



**Ibn Khaldoun University – Tiaret**  
**Faculty of Mathematics and Computer Science**  
**Department of Computer Science**



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**Module : English**

**Level : 2LMD**

**Semester : 1**

**Teacher : Mr. LAKMECHE**

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**UNIT TWO :**

**Communications : Video Conferencing**

**Learning Objectives :** Upon completion of this unit, students should :

**1- be better at :**

- reading for detailed information,
- explaining rules orally,

**2- be able to :**

- describe procedures using the present passive,

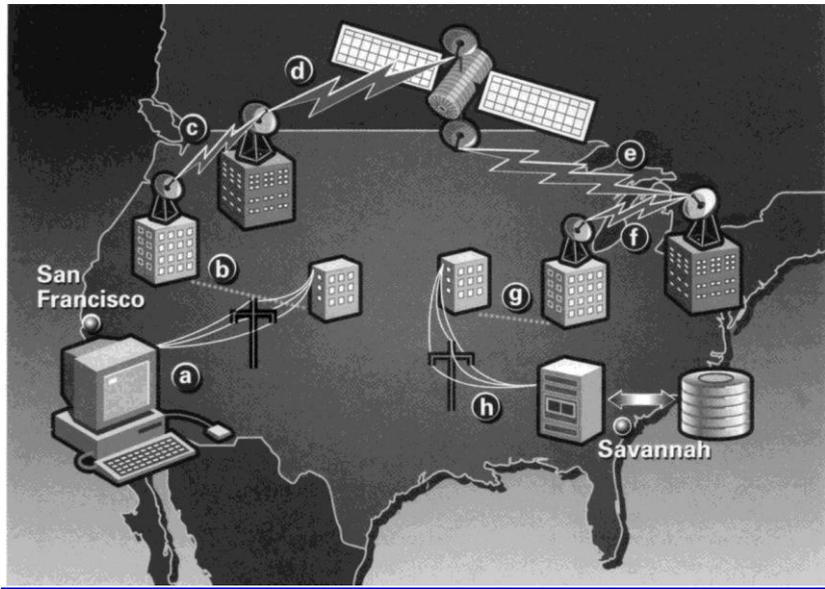
**3- know and be able to :**

- use these words : (*voicemail – video conferencing – telephone lines – fibre optic cable – microwave station – earth satellite – relay – send – transmit*).

**A- PREREADING**

**Task 1 (Warming up):** Identify the different communications links between the office desktop in a San Francisco police-station and the mainframe in Georgia State Police headquarters. Choose from this list

- 1- fibre-optic cable    2- earth-satellite transmission    3- telephone wire  
 4- microwave transmission    5- satellite-earth transmission



