



JABATAN PELAJARAN NEGERI SEMBILAN

**PEPERIKSAAN PERCUBAAN SETARA
SIJIL PELAJARAN MALAYSIA 2016
INFORMATION AND COMMUNICATION TECHNOLOGY**

3765/1

Kertas 1

Ogos

2½ jam

Dua jam tiga puluh minit

SKEMA JAWAPAN

Question No. <i>No. Soalan</i>		Candidate's Answer <i>Jawapan Calon</i>	Marks <i>Markah</i>
1.		C	1
2.		Verification	2
3.	(i)	X : Keyword Blocking	3
	(ii)	Y : Site Blocking	4
4.	(i)	A: Video Camera Digital	5
	(ii)	Record full motion and store captured motion images digitally	6
5.		D	7
6.	(i)	P: ROM	8
	(ii)	RAM	9
7.	(i)	C	10
	(ii)	B	11
8.	(i)	Net A : Peer to Peer	12
	(ii)	Net B : Client - Server	13
9.		A	14
10.	(i)	Coaxial cable	15
	(ii)	Fiber optic	16
11.		C	17
12.	(i)	C	18
	(ii)	B	19
13.		B	20
14.		Animation	21
15.		Programming language	22
16.	(i)	P	23
	(ii)	R	24
17.		Testing and Debugging	25
18.	(i)	Boolean	26
	(ii)	Double	27
19.		C	28
20.		Process	29
21.		False	30
22.	(i)	Data	31
	(ii)	Information System	32
23.		Foreign Key	33
24.		D	34
25.	(i)	Documentation	35
	(ii)	Testing	36

Section B**Bahagian B**

[20 marks]

[20 markah]

This section consists of **five** questions. Answer **all** questions.

Bahagian ini mengandungi lima soalan. Jawab semua soalan.

26	(a)	A : Ciphertext B : Decrypt / <i>Decryption</i>	[2 marks] [2 markah]
	(b)	Process X is a process of Cryptography. Cryptography is a process of <u>hiding information</u> by <u>altering the actual information</u> into <u>different representation</u> . <u>Encryption</u> is a process to <u>convert plaintext</u> into <u>ciphertext</u> . Then <u>ciphertext</u> will <u>convert to plaintext</u> after <u>decryption process executed</u> .	[1 mark] [1 markah] [1 mark] [1 markah]
27	(a)	(i) The package that will be choose by Encik Jasni is <u>Package B</u> . (ii) Justification : The <u>clock speed</u> of processor is <u>2.6 GHz</u> . This processor <u>can process the data and instruction faster</u> than Package A.	[1 mark] [1 markah] [1 mark] [1 markah]
	(b)	Formula to show how the CPU process the data and instruction in per second is : <u>1 hertz = 1 cycle per second</u> <u>1 Hz = $\frac{1 \text{ cycle}}{1 \text{ second}}$</u> Or <u>1 MHz = $\frac{1\,000\,000 \text{ cycle}}{1 \text{ second}}$</u> Or <u>1 GHz = $\frac{1\,000\,000\,000 \text{ cycle}}{1 \text{ second}}$</u> Or any relevant answer given by student based on package A or B	[2 marks] [2 markah]

28	(a)	<p>Process X : setting an IP address, Subnet mask and Gateway</p> <p>Process Y : ping the IP address for network connection between two computers / nodes.</p>	<p>[2 marks] [2 markah]</p>
	(b)	<p>The result of Process Y shows the failure of network connection because <u>the first three network ID</u> in Figure 13(a) <u>192.168.0.100</u> is <u>different with the first three network ID</u> in Figure 13(b) <u>192.168.3.125</u>. So in order to <u>successfully connection between two nodes</u>, they must <u>use same TCP/IP protocol</u>.</p>	<p>[2 marks] [2 markah]</p>
29	(a)	<p>Medium of delivery used by multimedia developer is <u>CD based</u>.</p> <p>Justify: <u>Because the product multimedia store on CD</u>.</p>	<p>[2 marks] [2 markah]</p>
	(b)	<p>Two advantages of using a medium of delivery CD based are :</p> <p>(i) Developer can store high resolution pictures/images/graphics and video (high end) on CD.</p> <p>(ii) User can access information faster and easily.</p>	<p>[2 marks] [2 markah]</p>
30	(a)	<p>Constant : P</p> <p>Variable : r/s/t – choose one</p>	<p>[2 marks] [2 markah]</p>
	(b)	<p>Statement that used to declare ‘Amount’ is <u>Dim r as Double</u>.</p> <p>Justification: Because samples data used in Set 1 and Set 2 show value of Amount have fractional part / decimal numbers.</p>	<p>[2 marks] [2 markah]</p>

Section C***Bahagian C***

[14 marks]

[14 markah]

This section consists of **three** questions. Answer **two** questions.

