Scheme Pra PSPM KMJ SC015 20232024

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>1(a)</td><td>
<table>
<tr><th>Operation</th><th>Explanation</th></tr>
<tr><td>Input</td><td>- The kiosk accept menu to the system
- The kiosk accepts payment option</td></tr>
<tr><td>Process</td><td>- The kiosk processing the payment transaction
- The kiosk calculating the total order</td></tr>
<tr><td>Output</td><td>- The kiosk displaying the final order
- The kiosk displaying the total amount to pay
- Receipt printed</td></tr>
<tr><td>Storage</td><td>- The kiosk can save the database.</td></tr>
</table>
</td><td>J2

J2

J2

J2</td></tr>
<tr><td>1(b)</td><td>- Google save/stores the UPS trial in Google Drive
- Google save/stores the Google Form in Google drive</td><td>J2</td></tr>
<tr><td>2(a)</td><td>2550 - 1230 = 1320 (red velvet Nutella cake)

<table>
<tr><td>16</td><td>1320</td><td></td></tr>
<tr><td>16</td><td>82</td><td>……..8</td></tr>
<tr><td>16</td><td>5</td><td>……..2</td></tr>
<tr><td></td><td>0</td><td>……..5</td></tr>
</table>

Answer : 528_{16}</td><td>J1

J2

J1</td></tr>
<tr><td>2(b)</td><td>
<table>
<tr><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td><td>0</td></tr>
<tr><td>2^7</td><td>2^6</td><td>2^5</td><td>2^4</td><td>2^3</td><td>2^2</td><td>2^1</td><td>2^0</td></tr>
<tr><td>128</td><td>64</td><td>32</td><td>16</td><td>8</td><td>0</td><td>2</td><td>0</td></tr>
<tr><td colspan="8">128+64+32+16+8+2</td></tr>
</table>

Answer: 250</td><td>J1

J1
J1

J1</td></tr>
<tr><td>2(c)(i)</td><td>
<table>
<tr><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>8</td><td>4</td><td>2</td><td>1</td><td>8</td><td>4</td><td>2</td><td>1</td></tr>
<tr><td colspan="4">3</td><td colspan="4">13 (D)</td></tr>
<tr><td colspan="8">3D</td></tr>
</table>
Answer: $3D_{16}$</td><td>J1
J1
J1

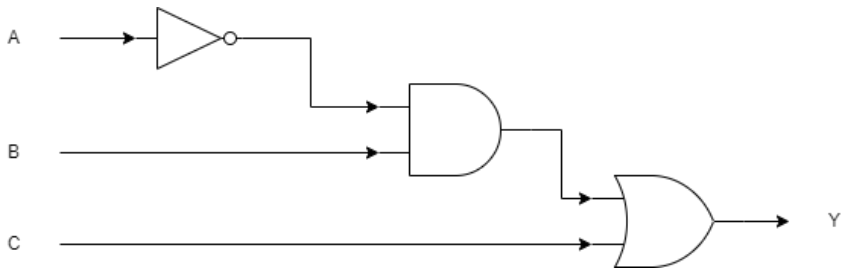
J1</td></tr>
</table>

<table>
<tr><td>2(c)(ii)</td><td>
<table>
<tr><td>1</td><td>1</td><td>1</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>8 4 2 1</td><td>8 4 2 1</td><td>8 4 2 1</td><td>8 4 2 1</td><td>8 4 2 1</td><td>8 4 2 1</td></tr>
<tr><td>0001</td><td>0001</td><td>0001</td><td>0001</td><td>0000</td><td>0001</td></tr>
</table>

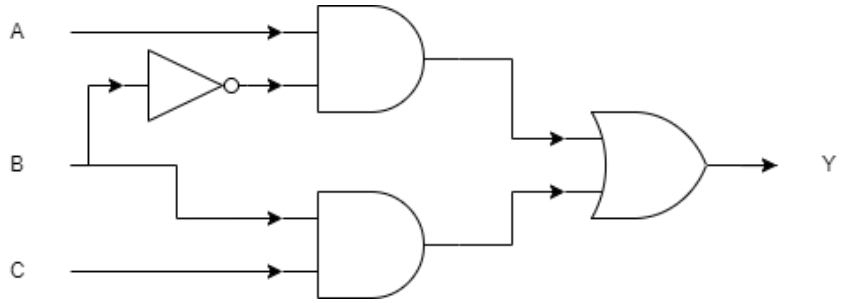
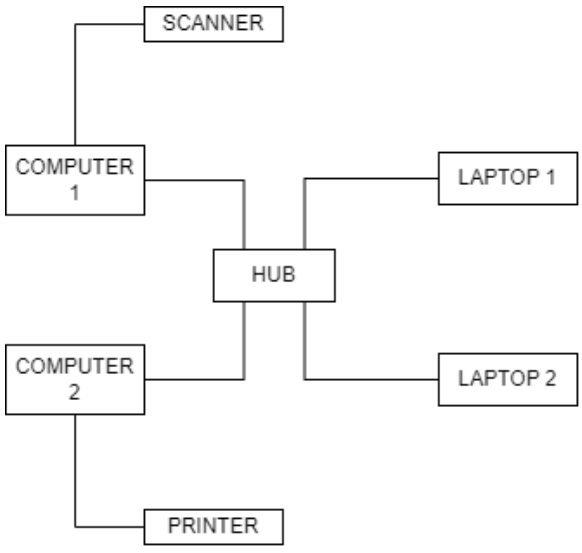
Answer: 1 0001 0001 0001 0000 0001_2</td><td>J1
J1
J1