**Key:**

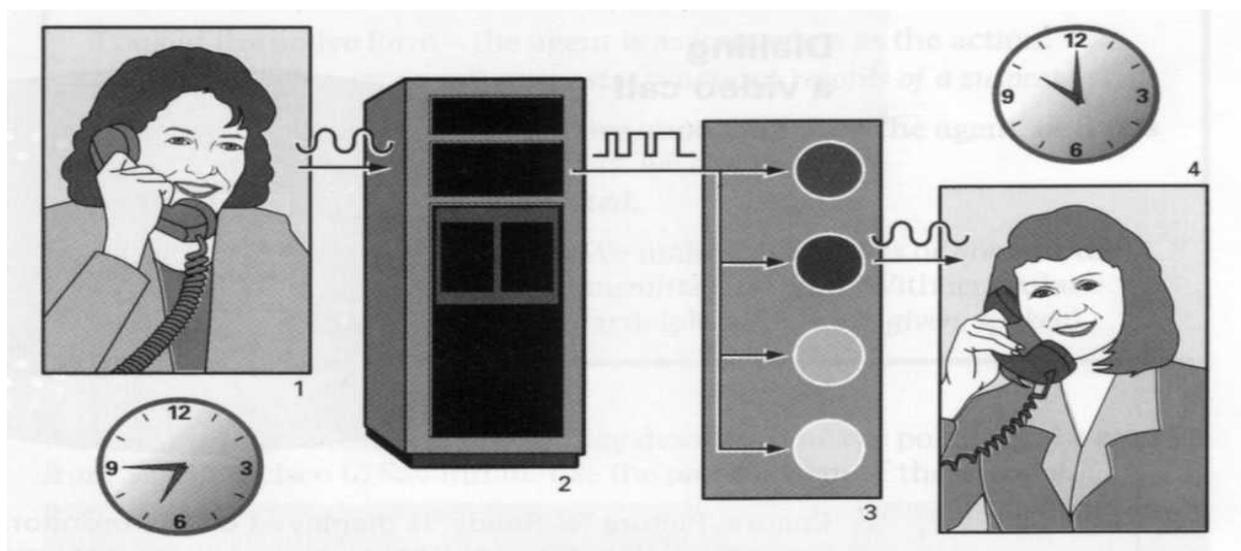
1	2	3	4	5
a, h	b,g	c,f	d	e

**Task 2 :** Try to think of other organizations which use long-distance computer communications to exchange information.

**Key:** (Examples) : airlines, news agencies, weather forecasting, shipping lines.

**Task 3 :** Study this diagram of a voicemail system. Match each picture to the correct caption.

- a- The digital message is stored in 'voice mailboxes' on disk.
- b- The caller dictates the message.
- c- When the recipient dials the mailbox, the message is converted back to analogue signals and delivered in audio form.
- d- The message is converted from analogue to digital signals.



**Key:**

<b>Picture</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Caption</b>	<b>b</b>	<b>d</b>	<b>a</b>	<b>c</b>

## A- READING 1

## Voicemail

**Task 4:** Read this voicemail message from John Bailes in Brussels for Lenny Yang, a Salesman with the Taytron company in London , then answer the questions below.

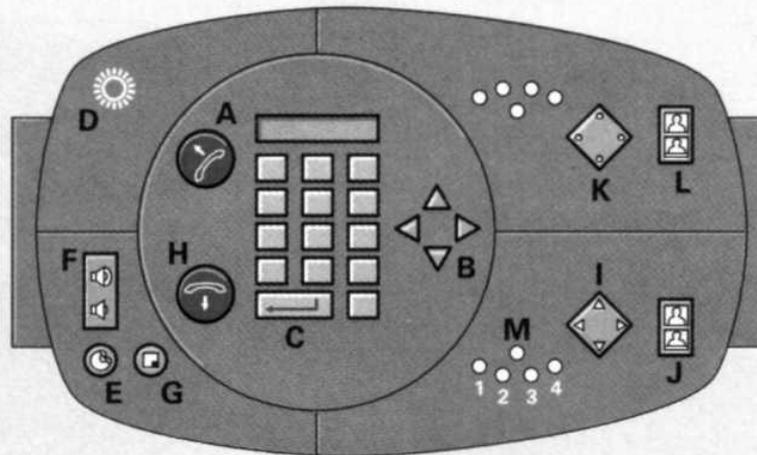
**Answerphone Message :** Thank you for calling Taytron. The office is now closed, but if you'd like to leave a message after the tone, dial one for sales, dial two for maintenance, and dial three for all other enquiries.

**John Bailes :** This is John Bailes with a message from Lenny Yang. I'm sorry to phone so late but I can't make our meeting at 10.15 tomorrow. There are no seats on the 8.30 flight. I've got a ticket for the 9.45 flight which lands at 10.30. If the traffic isn't too bad, I can be with you around 11.15, say 11.30 to be safe. So can we meet at half-past eleven tomorrow. If there's any problem, please email me tomorrow before 8.30. My address is « bailes@brandt.co.be ». See you tomorrow.

- 1- Which number does John Bailes dial to leave a message?
- 2- What time was John's meeting with Lenny Yang?
- 3- Why can't John meet at that time?
- 4- How is John travelling to London?
- 5- When does he leave Brussels?
- 6- When does he arrive in London?
- 7- Can he meet Lenny at 11.15?
- 8- Why does Lenny have to email before 8.30?



