CWA Inter - Stage I : Information Systems and Technology - December 2009

1—6(IST) Revised Syllabus

Tir	ne A	llowe	d: 3 Hours		·		Full Ma	rks : 100	
			The figur	es in the mar	gin on the rigl	nt side indicate ful	l marks.		
		A	Answer Ques	tion No. 1 wh	ich is compuls	ory and any five fi	com the rest.		
								Marks	
1.	(a) (b)		ch Column 1 each part belo		umn 2 and write your answers only in A, B,, J		in A, B,, J	1x1 0	
			Column 1		Column 2				
		Put	(i) Seek tin (ii) Buffer (iii) Facsim (iv) Firmwa (v) Genera (vi) Downti (vii) Spoolin (viii IBG) Diagno (ix) Routine (x) Pascal an appropriate owing table:	B. Months ille C. Property in the control of the co	 B. Malfunctioning of a computer C. Program that constructs other programs to perform D. For read/write head to move to the desired track in E. system F. To reduce the speed mismatch between I/O device G. CPU H. Stores information on temporary basis I. Indicates system problems 				
		10110	(a) Standard	(b) Object	(c) Location	(d) Boolean algebra	(e) Response	_	
			(g) Program	(h) Cylinder	(i) People	(j) Loop		-	
		(i)	deals with logical proposition which are either true or false.						
		(ii)	A set of corresponding tracks in all the surfaces in a disk pack is called a						
		(iii)	In ERP, an enterprise model is built aroundtechnology, processes, and products/services.						
		(iv)	Fully compiled program that is ready to be loaded into the computer is called an program.						
		(v)	Total elapsed time between submission of a command and data to a computer and getting the result of computation is called time.						

	(c)	Each statement below is either TRUE or FALSE. Choose the most appropriate one.	1x5		
		(i) A multiplexer converts several data communication lines into one large signal at the sending location.			
		(ii) One billionth of a second is known as giga second.			
		(iii) Both magnetic disk and magnetic tape can be used for sequential processing of data.			
		(iv) Two or more CPUs are required for multiprogramming.			
		(v) With a 5 bit binary number, the maximum decimal value that can be expressed is 16.			
2.	(a)	Classify and describe the following printers:	2x2		
		(i) Dot Matrix Printer;			
		(ii) Inkjet Printer.	6		
	(b)	What is multiprocessing? Give its advantages and limitations.			
	(c)	Name the three components of a network and briefly explain the role of each of them.			
3.	(a)	How do you define a system? What is a computer system? Justify your answer.			
	(b)	What is the basic idea behind Business Process Re–engineering? How is it achieved? What are the benefits derived from BPR?	6		
	(c)	What do you understand by Software Quality? What are main tools that are normally employed for quality assurance of software?	6		
4.	(a)	What are the characteristics and features of an ERP?	4		
	(b)	Describe briefly the various transmission techniques.	6		
	(c)	What are the responsibilities discharged and the nature of problems during implementation phase handled by a System Analyst in a database environment?			
5.	(a)	Write the full form of the following abbreviations:	1x4		
		(i) BIOS			
		(ii) DFD			
		(iii) INGRES			
		(iv) CASE			
	(b)	What is an operating system? Why is it necessary for a computer system?	6		
	(c)	What is the role played by "Firewall' in Internet? What purpose does a leased line serve?	6		
6.	(a)	Convert the following number system into as indicated: (i) $(890)_{10} = (\underline{}_{20})_{2}$	2x2		

(ii) $(1023)_{10}$ $(_{---})_{16}$ (b) Distinguish between the following: 2x3Intelligent and Dumb terminals: Syntax and logical errors. (iii) Indexed Sequential and Direct Access Method for records in a file. (c) What are the objectives of Information Technology Act, 2000? How is it 6 helpful in promoting E-Commerce? 4 7. (a) What are information system audit and its key elements? (b) What are the major tasks performed by the Generalized Audit Programmes? 6 (c) What are the features of a good source document design? What safeguards 6 should be taken to ensure success before making changes to source documents? Write short note on any four of the following: 4x4(a) Open and Closed Systems; (b) Requirement of Audit Charter; (c) World Wide Web (WWW); (d) Algorithm; (e) Network Topologies; (f) EBCDIC