

2.1.2.1	State the relationship of data representation: bit, byte and character.							3					
2.1.3.1	Explain the function of ASCII code.												
2.1.4.1	State the units of data measurement: i.) Bit, ii.) Byte, iii.) Kilobyte (KB), iv.) Megabyte (MB), v.) Gigabyte (GB) and vi.) Terabyte (TB)												
2.1.5.1	State the units of clock speed measurement: i. Megahertz (MHz), ii. Gigahertz (GHz)												
2.2.1.1	Identify the input devices used for text, graphic, audio and video.	8											
2.2.2.1	Identify the output devices used for text, graphic, audio and video												
2.2.3.1	Identify the location of the central processing unit (CPU), expansion slots, expansion cards, RAM slots, ports and connectors on the motherboard.	9			6								
2.2.4.1	Explain types and functions of : i. primary storage (RAM, ROM), ii. secondary storage (magnetic medium optical medium, flash memory)				4, 5			4 (i) (ii)					
2.3.1.1	State the various types of OS used on different platforms.												
2.3.1.2	State the functions of OS.												
2.3.1.3	State the different interfaces of OS.				7								
2.3.2.1	State the types of application software (word processing, spreadsheet, presentation, graphic).							10					
2.3.2.2	Describe the uses of application software (word processing, spreadsheet, presentation, graphic).							5					
2.3.3.1	Differentiate between the types and usage of utility programmes (file management, diagnostic and file compression).	23						6					
2.3.4.1	Differentiate between proprietary and open source software.		27					7	26 (i) (ii)				
2.4.1.1	Assemble the components of a PC.												
2.4.1.2	Display cooperation in assembling the components of a PC.												
2.4.2.1	Format and partition the hard disk.												
2.4.3.1	Install operating system, application software and utility programs.												
2.5.1.1	Explain the latest open source OS and application software available in the market.												
2.5.2.1	Explain the latest ICT hardware and software												
2.5.2.2	Explain pervasive computing.												
3.1.1.1	Define computer networks.												
3.1.1.2	Define communications.												
3.1.2.1	State the importance of computer networks and communications.												
3.1.3.1	Define types of computer networks: i. Local Area Network (LAN), ii. Metropolitan Area Network (MAN) and iii. Wide Area Network (WAN)	11											
3.1.3.2	Differentiate between the three types of computer networks.							32 (a)					

4.1.5.1	Identify the multimedia elements: i. text, ii. audio, iii. video, iv. graphics and v. animation	12			12								
4.2.1.1	Identify hardware that can be used to produce multimedia products: i. scanner, ii. video camera, iii. camera, iv. audio devices and v. video capture devices	16			13								
4.2.2.1	Identify editing software that can be used to produce multimedia elements: i. text editor, ii. graphics and image editor, iii. audio editor and iv. video and animation editor	13											
4.2.3.1	Define the various concepts in authoring tools: i. time frame concept, ii. icon concept and iii. card concept												
4.2.4.1	Describe and give examples of web editors: i. text-based and ii. WYSIWYG							13 (i) (ii)	28 (a) (b)				
4.3.1.1	State user interface principles.												
4.3.1.2	Apply suitable user interface principles in a project.							15					
4.3.2.1	State the role of each member in a development team (examples: project manager, subject matter expert, instructional designer, graphics artist, audio-video technician and programmer).							14					
4.3.3.1	Describe the phases in multimedia production: i. analysis, ii. design, iii. implementation, iv. testing, v. evaluation and vi. publishing	14			14			16					
4.3.3.2	Apply all the phases of multimedia production to produce an interactive educational multimedia project.												
4.4.1.1	Give an example of immersive multimedia in education, business or entertainment.												
5.1.1.1	State the definition of program.												
5.1.1.2	State the definition of programming language.				15								
5.1.2.1	Identify the generations of low-level programming languages with examples.				16								
5.1.2.2	Identify the generations of high-level programming languages with examples.							17					
5.1.3.1	Define structured approach in programming.	2											
5.1.3.2	Define object-oriented approach in programming.	2											
5.1.3.3	Differentiate between structured approach and object-oriented approach in programming.				19								
5.1.4.1	Describe the translation method of programming using assembler, interpreter and compiler.												
5.1.5.1	Differentiate between constants and variables.					29 (a)		18	29 (b)	32 (a)			
5.1.5.2	Differentiate between the data types: Boolean, integer, double, string and date.						33 (a)	19	29 (a)				
5.1.5.3	Differentiate between mathematical and logical (Boolean) operators.	17						20					

