



PEPERIKSAAN PERCUBAAN SPM 2009

3765/1

INFORMATION AND COMMUNICATION TECHNOLOGY

Kertas 1

September

2½ jam

Marking Scheme

Question No.		Candidate's Answer	Marks
1		paperless	1
2		B	2
3	i.	A	3
	ii.	C	4
4		False	5
5		C	6
6		X	7
7	i.	A : Presentation/Presentation Software	8
	ii.	B : Word Processing Software/Word Processor	9
8	i.	WAN/Wide Area Network	10
	ii.	LAN/Local Area Network	11
9		Networks/Networking	12
10	i.	Infrared	13
	ii.	Radio Waves	14
11		C	15
12		False	16
13		D	17
14		Consistency	18
15		True	19
16	i.	Fifth Generation/5th Generation	20
	ii.	High Level	21
17		True	22
18	i.	Assembler	23
	ii.	Interpreter	24
19		B	25
20	i.	Graphic Artist	26
	ii.	Subject Matter Expert	27
21	i.	Notepad	28
	ii.	Macromedia Dreamweaver	29
22	i.	P	30
	ii.	Q	31
23	i.	C	32
	ii.	B	33
24	i.	Byte	34
	ii.	Record	35
25		Primary key	36

26.

- (a) The two threats are
- virus / malicious code [1 mark]
 - hacking. [1 mark]

Note:

Trojan horse, Logic bomb, Trapdoor and Backdoor and Worm are not accepted.

- (b) The two measures that can be taken are
- installing an antivirus to detect and remove the viruses [1 mark]
 - installing a firewall to avoid unauthorized access or intruders into the school server. [1 mark]

27.

- (a) X – Arithmetic Logic Unit (ALU) [1 mark]
Y – Control Unit [1 mark]
- (b) R – Storing [1 mark]
Function- Return/Write the result of instructions to the memory. [1 mark]

Note:

Any relevant answers for the function of R are accepted

28.

- (a) On a client/server architecture, **one or more computer act as a server that provides services** and the other **computers act as client** on the network **request services** from the server.

[2 marks]

Note:

No mark will be awarded if only the type of network architecture stated.

- (b) X is a modem. It is used to **convert digital signal from computer to analogue**, and **vice versa**. [2 marks]

Note:

- convert digital signal from computer to analogue [1 mark]
- convert analogue signal to digital signal / vice versa. [1 mark]
- No mark will be awarded if only modem is stated.

29.

(a) i. Non-linear [1 mark]

ii. Linear [1 mark]

(b)

Non-linear interactivity allows a user to interact with the content according to what the user wants from the content.	Linear interactivity allows a user to use the multimedia application without controlling the progress of the content
The user can control the progress and sequence of the multimedia content by using buttons or links.	The user is passive receiver of the multimedia content most of the time.
Two ways communication between the user and the multimedia program.	One way communication where the user cannot interact with the multimedia program.

Note: [2 marks]

If only the highlighted texts given, no mark will be awarded.
 The answers must come in complete relevant sentences.
 The comparison items must be the same.

30.

a) - **Lim** used **object-oriented** programming approach [1 mark]

- **Harun** used **structured** programming approach. [1 mark]

Note:

- If only the name of programmer or approach is stated, no mark will be awarded.

(b) One difference between object-oriented programming approach and structured programming approach: [2 marks]

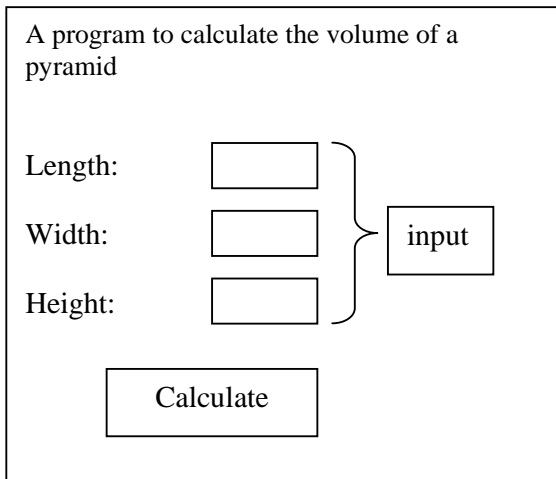
Object-Oriented Programming	Structured Programming
Object oriented approach uses objects	Structured programming approach uses a top down design model
The programmer packages the data and the function into a single unit, an object.	The programmer divides programming problem into module like function.
Large programming project	Medium programming project