J1</td></tr>
<tr><td>2(d)</td><td>
<table>
<tr><th>Characteristic</th><th>Unicode</th></tr>
<tr><td>Number of bytes</td><td>2 bytes</td></tr>
<tr><td>Number of characters</td><td>2^{16} or 65 536 characters</td></tr>
</table>
</td><td>J2</td></tr>
<tr><td>3(a)</td><td>C1 = Ahmad register Data Structure
C2 = Pass Fundamental Programming
C3 = Pass Object Oriented Programming
C4 = Pass Advanced Programming

C1 = (C2 · C3) + C4</td><td>J1

J1</td></tr>
<tr><td>3(b)</td><td>
<table>
<tr><td>C2</td><td>C3</td><td>C4</td><td>C2.C3</td><td>C1</td></tr>
<tr><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>0</td><td>1</td></tr>
<tr><td>1</td><td>1</td><td>0</td><td>1</td><td>1</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr>
</table>
</td><td>J4</td></tr>
<tr><td>3(c)(i)</td><td> 
</td><td>J1 – not
J1- AND
J1-OR</td></tr>
</table>

<table>
<tr>
<td>3(c)(ii)</td>
<td>
<table>
<tr><th>A</th><th>B</th><th>C</th><th>NOT A</th><th>NOT A AND C</th><th>Y</th></tr>
<tr><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td></tr>
<tr><td>0</td><td>1</td><td>0</td><td>1</td><td>0</td><td>0</td></tr>
<tr><td>0</td><td>1</td><td>1</td><td>1</td><td>1</td><td>1</td></tr>
<tr><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>1</td><td>0</td><td>1</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td></tr>
<tr><td>1</td><td>1</td><td>1</td><td>0</td><td>0</td><td>1</td></tr>
</table>
</td>
<td>J1-input
J1-NOT A
J1-NOT A and C
J1-Y</td>
</tr>
<tr>
<td>3(d)(i)</td>
<td>D = Dian goes to Norway
A = Ana goes
B = Betty goes
C = Camila goes

D = A.B`+B.C</td>
<td>J3</td>
</tr>
<tr>
<td>3(d)(ii)</td>
<td> 
</td>
<td>J4</td>
</tr>
<tr>
<td>4(a)</td>
<td> 
</td>
<td>J4</td>
</tr>
</table>

<table>
<tr><td>4(b)</td><td><table>
<tr><th>Peer-to-peer</th><th>Client Server</th></tr>
<tr><td>No server involved</td><td>Must have a server</td></tr>
<tr><td>Difficult to perform backup as files are spread across the network.</td><td>Much easier to perform backup as files are located in the server.</td></tr>
<tr><td>Not very secure because each peer has direct access to each other.</td><td>More secure because everything goes through server and centralized.</td></tr>
</table></td><td>J4</td></tr>
<tr><td>4(c)(i)</td><td>LAN connects computers and devices in a limited geographical area while WAN connects computers.
LAN is a private network which is typically owned, controlled and managed by a single person or organization while WAN is a public network like the internet that is not owned by any one organisation.</td><td>J2</td></tr>
<tr><td>4(c)(ii)</td><td>- The speed of data transfer rate becomes slow
- Increase in cost of management
- Networks are more vulnerable to a wide range of threats.
(Or any suitable answer).</td><td>J3</td></tr>
<tr><td>4(d)(i)</td><td>- The lack of address space - the number of different devices connected to the Internet grows exponentially, and the size of the address space is quickly depleted.
- The problem of security of communications.
- Lack of quality-of-service support - placement of information about bandwidth, delays required for smooth operation of some network applications are not supported.</td><td>J2</td></tr>
<tr><td>4(d)(ii)</td><td>The domain name system is responsible for translating domain names into a specific IP address so that the client can load the requested Internet resources</td><td>J2</td></tr>
<tr><td>5(a)(i)</td><td>Information privacy</td><td>J1</td></tr>
<tr><td>5(a)(ii)</td><td>Intellectual Property</td><td>J1</td></tr>
<tr><td>5(a)(iii)</td><td>Information accuracy</td><td>J1</td></tr>
<tr><td>5(b)(i)</td><td>Keep message brief or
Be clear or
Use appropriate language or
Avoid sending SPAM or
Be careful when using sarcasm and humour or
Avoid forward chain letter or
Avoid sending or posting flames (abusive or insulting messages) and do not participate in flame wars (exchanges of flames) Or
Never access someone's private email or
Any other suitable answer</td><td>J2</td></tr>
</table>

5(b)(ii)	Not acceptable: Use appropriate language and DO NOT USE ALL CAPITAL LETTERS which is the equivalent of shouting.	J2
6(a)	The purpose of the support and security phase is to provide ongoing assistance for an information system and its users after the system is implemented.	J2
6(b)	An acceptance test is performed by end users and checks the new system to ensure that it works with actual data.	J2
6(c)(i)	Implementation	J1
6(c)(ii)	Analysis	J1
6(c)(iii)	Support and Security	J1
6(c)(iv)	Support and Security	J1