5.1.5.4	Differentiate between sequence control structure and selection control structure.	18			17	29 (b)		21		32 (b)			
5.2.1.1	Describe the five main phases in program development: i. problem analysis, ii. program design, iii. coding, iv. testing and debugging and v. documentation	19			18, 20, 21								
5.2.2.1	Apply program development phases to solve problems.	24						33 (b)					
5.3.1.1	Find out the latest programming languages: i. fifth generation language, ii. natural language and iii. OpenGL (Graphic Library)												
6.1.1.1	Give the meaning of data, information and information systems.				22								
6.1.2.1	State the usage of Information Systems in education, business and management.												
6.1.3.1	List the Information System components: i. data, ii. hardware, iii. software, iv. people and v. procedure	20											
6.1.3.2	Define each of the Information System components.												
6.1.3.3	Describe the interrelation between information system components using a diagram.												
6.1.4.1	List five types of Information Systems: i. Management Information System (MIS), ii. Transaction Processing System (TPS), iii. Decision Support System (DSS), iv. Executive Information System (EIS), v. Expert System (ES)/Artificial Intelligence (AI)												
6.1.4.2	State the usage of each type of information system.							23					
6.1.5.1	Define bit, byte, field, record, and file				24								
6.1.5.2	State the hierarchy of data: Bit ? Byte (Character) ? Field ? Record ? File ? Database	7											
6.2.1.1	Define database and Database Management Systems (DBMS).	25			23 (ii)								
6.2.1.2	List the benefits of using database.		29 (a)										
6.2.2.1	State the relationship between attribute (field), row (record) and relation (file).	21							30 (b)				
6.2.2.2	Define the primary key and foreign key.				23 (i)								
6.2.2.3	State the importance of the primary key.				33 (b)								
6.2.2.4	Differentiate between the primary key and foreign key.												
6.2.2.5	State the importance of relationship between the primary key and foreign key.												
6.2.3.1	Define the following database objects/ tools: Table, form, query, report.												
6.2.3.2	Identify table, query, form and report as database objects/ tools.												
6.2.4.1	List the basic operations of data manipulation: i. Update, ii. Insert, iii. Delete, iv. Retrieve, v. Sort, vi. Filter and vii. Search							24					
6.2.4.2	State the usage of basic operations in data manipulation.				33 (a)			25					

2.1.2.1	State the relationship of data representation: bit, byte and character.			3									
2.1.3.1	Explain the function of ASCII code.												
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2.2.2.1	Identify the output devices used for text, graphic, audio and video												
2.2.3.1	Identify the location of the central processing unit (CPU), expansion slots, expansion cards, RAM slots, ports and connectors on the motherboard.	9	6										
2.2.4.1	Explain types and functions of : i. primary storage (RAM, ROM), ii. secondary storage (magnetic medium optical medium, flash memory)		4, 5	4 (i) (ii)									
2.3.1.1	State the various types of OS used on different platforms.												
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2.3.3.1	Differentiate between the types and usage of utility programmes (file management, diagnostic and file compression).	23		6									
2.3.4.1	Differentiate between proprietary and open source software.			7		27	26 (i) (ii)						
2.4.1.1	Assemble the components of a PC.												
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3.1.3.1	Define types of computer networks: i. Local Area Network (LAN), ii. Metropolitan Area Network (MAN) and iii. Wide Area Network (WAN)	11											
3.1.3.2	Differentiate between the three types of computer networks.										32 (a)		