Note: Any relevant answer is accepted

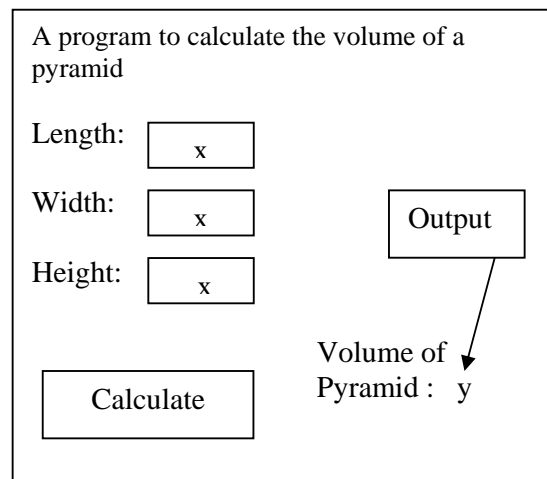
SECTION C

31.

(a) User Interface design for Input



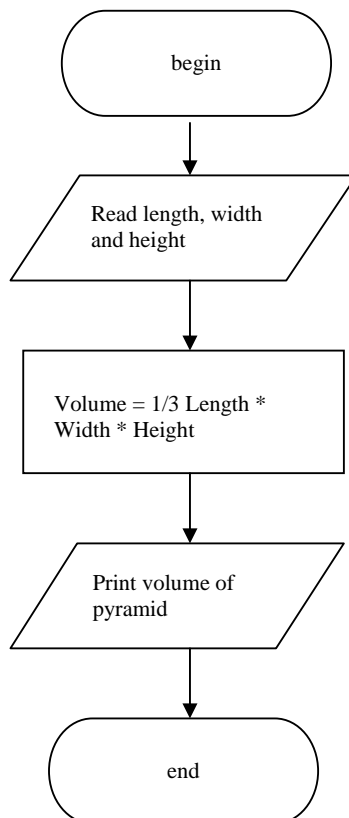
(b) User Interface design for Output



Note:

- three input items (**Length, Width and Height**) - 1 mark
- **input label** - 1 mark
- **sample value for 3 input and volume** - 1 mark
- **output label.** - 1 mark
- **It is accepted if the candidate draw and label correctly the input and output in one interface.**

b.



Note:

- Draw the element of the flow chart correctly - 1 mark.
- Draw the arrow correctly - 1 mark.
- Give the correct answer in each element of flow chart - 1 mark.

Marking Scheme

32. a) Phase Y = Evaluation phase (optional, ⁶ no mark will be awarded)

The evaluation phase begin after the testing phase – 1 mark

Selected users are involved in this phase – 1 mark

It focuses on **overall presentation and effectiveness** of the multimedia – 1 mark

or

Evaluation of the product needs to be evaluated in 2 aspects : **content and user interface**

*** Any relevant answers to the description of evaluation phase is acceptable.**

b) Phase X = Testing phase (optional, no mark will be awarded)

- **Testing the newly developed product – 1 mark**

on content, navigation and interface. – 1 mark

- Ensure that the program runs correctly – 1 mark without errors – 1 mark.

*** Any relevant answers to the description of testing phase is acceptable.**

33.

(a) P / **Analysis.** (optional, no mark will be awarded)

Explain briefly Phase P (Analysis) [3 marks]

- Recognizing the need for the system,
- Defining the problem,
- Examining alternative solutions
- Developing a plan
- Determining feasibility
- Preparing the proposal

Note:

1. Any 3 points given above will be awarded 1 mark respectively.
2. Any name of phases stated will not be awarded any mark.
3. Incorrectly naming the phase, but correct explanation, no mark will be awarded.
4. The answer must be in sentence form.

(b) Any two activities [4 marks]

Q/Development (optional, no mark will be awarded)

- **Developing new system (Student Information System)** by
 - o creating database, creating table, assigning table relationship, creating query, creating forms and report.
- **Train User**
 - o Give training to school's staffs on how to conduct the Student Information System.
- **Install the system.**
 - o to ensure that the system is fully operational, install the system in a production environment.
- **Perform data entry or conversion**
 - o Include old data into the new system, such as student personal data taken from SMM system.