B.E.Fourth Semester (Computer Technology) (C.B.S.)

Introduction to Mainframe Languages

P. Pages: 2
Time: Three Hours



NKT/KS/17/7292

Max. Marks: 80

	Note	es: 1. All questions carry marks as indicated. 2. Solve Question 1 OR Questions No. 2. 3. Solve Question 3 OR Questions No. 4. 4. Solve Question 5 OR Questions No. 6. 5. Solve Question 7 OR Questions No. 8. 6. Solve Question 9 OR Questions No. 10.	
		7. Solve Question 11 OR Questions No. 12.	
		8. Assume suitable data whenever necessary.	
		9. Illustrate your answers whenever necessary with the help of neat sketches.	
1.	a)	Discuss the key features and benefits of mainframe computers.	6
	b)	Explain the use of Batch processing in comparison to that of online processing.	5
	c)	Write a short note on mainframe operating system. OR	3
2.	a)	Discuss about the evolution of virtual machines. Also explain how virtualization could be implemented in operating system.	7
	b)	Explain the use of data set in mainframes.	4
	c)	Differentiate between mainframe computer and super computer.	3
3.	a)	Explain in detail the record formats used in direct access storage devices.	6
	b)	Explain in detail the paging process of Z-Operating System (Z/OS) OR	7
4.	a)	Explain the program execution modes of Z-operating system (Z/OS)	7
	b)	Write short note on:	6
	ŕ	i) MVS Address Space ii) Virtual storage access methods.	
5.	a)	Explain the various statements used in job control language with suitable example.	9
	b)	Write a short note on JCL procedure.	4
	U)	15 701	7
6.	a)	OR Justify the need of Job control language. Also explain the structure of job control language.	7
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L	b)	Write a short note on IBM utility program.	6
7.	a)	Explain the four divisions used in cobol program with their syntax & example.	5
	b)	Explain the level structure in cobol program. What is the use of level no 66 & 77 ?	6

1	c)	What is the difference between literal and figurative constant? How many different types	3
	2)	of constants are there in COBOL.	
U)		OR	
8.	a)	Explain the following clauses in COBOL.	6
	,	i) Redefines clause ii) Usage clause	
	b)	Explain the use of move with corresponding option with example.	4
	,		
	c)	Consider each of the following entries & indicate whether it is valid or invalid. Correct the	4
	- /	invalid entries.	-
		i) O2 AMOUNT PIC "\$ZZZZ9.99"	
		ii) O2 B PIC 999 VALUES ARE 15, 20.	
		iii) FILLER PIC X(40) VALUE " SPACES.	
		iv) O2 UNDERLINE PIC X(132) VALUEALL *.	
9.	a)	Explain the following clauses related to the sequential file with example.	5
(A)	3	i) LABEL RECORD Clause.	
))	ii) VALVE of Clause	
) -		iii) DATA RECORD Clause	
	b)	Write a program that will sort a magnetic tape file into the trans-code within the account	8
	,	number order.	
		Positions Fields	
		1 - 8 Account - number (alphanumeric)	
		9 - 15 not used	
		16 - 17 Trans - Code (numeric integer)	
		18 - 60 Not used	
		OR	
10.	a)	Explain WRITE & REWRITE statement for relative file with suitable example.	3
10.	u)	Explain Will & REWRITE statement for relative the with statute example.	-
	b)	Compare SEARCH & SEARCH ALL with suitable example.	4
	(0)	Compare all merrar as all merrar mer management champion	~
	c)	Explain the following verbs with syntax:	6
	• ,	i) STRING Verb ii) COPY verb	Ů
		1) 21111 (6 + 616	
11.	a)	Compare COBOL file handling program and JCL.	5
	,	The second of th	
	b)	Explain the role of DB2 in mainframe application development.	4
	,		
	c)	What are the various types of ABEND codes? Explain with example.	4
	,	OR	
10	-)		_
12.	a)	Explain DB2 Precompile - compilation - Bind process with suitable diagram.	7
	1. \		_
	b)	Explain the following program execution methods.	O
IE	7	i) Edit - JCL	1
12	116	ii) Foreground modes.	4
1<		iii) Background modes.	
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