## Dialling a video call



Ensure 'PictureTel Ready' is displayed on the monitor. Press the Call button (A). The monitor will prompt you to:

1. Make a manual call
2. Re-dial the last video numbers
3. Place a call from the speed dial menu.

To select a number from the speed dial list, use the direction keys (B), then press Enter (C).

When the call has been successfully connected, you will see the Far End location on the monitor.

### Mute

On the left-hand side there is an audio mute key (E). When this is in operation, a banner will appear on your main monitor telling you that Near End, Far End, or both are on mute. Use the Mute button if you want to have a private conversation.

### Volume

To adjust the incoming volume, simply press the Volume key (F).

### Picture-in-Picture

If you prefer not to see your own image, you can switch the P-I-P off using button (G).

### Moving the camera

The right-hand side of the keypad houses the Near End (I and J) and Far End (K and L) camera controls. The diamond-shaped keys (I, K) control the direction of the camera and (J, L) the zoom in and out.

### Ending your video conference

When your meeting is finished, remember to end the call by pressing the Hang Up key (H). It is preferable for the call originator to hang up.

### Key:

1.
  - a) Key (E): puts Near End, Far End, or both on mute
  - b) Key (L): controls the zoom in and out of the Far End camera
  - c) Key (B): selects numbers from the speed dial list
  - d) Key (H): ends the call
2.
  - a) make a call → A
  - b) adjust the volume → F
  - c) switch off the picture-in-picture → G
  - d) zoom in and out the Near End camera → J



**Key:** (send, relay, and transmit are almost interchangeable in many contexts in this exercise)

- 1- Records of a suspect **are requested**.
- 2- The message **is sent** to a local microwave station.
- 3- The request **is relayed** to the nearest earth satellite station.
- 4- The message **is transmitted** to a satellite in space.
- 5- The message **is transmitted** back to an earth satellite station.
- 6- It **is relayed** to a microwave station.
- 7- It **is sent** via the telephone lines to the headquarters computer.

**Task 8:** *Now describe how the records are sent from Savannah to San Francisco.*

## E- Problem-solving

**Task 9:** *Work in pairs. Students in another country want to study the same computing course as yours without coming to your country. What communications links could your college or university use to make this possible?*

**Key:** (other answers are possible)

- **World Wide Web** ▶ to display texts, diagrams, and tasks
- **email** ▶ for student and teachers to communicate with each other
- **video conferencing** ▶ for live lectures, tutorials, and discussions
- **FTP (file transfer protocol)** ▶ for transferring or downloading files

## F- Speaking

**Task 10 :** *Work in pairs. With the help of the rules provided, explain to your partner why these samples of handwriting are not easy for computers to read.*

EWING 57320 Kent 5BE4 9068 LOOP

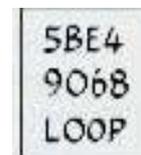
**Student A rules:**

- 1- Make your letters big
- 2- Use simple shapes
- 3- Use block printing



**Student B rules:**

- 1- Connect lines
- 2- Close loops
- 3- Do not link characters



**Key:**

- This task focuses on some of the problems of optical character recognition, for example when computers are used to process handwritten cheques.
- Use ways of giving advice. For example:
  - You should make the letters big. They're too small.
  - You should use simple shapes.
  - You shouldn't link characters.

## G- Further reading

Users often want to send messages from one network to another or to computers on the other side of the world. This can be done using a variety of communication links. Normal copper telephone wires can be used over short distances but shielded cable called *coaxial cable* or *coax* can be used for longer distances. However, coax has largely been replaced by even faster cable known as *fibre optics* or *fibre optic* cable. (Note that the American spelling of fibre is *fiber*.) Fibre optic cable uses glass fibres to conduct a beam of laser light. To transmit signals long distances around the world satellites are often used. The signal is transmitted and received by *earth-satellite stations* positioned at suitable locations over the earth's surface. *Microwave transmissions* are another means of transmitting signals from one *microwave station* to another.

An increasingly popular way of communicating using computers is *voicemail*. In this system, spoken messages are sent to a server computer where they are stored in areas called *voice mailboxes*. When the user connects to their mailbox they can listen to the stored messages.

