, or broadly to any type of electronic funds transfer**.**	**9. أنظمة دفع آلي (تسديد).** **E-Payment System.**
	10. أنظمة إصدار الجوازات. **E-Passport issuing system.**
Project management software has a capacity to help plan, organize, and manage resource pools and develop resource estimate. Depending on the sophistication of the software, resource including estimation and planning, scheduling, cost control and budget management, resource allocation, collaboration software, communication, decision-making, quality management and documentation or administration systems.	**11. نظم إدارة المشاريع.** **Project management system.**
VMware & Citrix **Technical support administration system & virtual infrastructure admin system.**	**12. أنظمة إدارة تقنية (نظم إدارة الدعم الفني، البيئات الافتراضية).**

	Technical support administration system	
	13. أنظمة طبية. **Medical Systems.**	
As it is considered one of the smart solutions to solve the problem of queues, as it helps employees to work and serve customers efficiently and regularly. As the system regulates the time, which leads to a reduction in waiting time and speed in performing the service.	**14. أنظمة تنظيم الدور.** **Role regulation systems.**	
What is placed on an electronic editor and takes the form of letters, numbers, symbols, signs, or others, and has a unique character that allows identifying the person of the signatory and distinguishes him from others.	**15. نظام التوقيع الإلكتروني.** **Electronic signature.**	
A smart meter: is an electronic device that records information such as consumption of electric energy, voltage levels, current, and power factor. Smart meters communicate the information to the consumer for greater clarity of consumption behavior, and electricity suppliers for system monitoring and customer billing.	**16. العدادات الذكية.** **Smart meter.**	
Asset Management, RFID: The best asset tracking software to reduce lost equipment, increase productivity, and eliminate unnecessary asset costs.	**17. نظام حصر الأصول الثابتة.** **Asset Management, RFID**	
Data bank: is a repository of information on one or more subjects that is organized in a way that facilitates local or remote information retrieval. A data bank may be either centralized or decentralized. In this sense, data bank is synonymous with database. (*)	**4. خدمات بنوك المعلومات والموسوعة المعلوماتية.** **18. Data banks services & Information encyclopedia.**	