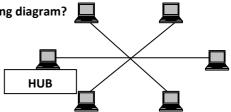
# General Certificate of Education (Ord.Level) Examination 2007 Information & Communication Technology I

One	hour						
Not	e: (i)	Answer all que					
	(ii)	•	questions 1 to 4			1), (2), (3), (4)	
	,	Which you consider as correct or most appropriate  Mark a cross ( X ) on the number corresponding to your choice in the answer sheet provided.					
	(iii) Mark a cross ( X ) on the number (iv) Future instructions are given on						
	(v)		_	=		er scripts together and hand over.	
	( )	After answern	ig i apei i ana i	uper in the time to	vo sets of answ	rer seripts together and nana over.	
1.	Which	of the following is c	onsidered as rov	v data?			
		(1) Marks obtaine					
		(2) Sorted list of r		•			
		(3) Maximum ma			ISS		
		(4) Average mark	s obtained by sti	ident in a class			
2.	First ge	neration (IG/I Gen)	computers were	e based on			
		(1) Vacuum tubes		(2) Transi	stor		
		(3) Integrated circu		• •	orocessors.		
3.	The mo	ost general term use				omputer is	
		(1) Software (2) Ha	ardware	(3) Firmwa	are	(4) Live ware	
4.	The na	rt of a computer tha	t processes inst	ructions norfo	ms calculation	s, makes logical decisions and manages	
4.	_	w of data through th	-	-	ilis calculation	s, makes logical decisions and manages	
	the no	(1) Hard Disk	(2) RAM	(3) Data B	us	(4) CPU	
		(=,	(=,	(5) = 5.55 =		(1)	
5.	Consid	er the following stat	ements.				
		A - Keyboard is an	•				
		B - Monitor is an o	-				
		C - Compact disk is		9			
	Which	of the above is/are t		(0) 4		(4) 411 4 5 1 6	
		(1) A only	(2) B only	(3) A and (	_ only	(4) All A, B and C	
6.	Under	which of the followi	ng categories is	a laptop compi	uter classified?		
•		(1) Microcompute	-		B) Mainframe	(4) Supercomputer	
			. ,	•	•		
7.						omputer system is to	
		(1) Provide backup	•	•	ower failure		
		(2) Provide the cor	•				
		(3) Provide (Direct			uter circuitry.		
		(4) Change the inte	ernai battery or t	ne computer.			
8. T	he clock	rate of a CPU of a r	nodern Persona	l Computer (PC	) is usually exp	ressed in	
		(1) GHz (gigahertz)		Mbps (megabits			
		(3) GB (gigabytes).		PS (Instruction			
9. V	Vhich of	the following state			-		
		(1) Memory refers		•	•	the computer	
		(2) It holds data &		-	_	stice will be look	
		(3) If the electrical (4) It is the place w	•				
		(4) it is the place w	mere ariumneuc	and logic opera	icions are done	•	
10.	A comp	uter network which	is limited to a si	mall area is kno	wn as a		
		(1) LAN	(2) WAN	(3) VAN	(4) MA	N.	

# 11. What is the topology of the computer network shown in the following diagram?

- (1) Bus
- (2) Star
- (3) Ring
- (4) Tree



#### 12. Microsoft Windows XP is an example of a/an

(1) Application software

(2) System Software

(3) System utility.

(4) Graphical User Interface (GUI)

#### 13. How many bytes are there in a kilobyte?

- (1)8
- (2) 1000
- (3) 1024
- (4) 1048

#### 14. Which of the following statements are true?

- A A bit is the smallest unit of information that a computer can process.
- B A bytes is the smallest unit of information that a computer can process.
- C A bit contains 8 bytes.
- D A bytes contains 8 bit
- (1) A and C
- (2) A and D
- (3) B and C
- (4) B and D

# 15. The decimal equivalent of 10102 is

- (1)5
- (3) 10
- (4) 12

### 16. The binary equivalent of decimal 15 is

- $(1)\ 1001$
- (3) 1111
- (4) 10101

# 17. Which of the following has least value?

- $(1) 45_{10}$
- (2) 11000<sub>2</sub>

(2) 1100

- $(3)37_8$
- $(4) 1A_{16}$

18.



In digital logic the above symbols A and B respectively represent the gates

- (1) NOR and AND.
- (2) NOR and OR.
- (3) OR and NOR.
- (4) NOT and OR.

#### 19. The following is a truth table of a certain logic gate that has two inputs A, B and an output F. The

logic gate is

- (1) OR
- (2) AND
- (3) NOR
- (4) NAND

В	F
0	0
1	0
0	0
1	1
	B 0 1 0 1 1

#### 20. Which of the following statements is/are true regarding an Information System?

- A Applications software converts data into information.
- B Systems software controls hardware.
- (1) A only
- (2) B only
- (3) A and B
- (4) None of the above

# 21. Which one of the following operations can be used to move Text and Graphics in application programs working under the Windows operating System?

