

Penang Chinese Girls' High School (Trial Examination 2011) Form 5

SAMPLE ANSWERS AND MARKING SCHEME

Section A

Information and Communication Technology

1	a	Vacuum tube	12	a	Star topology
	b	Microprocessor		b	Server
2		C	13		WYSIWYG
3		- enforcement of privacy law	14	B	
		- install firewall to protect personal data against unauthorized access, modification	15	a	allows computers and devices to transmit data wirelessly among themselves
		- install anti-spyware, disable cookies on web browser		b	Radio wave
		- encrypt personal confidential data into an unreadable form	16		Q
4	a	R	17	a	Simplicity
	b	Copyright infringement		b	Repetition / Consistency/ Harmony and unity
5		Firewall	18		Non-linear
6	a	False	19		Structured approach
	b	True	20		Testing and Debugging
7		S	21		B
8		RAM	22	a	Selection control structure
9		Computer network		b	The answer given by student
		Intranet	23	a	False
11		Monitor		b	True
	a	USB port	24	a	Database
	b			b	Database management system
			25	a	Record
			b	Foreign key	

Section B

26. - Spreadsheet containing formulas which can perform calculation on the data in the worksheet. (1m) this cannot be done using word processor. (1m - comparison)
- Paula can easily change the cost of one item and the number needed, the spreadsheet can automatically recalculate the total cost of item and total cost of holiday based on the changes Paula made. (1m) This what-if analysis feature can not be done in word. (1m - comparison)
- 27a. - The new attendance system will ease the job of form teacher as they do not need to mark the student's attendance manually every day.
- The school's administrator will know the attendance of the students instantly without having to wait for the form teacher to mark the attendance.
 - By using the new system there will be paperless environment as all the attendance is kept in the computer.
 - By using the new system, the attendance will be more accurate as marking the attendance manually will prone to error. (1m for each - total 2m)
- b. - By using the new attendance system, the school need to spend a lot of money to prepare the badge, install the badge readers, computer, network devices and maintain them.
- Some of the students will help their friends to 'clock' in or out. This will let the school administrator hard to detect if a student is late to school.
 - If the system is down, all the students cannot mark their attendance. (1m for each - total 2m)

- 32a. - Encik Faizal will convert a design plan such as storyboard into a multimedia program.
- Encik Faizal will prepare the graphics, audio, video and animation using application software.
 - Encik faizal will use an authoring tool to integrate all the multimedia elements and produce the courseware.
 - Encik Faizal will create the links to the navigation buttons so that user can control the sequence of the courseware. (1m for each, total - 3m)
- b. Web-based
- The courseware contains course chat. This feature can only be done online.
 - The courseware contain course announcement. By using web-based multimedia, Encik Faizal can make the announcement easily by posting it online and his students will view the announcement immediately.
 - The courseware contains learner's progress reports. Encik Faizal can easily obtain his students progress reports as the answer the assessment exercise anytime, anywhere. (1m for each, total - 3m)

- 33a. total sales = number of brand name cartridge x 125.50 + number of generic cartridge x 58 (1m)
- If total sales > 500 then (1m)
- Discount = total sales x 0.20
- Else
- Discount = 0
- End if
- Amount to be paid = total sales - discount (1m)
- OR
- If total sales > 500 then
- Amount to be paid = total sales x 0.80 (1m)
- Else
- Amount to be paid = total sales (1m)
- End if
- b. A : read number of brand name cartridge, number of generic cartridge (2m)
- B : total sales > 500? (1m)
- C : print total amount to be paid (1m)

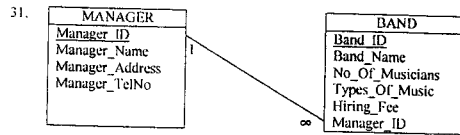
- 28a. - The data transmitted in both directions in topology A.
- In topology B, data transmitted in one direction. The data packets circulate along the ring in either clockwise or anti-clockwise direction. (1m for either one point, 1m - comparison)
- b. i) In topology A, a break in the backbone will cause the whole network fails to function. (1m)
- ii) In topology B, a break in the ring (any computer spoilt) will cause the whole network fails to function. (1m)
- 29a. - logical operators (1m)
- The operator "AND" is used because he/she must fulfill both criteria obtained a minimum of 8A+ in SPM trial exam and GPA at least "B" in co-curricular activities. (1m)
 - relational operators (1m)
 - The relational operators (>=) tells the computer to check whether the number of A+ obtained is greater or equal to (>=) 8
 - The relational operators (<=) tells the computer to check whether GPA is less than or equal to (<=) "B"
- (Justification - either one - 1m)
- b. number of A+ >= 8 and GPA <= "B" OR number of A+ >= 8 and (GPA = "B" or GPA = "A") (either one - 1m)

30a.

PatientID	Name	Time	Date	ContactNo
0003	Fauzi bin Mohd Imran	9.00 am	25/01/2011	0144327327
0003	Fauzi bin Mohd Imran	8.00 am	23/04/2011	0144327327

- (1m for two records, 1m for ascending order in date)
- b i) Guidelines (procedure) are given to assist the nurse (people) on how to enter the data into the Clinic Management Program. (1m)
- ii) Patient's personal data such as name, IC number, address, contact number, appointment date and time (data) are entered into the clinic management program (software).
- The clinic management program provides interfaces which enable the nurse and doctor entering the patient's personal data such as name, IC number, address, contact number, appointment date and time (data) into the program. (either one - 1m)

Section C



MANAGER Table - 1m . BAND table - 1m.
 both primary key - 1m, foreign key - 1m, relationship - 1m
 All fields are correctly stated in Manager table - 1m
 All fields are correctly stated in BAND table - 1m