

SEKOLAH-SEKOLAH MENENGAH NEGERI SEMBILAN DARUL KHUSUS
PEPERIKSAAN PERCUBAAN SPM 2008
INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

SECTION A
ANSWER SHEET

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8		TRUE	8
9		FALSE	9
10		FALSE	10
11		C	11
12		B	12
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15		D	15
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SCHEME FOR SECTION B

26	<p>(a) Give TWO examples of Copyright Infringement. <i>Berikan DUA contoh pelanggaran hakcipta</i></p> <p>(i) Pirated copy CD</p> <p>(ii) Illegal downloading (any material)</p> <p>(iii) Sale a pirated item</p> <p>(iv) Any relevant answers</p>	<p>2 marks</p> <p><i>(1mark for each correct answer)</i></p>
	<p>(b) Security measures are the precautionary measures taken towards possible dangers or damages. State the appropriate security measures to overcome the identified computer threats:</p> <p><i>Langkah - langkah keselamatan bermaksud tindakan awal yang diambil terhadap kerosakan atau bahaya yang mungkin berlaku. Nyatakan langkah- langkah keselamatan yang sepatutnya diambil untuk mengatasi ancaman- ancaman komputer yang mungkin berlaku.</i></p> <p>(i) Data Lost / Kehilangan Data</p> <p style="padding-left: 40px;"><i>Data backup/ using antivirus</i></p> <p>(ii) Hiding information / Menyembunyikan maklumat</p> <p style="padding-left: 40px;"><i>Cryptography / using password /set as hidden file</i></p>	<p>2 marks</p> <p><i>(1mark for each correct answer)</i></p>

27	<p>(a) State two differences between primary storage and secondary storage. <i>Nyatakan dua perbezaan antara storan primer dan storan sekunder.</i></p> <p>i) Holding data/information <i>Primary storage holding data / information permanently (non – volatile) compare to secondary storage holding data/ information temporarily (volatile) .</i></p> <p>ii) Storage Capacity <i>Primary storage has limited storage capacity compare to secondary storage, it has unlimited storage capacity.</i></p> <p>iii) Access Time <i>Primary storage can access data faster than secondary storage (slower).</i></p> <p>iv) Cost/ Price <i>Primary storage cost more expensive compare to secondary storage (cheaper)</i></p>	<p>2 marks <i>(1mark for each correct answer)</i></p>
	<p>(b) Give one example of : <i>Berikan satu contoh bagi :</i></p> <p>(i) Primary storage/ Storan primer <i>RAM/ ROM</i></p> <p>(ii) Secondary storage /Storan sekunder <i>Diskette/Hard Disc/CDRom/Pendrive/ any relevant answers</i></p>	<p>2 marks <i>(1mark for each correct answer)</i></p>

28

(a) Figure 1, shows two types of computer networks.
State **two** differences between network A and network B.

*Rajah 1, menunjukkan dua jenis rangkaian komputer.
Nyatakan **dua** perbezaan antara rangkaian A dan rangkaian B.*

LAN	WAN
<p>1. Local Area Network (LAN) is the smallest network compared to the other two networks. The simplest form of LAN is to connect two computers together.</p> <p>2. LAN is operated within a limited physical area, such as at home, school, a single building or several buildings. A network which consists of less than 500 interconnected devices across several buildings, is still recognized as a LAN.</p> <p>3. Inexpensive hardware used in LAN previously include twisted pair, coaxial cables and the higher end is fiber optic or wireless. However, coaxial cables are now being replaced by a higher speed cabling system such as CAT5 using RJ45 connectors.</p> <p>4. LAN is a very high speed network (from previously 10Mbps) to 100Mbps, which is faster than MAN and WAN.</p>	<p>1. MANs or the mix of two with a very large geographical area, for instance a country or even beyond the border.</p> <p>2. Wide Area Network (WAN) is the largest network of all network types. The Internet is the largest WAN in the world. WAN generally covers large distances such as states, countries or continents. Actually, WAN is a group of MANs or LANs or the mixture of both networks.</p> <p>3. A device called a router is needed to connect the MANs and LANs all over a large physical area. A router is a special networking device that connects two or more different networks and keeps data flowing between them. A router makes all the different networks communicate, such as connecting LAN to LAN, LAN to WAN or WAN to WAN.</p> <p>4. The transmission media in WAN uses the fibre optic cable. WAN is still considered a fast network with speeds 20 – 2000 Kbps, but slower than LAN and MAN.</p>

2 marks
(1mark for each correct answer)

(b) (i) State the topology used in Network A
Nyatakan topologi yang digunakan dalam rangkaian A.