- (1) Cut and Paste
- (2) Cut and Copy
- (3) Delete and Move
- (4) Erase and insert

#### 22. What is true regarding the preparation of a document using the Microsoft Word package?

- (1) When typing a document it is necessary to press Enter Key at the end of each line.
- (2) Text can be inserted only by creating a text box.
- (3) Different pages of a document can be set to different paper sizes.
- (4) Different types of text formatting operations such as changing colour can be used.

23 In Microsoft Word	which of the following k	evhoard shortcuts are used	I to cut and Paste respectively
23. III IVIICIOSOIL VVOI U	, william of the following r	cyboard shortcats are asea	to cut and i aste respectively

- (1) ctrl + X and ctrl + V
- (2) ctrl + A and ctrl + P
- (3) ctrl + S and ctrl + V
- (4) ctrl + C and ctrl + P

### 24. Which of the following software facilitates both sorting and analyzing of data?

- (1) Word processing
- (2) Internet browser
- (3) Spreadsheet Processing
- (4) Presentation graphics

1

2

3

4

5

## 25. What function in Microsoft Excel is used to find the lowest value in a range of cells?

- (1) = max()
- (2) = min()
- (3) = lower()

В

(4) =floor()

# 26. The following figure shows a part of a Microsoft Excel Spreadsheet. Which of the following can be used to add the

given values 10, 20 and 30?

A = SUM(A1:A3)

B = A1 SUM A2 SUM A3

C = A1 + A2 + A3

D = SUM(A1,A2,A3)

(1) A only	(1)	Α	only	
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- (2) A and B only
- (3) A and C only

A

10

20

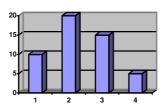
30

(4) C and D only

C

# 27. What is the type of Microsoft Excel chart represented by the given diagram?

- (1) Column chart
- (2) Bar chart
- (3) Pie chart
- (4) Line chart



#### 28. An example of a key field in a Table which contains data of patients in a hospital be

- (1) Date of admission
- (2) Admission number

(3) Name

(4) Address

# 29. Which data type is appropriate to represent a telephone umber (e.g. 012 3456789) in Microsoft Access

- (1) Text
- (2) Byte
- (3) Memo
- (4) Integer

# 30. Which of the following problems have been solved by Computer Networks in an office environment?

- A Difficulty in sharing of resources.
- B Data redundancy
- C Cost of communication
- (1) A and C only
- (2) A and B only
- (3) B and C only
- (4) All A, B, and C

#### 31. An error in a computer program is referred to as a

- (1) Syntax.
- (2) Bug
- (3) debug
- (4) virus.

# 32. What one of the following is false about Visual Basic (VB)?

- (1) There is no significant difference between early versions of the BASIC Programming language and Visual Basic.
- (2) It enables you to create Graphical User Interfaces (GUI) to Windows applications.
- (3) It is event driven.
- (4) It provides facilities to handle databases.

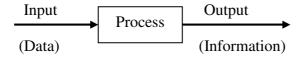
33.	Private Sub Form_Load() Show			
	For i = 1 to step 2	2		
	Print i;			
	Next i			
	End Sub			
	The output of the above	Visual Basic code is		
	(1) 0 0 0 0 0	(2) 1 3 5 7 9	(3) 3 5 7 9	(4) 2 4 6 8 10
34.	Which of the following is		rnet?	
	(1) Nobody owns			
	• •	entralized control.		
	• •	of computer netwo		
	(4) All the inform	ation available is ext	remely accurate and high	ly reliable.
35.	Which of the following is	_		
	(1) Outlook Expr	ess	(2) Internet Explorer	
	(3) Google		(4) Macromedia Flash	
36.	A Company that provides	access service to the	e Internet is called a/an	
	(1) Server	(2) Client	(3) ISP	(4) Teleshop
37.	http://www.doenets.lk is	an example of	(2)	
	(1) a Server		(2) a URL (Uniform Res	· · · · · · · · · · · · · · · · · · ·
	(3) an access cor	d of a network	(4) an e-mail address of	f an organization
38.	The purpose of a passwor	d in a computer nety	vork is to	
		o the public to enter		
	(2) provide secur	ity and control acces	S.	
	(3) speed up the	operations of the cor	mputer	
	(4) provide equa	privileges to all user	S.	
39.	A poor or awkward postu	re at the computer f	or a short duration can c	ause
	(1) nausea.	(2) mental stres		(4) eye problems.
40.	Which of the following is	not recommended r	egarding health and safe	ty of using a computer?
	_	uter during lightning		o, or dome a compared.
			way from the computer s	screen.
				need to have regular breaks
			onnections in the comput	
	, , p	<u> </u>	· · <b>P</b> • ·	

# General Certificate of Education (Ord.Level) Examination 2007 Information & Communication Technology II

#### Two hours

Answer five questions only as instructed. Any extra questions answered, if not struck off by the candidate himself, will be crossed out by the examiner, without being marked.

