KASNEB

ATD LEVEL I

DCM LEVEL I

INFORMATION COMMUNICATION TECHNOLOGY

TUESDAY: 23 May 2017.			Time Allowed: 3 hours.	
Answer any FIVE questions.			ALL questions carry equal marks.	
QUESTION ONE (a) Explain the following categories of personal computers:				
	(i)	Desktop computer.	(2 marks)	
	(ii)	Notebook computer.	(2 marks)	
	(iii)	Tablet computer.	(2 marks)	
(b)	Diffe	rentiate between "dynamic memory" and "static memory" as used in a compu	iter system. (4 marks)	
(c)	Highl	ight six ways in which the use of computers could reduce operating cost of a	school. (6 marks)	
(d)	Outlin	ne four benefits of using email as a means of communication in an organisation	on. (4 marks) (Total: 20 marks)	
QUE (a)	STION In the	TWO context of information systems, state five qualities of good information.	(5 marks)	
(b)	Explain the meaning of the following concepts of a computer file:			
	(i)	Hit rate.	(2 marks)	
	(ii)	Volatility.	(2 marks)	
	(iii)	Growth.	(2 marks)	
(c)	Distinguish between a "modem" and a "multiplexer" as used in computer networks. (4 marks)			
(d)	Descr	ibe five factors to consider when selecting a computer programming language	e. (5 marks) (Total: 20 marks)	
QUE (a)	Highl	THREE ight four business processes that could be supported by the use of comisation.	puterised accounting software in an (4 marks)	
(b)	Expla	in three functions of a power supply unit in a computer system.	(6 marks)	
(c)	Highl	ight four signs that could warn a user of an overheating computer.	(4 marks)	
(d)	Describe each of the following multiuser computers:			
	(i)	Server.	(2 marks)	
	(ii)	Mainframe.	(2 marks)	
	(iii)	Supercomputer.	(2 marks) (Total: 20 marks)	

AD14 & CD14 Page 1 Out of 2

QUE (a)		N FOUR ain the following terms as used in information security:			
	(i)	Malware.	(2 marks)		
	(ii)	Spyware.	(2 marks)		
	(iii)	Worm.	(2 marks)		
	(iv)	Trojan.	(2 marks)		
(b)	High	Highlight four ways in which an operating system could be used to sort computer files. (4 m			
(c)	Desc	ribe four features of each of the following information systems:			
	(i)	Transaction Processing System (TPS).	(4 marks)		
	(ii)	Executive Support System (ESS).	(4 marks)		
QUE (a)	ESTION FIVE Outline four features that could determine the choice of appropriate smartphone for internet usage. (4 m.)				
(b)	Differentiate between the following types of internet connections:				
	(i)	"Dial-up internet" and "cable internet".	(4 marks)		
	(ii)	"Digital subscriber line (DSL)" and "Satellite internet".	(4 marks)		
(c)	Identify two hardware devices in each case that could be used to produce the following output:				
	(i)	Soft copy.	(2 marks)		
	(ii)	Hard copy.	(2 marks)		
(d)	Identify two hardware devices in each case that could be used to produce the following output: (i) Soft copy. (ii) Hard copy. (2 m) (4 m) (Total: 20 m) (ESTION SIX (i) Define the term "utility software". (2 m) (3 m)				
QUE (a)	STIO (i)	N SIX Define the term "utility software".	(2 marks)		
	(ii)	List three examples of utility software.	(3 marks)		
(b)		Explain three factors that influence Garbage In. Garbage Out (GIGO) in the context of data processing. (6 ma			
(c)	(i)	Describe the role of a repeater in computer networking.	(2 marks)		
	(ii)	State three advantages of star network topology.	(3 marks)		
(d)		Distinguish between "switch user option" and "log off option" as used in graphical user interface (GUI) opera systems. (4 ma (Total: 20 ma)			
QUE (a)		N SEVEN ain the meaning of the following wireless networking technologies:			
	(i)	Bluetooth.	(2 marks)		
	(ii)	Infrared.	(2 marks)		
(b)	Outli	ne two advantages and two disadvantages of dot matrix printers.	(4 marks)		
(c)	Expl	Explain three functions of control unit of a computer system. (6 mark			
(d)	Desc	Describe two types of flat panel display monitor. (4 mark			
(e)	List 1	wo examples of registers found within the central processing unit (CPU) of a computer.	(2 marks) (Total: 20 marks)		

AD14 & CD14 Page 2 Out of 2