3.1.4.1	Define two types of network architecture: i. Client/Server and ii. Peer-to-Peer							27 (a) (b)				
3.1.5.1	State three types of network topologies: i. bus, ii. ring and iii. star		8						31 (a)			
3.1.5.2	Differentiate between the three types of network topology.	10					27		31 (a)			
3.1.6.1	Define Transmission Control Protocol/Internet Protocol (TCP/IP) as a protocol to facilitate communication over computer network.											
3.1.7.1	Describe the types of network communications technology: i. Internet, ii. Intranet and iii. Extranet					28	28			32(b)		
3.2.1.1	Identify the devices needed in computer network communication : i. Network Interface Card (NIC), ii. Wireless Network Interface Card, iii. Modem (internal and external), iv. Hub / Switch, v. Router and vi. Wireless Access Point		9							31 (b)		
3.2.1.2	State the functions of the following: i. Network Interface Card (NIC), ii. Wireless Network Interface Card, iii. Modem (internal and external), iv. Hub / Switch, v. Router and vi. Wireless Access Point									31 (b)		
3.2.2.1	Identify various types of cables such as Unshielded Twisted Pair (UTP), Shielded Twisted Pair (STP), Coaxial and Fibre Optic Cable.		10	8								
3.2.2.2	Identify various types of wireless transmission media such as infrared, radio wave and satellite.			9								
3.3.1.1	Define Network Operating System.											
3.3.1.2	Name various Network Operating System Software.		11									
3.3.2.1	State the functions of various client software.											
3.4.1.1	Insert network interface cards (NIC).											
3.4.1.2	Install drivers for the NIC.											
3.4.2.1	Crimp and test UTP cable: i. Straight cable and ii. Crossed cable			11 (i) (ii)								
3.4.2.2	Create awareness of the correct way when crimping a cable.											
3.4.3.1	Configure the workstation to join a Local Area Network : i. Internet Protocol (IP) Address, ii. Subnet Mask and iii. Server name											31 (a)
3.4.3.2	Test the network connection.											31 (b)
3.4.4.1	Create a shared folder.											
3.5.1.1	Describe i. Mobile Computing (specifications, services, frequencies), ii. Internet Technology and Services (VOIP, BLOG) and iii. Types of network (examples: PAN, VPN, WLAN, WIMAX)											
4.1.1.1	Define multimedia.											
4.1.2.1	Identify the use of multimedia in various fields.											
4.1.3.1	Differentiate between the characteristics of linear and non-linear multimedia.			12								
4.1.4.1	Compare and contrast the mediums of delivery for multimedia applications: i. web-based and ii. CD-based					30						

4.1.5.1	Identify the multimedia elements: i. text, ii. audio, iii. video, iv. graphics and v. animation	12	12									
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6.2.4.2	State the usage of basic operations in data manipulation.			25						33 (a)		

Keterangan/Makluman Berkaitan

- 1 Saya tidak akan bertanggungjawab di atas sebarang kerugian atau kehilangan disebabkan maklumat daripada analisa ini
- 2 Kemungkinan ada kesilapan di dalam analisa ini
- 3 Soalan Bahagian A, Soalan 15 tahun 2007 TELAH dimasukkan (Learning Outcome (LO) 2.1.1.1 Define Computer System
- 4  LO yang belum pernah diuji
- 5  LO yang paling kerap diuji
- 6  LO yang kerap diuji
- 7  LO yang dirasakan tidak akan diuji di dalam peperiksaan
- 8  LO yang diuji lebih daripada satu bahagian dalam satu-satu tahun peperiksaan

Statistik Kasar Jumlah Soalan Setiap Bahagian Untuk 3 Tahun Berdasarkan Sheet Section

LA	A	B	C	Jum
1	10	3	4	17
2	18	3	0	21
3	10	9	4	23
4	13	3	0	16
5	18	4	4	26
6	11	2	3	16
Jum	80	24	15	119

Soalan Bahagian C: Design a report based on a dialogue [7 markah]

* Soalan-soalan yang ada subsoalan (Contoh 3 (b) (b) dikira 2 soalan)

Dalam Bahagian C, tiada soalan daripada LA2 & LA4 diuji 3 tahun berturut-turut
Pelajar perlu tumpu LA3 untuk Bahagian B
Pelajar perlu tumpu LA2 dan LA5 untuk Bahagian A
LA5 mencatatkan bilangan soalan tertinggi diikuti LA3