**01.** The following figure shows the basic Input-Process-Output model used in Information Technology. Accordingly a system receives data its input and performs a meaningful process to deliver Information as the output.



An information system has been developed to input income and expenses of a person under different categories of needs such as food, house rent, health etc. of a person. The system is to provide information on monthly total for each category of his expenses, the total expenditure of the month and saving of the month.

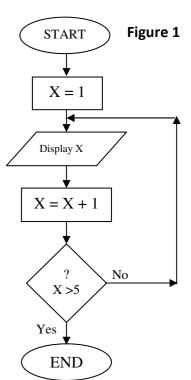
- (i) In addition to inputs given above, suggest another five inputs that can be entered into the system?
- (ii) What calculations should be performed by the system in order to produce the above information?
- (iii) Briefly explain, why the above system can be considered as an example of a batch processing system.
- **02.** Suppose you are the chief organizer of the annual Educational Trip of the school. If you have the freedom to use the computer available in the computer room, suggest what software package you would use to perform each of the tasks listed below. Give reasons for your selection.
  - (i) Prepare letters for the parents of the students to inform about the event.
  - (ii) Prepare the budget of the trip.
  - (iii) Prepare a presentation on the places to be visited.
  - (iv) Keep records of each student in a database who are going on the trip, along with their parents details.
  - (v) Find out more information from the Internet about the places to be visited.
- **03.** (i) Write down the output generated by the following flowchart. (Figure 1)
  - (ii) The following is a part of a pseudocode which is used to evaluate the final grade achieved by a student in an examination, based on the average marks obtained for two subjects.

Set Average to 0 Get Name Get marks for Subject1 Get marks for Subject2

The name and the marks for the subject are as follows.

Name	Subject1	Subject2		
Arthur	40	80		
Berty	60	70		
Charlie	40	60		
David	30	50		

Write the output of the above pseudocode for each of the student.



**04.** Following is a part of a Microsoft Excel spreadsheet that a school teacher used to work out the cost for expanding the school's Computer Laboratory to facilitate more students.

	Α	В	С	D	E	F
1	Item Description	Unit Cost	Quantity	Total Cost	Discount	Final Cost
2	Computer	Rs. 55,000.00	5	Rs. 275,000.00	10%	Rs. 247,500.00
3	Laser Printer	Rs. 35,000.00	2	Rs. 70,000.00	5%	Rs. 66,500.00
4	External MODEM	Rs. 3,500.00	4	Rs. 14,000.00	2%	Rs. 13,720.00
5	Scanner	Rs. 7,600.00	3	Rs. 228,00.00	4%	Rs. 21,888.00
6	Flat bed Plotter	Rs. 9,000.00	2	Rs. 18,000.00	5%	Rs. 17,100.00
7					<b>Grand Total</b>	Rs. 366,708.00

- (i) State the formulae which would be contained in the following cells.
  - (a) D2
  - (b) F2
  - (c) F7
- (ii) List three advantages of using a spreadsheet package for such a calculation rather than using a calculator and a paper.

05.

- (i) What is data?
- (ii) List three difficulties of handling large volumes of data.
- (iii) What is a database? Briefly explain how you would overcome the difficulties mentioned in (ii) above by using a database.
- (iv) What is the general name used to describe a set of software which creates, maintains and utilizes database? List two popular examples of such software packages.
- (v) Assume that you are asked to create a simple database containing the data of teachers of your school. List five fields that can be used to construct a table in the database. Give two sample records that you would enter in the table.
- **06.** The librarian of a certain school has decided to create a Web site for its library.
  - (i) Assume that you have been appointed to develop the Web site. List three methods you will use to gather the required information.
  - (ii) List five items of information that should be included in the Web site.
  - (iii) List three advantages gained by students from such a Web site.
  - (iv) Give three ways in which the Web site makes the librarian's tasks easy.
- **07.** Write short notes on three of the following.
  - (v) Advantages of using a personal Computer for studies.
  - (vi) Advantages of e-mail over the traditional mail.
  - (vii) Disadvantages of the Internet.
  - (viii) Improving the efficiency of Sri Lankan workforce using ICT.

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