Star topology

(1mark for each correct answer)

	<p>(ii) State ONE advantage of using that topology <i>Nyatakan SATU kelebihan menggunakan topologi tersebut</i></p> <p><i>Good performance</i> <i>Easy to setup and expand</i> <i>Any non centralized failure will have very little effect to the network</i> <i>Easy to detect failure.</i> <i>Faster broadcasting of the data.</i></p>	<p><i>(1mark for each correct answer)</i></p>												
29	<p>(a) Web editor is a program that we use to create Web page. Based on Figure 2 state the type of Web editor A and Web Editor B.</p> <p><i>Penyunting Web adalah program yang digunakan untuk menghasilkan Laman Web. Berdasarkan Rajah 2, nyatakan jenis Penyunting Web A dan Penyunting Web B.</i></p> <p><i>Penyunting Web A : Text Based</i> <i>Penyunting Web B : WYSIWYG</i></p>	<p>2 marks <i>(1mark for each correct answer)</i></p>												
	<p>(b) State TWO differences between Web Editor A and Web Editor B.</p> <p><i>Nyatakan DUA perbezaan antara Penyunting Web A dan Penyunting Web B.</i></p> <table border="1" data-bbox="328 1326 1126 1765"> <thead> <tr> <th data-bbox="328 1326 724 1402">Text-based editor</th> <th data-bbox="724 1326 1126 1402">WYSIWYG editor</th> </tr> </thead> <tbody> <tr> <td data-bbox="328 1402 724 1469">Less user friendly</td> <td data-bbox="724 1402 1126 1469">More user friendly</td> </tr> <tr> <td data-bbox="328 1469 724 1536">No junk HTML</td> <td data-bbox="724 1469 1126 1536">Has junk HTML</td> </tr> <tr> <td data-bbox="328 1536 724 1603">Requires HTML knowledge</td> <td data-bbox="724 1536 1126 1603">No HTML knowledge needed</td> </tr> <tr> <td data-bbox="328 1603 724 1671">Difficult to insert a specific tag</td> <td data-bbox="724 1603 1126 1671">Easy to insert a specific tag</td> </tr> <tr> <td data-bbox="328 1671 724 1760">Cannot visualise the design</td> <td data-bbox="724 1671 1126 1760">Easy to visualise the design</td> </tr> </tbody> </table>	Text-based editor	WYSIWYG editor	Less user friendly	More user friendly	No junk HTML	Has junk HTML	Requires HTML knowledge	No HTML knowledge needed	Difficult to insert a specific tag	Easy to insert a specific tag	Cannot visualise the design	Easy to visualise the design	<p>2 marks <i>(1mark for each correct answer)</i></p>
Text-based editor	WYSIWYG editor													
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30	<p>(a) State the Translator X and Translator Y. <i>Nyatakan Penterjemah X dan Penterjemah Y.</i></p> <p>Translator X : <i>Interpreter</i> Translator Y : <i>Compiler</i></p>	<p>2 marks</p> <p><i>(1 mark for each correct answer)</i></p>
	<p>(b) State the generation of programming language that used Translator X and Translator Y. <i>Nyatakan generasi bahasa pengaturcaraan yang menggunakan Penterjemah X dan Penterjemah Y?</i></p> <p>High – level Programming Language (Third Generation Language)</p>	<p>2 marks</p>

SCHEME FOR SECTION C

31

- (a) (i) Draw **TWO** tables.
Lukiskan DUA jadual.

<i>Student</i>
<i>studentID</i>
<i>name</i>
<i>gender</i>

<i>Sport House</i>
<i>sportID</i>
<i>studentID</i>
<i>sport_house</i>
<i>age_category</i>

- (ii) Give the **SUITABLE** names for each table.
Beri nama yang SESUAI untuk setiap jadual.

Table : Student

Table : Sport House

- (iii) Write the field names for each table.
Tulis nama medan – medan untuk setiap jadual.

Table : Student

Field names : studentID, name, gender

Table : Sport House

Field names : sportID, studentID, sport_house, age_category

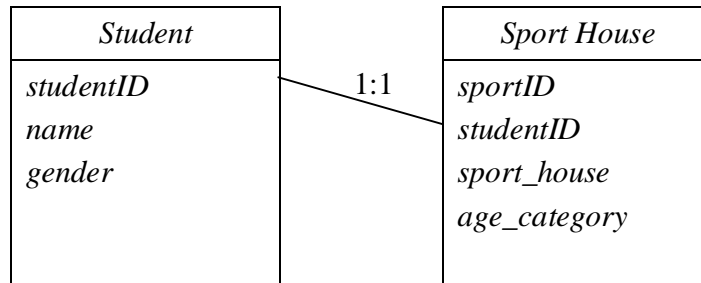
- (iv) State the **primary key** for both tables.
*Nyatakan **primary key** untuk ke dua – dua jadual.*

*Primary key for table Student is **studentID***

*Primary key for table Sport House is **sportID***

5 marks

- (v) Draw one – to – one **relationship** between two tables.
Lukiskan hubungan satu ke satu antara dua jadual tersebut.