Bahagian ini mengandungi tiga soalan. Jawab dua soalan sahaja iaitu:

a. Question 31, AND*Soalan 31, DAN***b. Question 32 OR Question 33***Soalan 32 ATAU Soalan 33*

31	(a)	<p>(i) The network topology which is suitable to set up the network is <u>star topology</u>.</p> <p>(ii) Justify : because the switch is a main / important medium device used and it is easy to set up all nodes using star topology.</p>	<p>[1 mark] [1 markah]</p> <p>[2 marks] [2 markah]</p>
	(b)	<p>Sketch the network architecture for SPBT room.</p> <p>Criteria for given marks : Each criteria carry 1 mark.</p> <p>(i) Star topology and client – server network architecture.</p> <p>(ii) Server and 5 pcs connected to switch.</p> <p>(iii) Printer whether connected to server or switch.</p> <p>(iv) Label the Switch , UTP cables, Server, 5 pcs and Printer</p>	<p>[4 marks] [4 markah]</p>
32	(a)	<p>Primary key for each table :</p> <p>Employee Table : Employee _ID</p> <p>Leave Table : ID_Leave</p>	<p>[2 marks] [2 markah]</p>

(b)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 15%;">Field :</td> <td style="width: 20%;">Employee_ID</td> <td style="width: 20%;"><i>Name</i></td> <td style="width: 20%;">ID_Leave</td> <td style="width: 25%;">Type_of_Leave</td> </tr> <tr> <td>Table:</td> <td><i>Employee</i></td> <td>Employee</td> <td><i>Leave</i></td> <td>Leave</td> </tr> <tr> <td>Sort :</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Show :</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Criteria :</td> <td><i>" E098345 "</i></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Or :</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>Each answer carry 1 mark Total : [4 marks] / [4 markah]</p>				Field :	Employee_ID	<i>Name</i>	ID_Leave	Type_of_Leave	Table:	<i>Employee</i>	Employee	<i>Leave</i>	Leave	Sort :					Show :	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Criteria :	<i>" E098345 "</i>				Or :				
Field :	Employee_ID	<i>Name</i>	ID_Leave	Type_of_Leave																														
Table:	<i>Employee</i>	Employee	<i>Leave</i>	Leave																														
Sort :																																		
Show :	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																														
Criteria :	<i>" E098345 "</i>																																	
Or :																																		
(c)	<p>Draw a line to show the relationship between the two tables.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 20%;"> <p>Employee</p> <hr/> <p>Employee_ID</p> <p>Name</p> <p>Position</p> </div> <div style="border: 1px solid black; padding: 5px; width: 20%;"> <p>Leave</p> <hr/> <p>ID_Leave</p> <p>Type_of_Leave</p> <p>Number_of_Leave</p> <p>Employee_ID</p> </div> </div>		<p>[1 mark] [1markah]</p>																															
33	(a)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Problem Statement</td> <td>Produce a multimedia presentation on School Co – Curricular Activities</td> </tr> <tr> <td>Project Title</td> <td>School Co – Curricular Activities</td> </tr> <tr> <td>Objective</td> <td>To inform/deliver information about School Co – Curricular Activities to audience.</td> </tr> <tr> <td>Target audience</td> <td>A group of state education department.</td> </tr> </table> <p>Any relevant answers given by student.</p> <p style="text-align: right;">[3 marks]</p>			Problem Statement	Produce a multimedia presentation on School Co – Curricular Activities	Project Title	School Co – Curricular Activities	Objective	To inform/deliver information about School Co – Curricular Activities to audience.	Target audience	A group of state education department.																						
Problem Statement	Produce a multimedia presentation on School Co – Curricular Activities																																	
Project Title	School Co – Curricular Activities																																	
Objective	To inform/deliver information about School Co – Curricular Activities to audience.																																	
Target audience	A group of state education department.																																	

	<p>(b) Design the interface for the main page.</p> <p>Criteria for interface :</p> <p>(i) Must contain 5 elements of multimedia: text, graphic, audio, video and animation.</p> <p>(ii) Information about school co - curriculum :</p> <ul style="list-style-type: none">• Badan beruniform• Kelab dan persatuan• Sukan dan permainan• Kejayaan dan pencapaian sekolah / School Achievements <p>(iii) Navigation button</p> <p>(iv)Hyperlink</p> <p>Each criteria carry 1 mark Total : 4 marks / 4 markah</p>	
--	--	--