*Video conferencing* is a more advanced form of communication by computer, which enables meetings to take place over long distances. Video cameras are used at each end of the communications link so that the participants can see and hear each other. The end of the link nearest a user is called *Near End* and the end of the link furthest from the user is called *Far End*. Each user has a keypad that enables them to control features of the system, for example to make or end a call, adjust the sound volume, and zoom the camera in to get close-up views, or zoom it back for a broader perspective. An additional display feature, called *picture-in-picture*, allows one image to be displayed inside another image.

When a piece of text is scanned using a scanner input device, an image of the text is input to the computer and displayed on the screen. It is not possible to change or edit the displayed text using a word processor, however, because the image is graphical, not digital. An optical character recognition (OCR) program must be used to convert the text image into digital text characters that can be edited. To identify a scanned text character, the software compares the character image to stored data about the shape of standard characters. It is easier for the OCR software to recognize the scanned characters if they are printed using block capitals and are not too small. If a text is written in 'joined-up' writing, it is more difficult for the OCR to identify because there are extra lines and loops between the letters.

### 1- Read the text then answer the following questions:

- a- In what way can users send messages from one network to another or to computers on the other side of the world?
- b- What means are usually used to send messages over short and long distances?
- c- What has coax largely been replaced by?
- d- What are the world satellites used for?
- e- In what way does the voice system operate?
- f- What is the most advanced form of communication?

### 2- Match each word from column A (1-20) with its partner from column B (a-u) to make a computing term definition.

<b>A</b>	<b>B</b>
1) voicemail	a) a storage area for spoken messages
2) video conference	b) a form of communication over a network that uses video cameras so that the people taking part can see and hear each other
3) fibre-optic cable	c) an installation for receiving and transmitting microwave signals
4) send	d) an object which has been sent into space in order to collect information or to be part of a communications system. It moves continually round the earth or around another planet
5) transmit	e) a switching device, that being under voltage loops and disconnects one or more electric circuits. It was widely used in early electromechanical computers.
6) coax(ial) cable	f) the process of sending a high frequency signal known as microwave
7) communications link	g) a signal that can only have one of two values representing on or off
8) earth satellite station	h) the process of sending a signal to, or receiving a signal from, a satellite orbiting the Earth
9) Far End	i) a type of signal that can take any value between a maximum and minimum
10) microwave station	j) a display screen feature that has a video picture displayed inside another video picture
11) microwave transmission	k) the equipment at the closest end of a video conferencing system
12) P-I-P (picture-in-picture)	l) the equipment at the remote end of a video conferencing system
13) Near End	m) an installation on Earth used for sending and receiving signals to or from a satellite
14) earth-satellite transmission	n) a connection between two points for transmitting and receiving signals
15) digital signal	o) a type of shielded cable for carrying signals. It is often used with radio frequency and video signals.
16) analogue signal	p) cause something to pass on from one person or place to another by means of communication
17) relay	q) take something to a particular destination or arrange something for the delivery, especially by post
18) earth satellite	r) a cable made from strands of glass that is used for carrying information signals on a beam of light
19) video conferencing	s) a meeting between people that are a long distance apart using cameras and display screens connected to a network to allow the people to see and hear each other
20) voice mailbox	t) a system of communication that uses computers to store spoken messages

## H- Words to retain

<p>1. voicemail, n  2. voice mailbox, n  3. video-conference, n  4. video conferencing, n  5. telephone line, n  6. fibre optic(s) cable, n  7. coax(ial) cable, n  8. earth satellite, n  9. earth satellite station, n</p>	<p>10. earth satellite transmission, n  11. communications link, n  12. microwave transmission, n  13. microwave station, n  14. digital signal, n  15. analogue signal, n  16. transmit, v  17. send, v</p>	<p>18. relay, n  19. P-I-P (picture-in-picture)  20. Near End  21. Far End  22. the caller  23. the recipient  24. speed dial list  25. zoom in</p>	<p>26. zoom out  27. mute key  28. diamond- shaped key  29. FTP (file transfer protocol)  30. copper telephone wire  31. shielded cable  32. fibre optics  33. glass fibre  34. joined-up writing</p>
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