- (b) Write two **records** for each table.
Tulis dua rekod untuk setiap jadual

Table : Student

<i>studentID</i>	<i>name</i>	<i>gender</i>
<i>S001</i>	<i>Ahmad Bin Othman</i>	<i>Male</i>
<i>S002</i>	<i>Puteri Madhirah Bt Megat Amir</i>	<i>Female</i>

** depend on student answers but make sure the field names are correct and relevant data enter for each field.*

Table : Sport House

<i>sportID</i>	<i>studentID</i>	<i>sport_house</i>	<i>age_category</i>
<i>SP001</i>	<i>S001</i>	<i>Blue</i>	<i>A</i>
<i>SP002</i>	<i>S002</i>	<i>Red</i>	<i>B</i>

** depend on student answers but make sure the field names are correct and relevant data enter for each field.*

2 marks

32	<p>(a) (i) State two popular tools that are used in the design phase.</p> <p style="text-align: center;"><i>Story board and flow chart.</i></p> <p>(ii) Based on your answer in (i), explain the difference between two tools.</p> <p style="text-align: center;"><i>The storyboard lays out how the multimedia elements are to be put in a multimedia program while flow charts help multimedia developers to lay out the flow of a multimedia program.</i></p>	<p>(2 marks)</p> <p>(1 marks)</p>
	<p>(b) Based on the CASPER user interface design principles, state one change that had been made to the screen design A to screen design B. Justify your answer.</p> <p>CONTRAST (<i>Use the bright colour for the tooth to show the contrast</i>) <i>Contrast refers to the usage of different types of multimedia elements. It is one of the way to make the multimedia program more attractive.</i></p> <p>ALIGNMENT (The arrangement of graphic and text changed to centre) <i>refers to the arrangement of multimedia elements on the screen. For example, graphics or text should be arranged at the most suitable position.</i></p> <p>EMPHASIS (<i>Changed the tooth picture with the bigger size to emphasize the focus of the campaign</i>) <i>Emphasis refers to creating the focus point on the screen. It will highlight the important part of the screen to attract the user's attention</i></p>	2 marks
	<p>(c) You have decided to use a time frame concept authoring tool. State TWO names of the authoring tool.</p> <p style="text-align: center;"><i>Flash , Director/ Swish</i></p>	2 marks

33	Based on Figure 4, <i>Berdasarkan Rajah 4,</i>										
	<p>a) State the constant value from the above flow chart. <i>Nyatakan nilai tetap daripada carta alir di atas.</i></p> <p><i>PI or 3.142</i></p>	1 mark									
	<p>b) Explain TWO differences between constant value and variable value. <i>Terangkan DUA perbezaan antara nilai tetap dan nilai pembolehubah.</i></p> <table border="1" data-bbox="379 797 1222 1234"> <thead> <tr> <th></th> <th>Constants</th> <th>Variables</th> </tr> </thead> <tbody> <tr> <td>Characteristics</td> <td>Value is not changeable during the course of the program.</td> <td>Value can be changed anytime during the course of the program.</td> </tr> <tr> <td>Usage</td> <td>Use constant when you want to declare something that won't be changed midway in your program execution.</td> <td>Use variable to store data that may or will change during the running of the program.</td> </tr> </tbody> </table>		Constants	Variables	Characteristics	Value is not changeable during the course of the program.	Value can be changed anytime during the course of the program.	Usage	Use constant when you want to declare something that won't be changed midway in your program execution.	Use variable to store data that may or will change during the running of the program.	4 marks
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Usage	Use constant when you want to declare something that won't be changed midway in your program execution.	Use variable to store data that may or will change during the running of the program.									
	<p>c) Explain the control structure used in Figure 1. <i>Terangkan struktur kawalan yang digunakan dalam Rajah 1.</i></p> <p><i>Sequence Control Structure is used in Figure 1.</i> <i>A sequence control structure executes statement one by one in linear order.</i> <i>The programmer uses sequence control structure when he/she want to execute code line by line.</i> <i>The program does not use decision symbol.</i></p>	2 marks									