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### B.C.A. (Semester - III) (Old) (CGPA) Examination Mar/Apr-2018 DATA STRUCTURE USING 'C'

	DATA STRUC	TURE USING 'C'
Time	e: 21/2 Hours	Max. Marks: 70
Instr	ructions: 1) Q.1 and Q.7 are compulsor 2) Attempt any two questions 3) Attempt any one question f	from Q.2 to Q.4.
Q.1	Choose the correct alternatives:  1) The is not a sorting alg a) Quick sort c) Selection sort	orithm. b) Binary sort d) Radix sort
	2) Hashing is a technique a) Searching c) Sorting	b) Merging d) Insertion
	<ul><li>3) The root is processed after its sub</li><li>a) Inorder</li><li>c) Postorder</li></ul>	trees in traversal. b) Preorder d) None of these
	4) algorithm searches a given array by repeatedly dividing the seal a) Hashing c) Quick Sort	ven value or element in an already sorted arch interval into half. b) Binary search d) Linear Search
	<ul><li>5) Which of the following sorting technical insertion Sort</li><li>c) Quick Sort</li></ul>	nique applied on two sorted lists? b) Radix Sort d) Merge Sort
	<ul><li>6) In AVL Tree, the Balance Factor of</li><li>a) 1,2,3</li><li>c) -1,0,1</li></ul>	b) -1,1,2 d) 2,0,-2
	<ul><li>7) The complexity of linear search alg</li><li>a) O (n)</li><li>c) O (n2)</li></ul>	porithm is b) O (log n) d) O (n log n)
	8) The data structure uses a) Stack c) Array	linear order. b) Queue d) All of these
	<ul><li>9) is not valid real life exa</li><li>a) Passengers waiting for Bus sta</li><li>c) String reversal</li></ul>	mple or application of Stack.  nd b) Recursion d) None of these
	<ul><li>10) The best data structure to check we balanced parentheses is a</li><li>a) Queue</li><li>c) Tree</li></ul>	
	<ol> <li>The Binary tree is linear data struct</li> <li>True</li> </ol>	cture. b) False

	<ul><li>12)Binary search algorithm cannot be a</li><li>a) Sorted Linked list</li><li>c) Sorted linear array</li></ul>	pplied to  b) Sorted binary tree d) None of these	
	13)Partition and exchange sort is a) Quick sort c) Bubble Sort	•	
	<ul><li>14)What is postfix form of given express</li><li>a) ABCD+-*</li><li>c) AB+CD-*</li></ul>	sion: ((A+B)*(C-D)) b) ABCD-+* d) ABCD*-+	
Q.2	<ul><li>a) What is data structure? Explain diffe</li><li>b) What is Circular Queue? Explain diffe</li><li>Queue.</li><li>c) Define Expression tree and Threade</li></ul>	ferent operations performed on circular	05 05 04
Q.3	<ul> <li>a) Define the terms:-</li> <li>1) Height and Depth of tree</li> <li>2) Ancestor and Decedent</li> <li>3) Leaf node</li> <li>b) Write algorithm of Merge Sort.</li> </ul>		05
	c) What is ADT? Explain Queue as AD	т.	04
Q.4	<ul><li>a) What is Dequeue? Explain different</li><li>b) Write a program to implement Bubbl</li><li>c) Write algorithm of evaluation of post</li></ul>	le sort.	05 05 04
Q.5	<ul> <li>a) Write a program to implement Linker</li> <li>1) Insert Last</li> <li>2) Delete Last</li> <li>3) Display List</li> <li>b) What is Binary Tree? Explain differe</li> </ul>		07 07
Q.6	<ul> <li>a) Write a program to implement Binary</li> <li>1) Insert node</li> <li>2) Delete node</li> <li>3) Inorder tree traversing</li> <li>b) What is linear search? Explain with explain</li> </ul>	y Search tree with following operations.	07 07
Q.7	<ul> <li>Write a short note on the following:-</li> <li>a) AVL Tree</li> <li>b) Explain Stack uses in recursion with</li> <li>c) Doubly linked list</li> </ul>	(Any 2)	14

Ь	.0.2	` ' '	ID DATA COMMUNICATION	
Time: 2½	Hou	ırs	Max. Marks: 7	70
nstruction	ons:	<ol> <li>Q.1 and Q.7 are compt</li> <li>Attempt any two questi</li> <li>Attempt any one quest</li> </ol>	ons from Q.2, Q.3 and Q.4.	
Q.1 a)	1)	a time as a) simplex c) half duplex	um that supports data in both directions one at b) multiplex d) full duplex	10
	2)	a) odd c) both a and b	ne number of zero's in each valid code word is  b) even d) cannot be said	
	3)	Framing is a job of a) physical c) data link	,	
	4)	IP addresses are of a) 8 bits c) 32 bits	b) 16 bits d) 64 bits	
	5)	Which of the following cal a) Co-axial c) STP	ble type supports the highest bandwidth? b) fiber-optic d) UTP	
	6)	a) Shannon's c) Newton	I to calculate data rate for noiseless channel. b) Nyquist d) none	
	7)	UDP is a) connectionless c) connection oriented	<ul><li>b) message oriented</li><li>d) both a and b</li></ul>	
	8)	Which of the following TC mails? a) FTP c) SNMP	P/IP protocol is used for transferring electronic b) SMTP d) IP	
	9)	In carrier sign level of modulating signal a) AM c) PM	al is modulated to follow the changing voltage b) FM d) GM	
	10)	a) CRC c) HDLC	rrors which may occur during transmission. b) DLC d) DCE	

#### SLR-CV-2 State True or False:-04 **Q.1** b) 1) IP address is also called as network address. 2) Communications between two computers are always serial. 3) Multiple protocols are grouped together to form a protocol suite. 4) The information that has discrete states is called analog data. Q.2 Write the Answer of the following question. (Any Two) 14 a) What is data communication system? Give the components and characteristics of communication system. **b)** Compare between virtual circuit subnet and datagram subnet. c) Explain Cyclic Redundancy Check (CRC) with example. Write the Answer of the following questions:- (Any Two) 14 Q.3 a) Differentiate between LAN and WAN. **b)** Explain network topology? Explain in various types. c) Explain the concept of amplitude modulation and frequency modulation in detail. Write the Answer of the following questions:- (Any Two) 14 Q.4 a) Explain multiplexing with its various types. b) Explain concept of OSI model in detail. c) What do you mean by computer network? Explain different advantages of it. a) Explain guided media in detail. 07 Q.5 **b)** Explain different multiple access protocols? 07 a) Explain distance vector routing algorithm. 07 07 **b)** Explain open loop congestion control policy? 14 Write short notes on: (Any Two) Q.7 a) Types of errors **b)** Compression

c) UDP

d) Design issue of layers

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	Ь	DATABASE MANAGI	-	
Time	: 2½	∕₂ Hours		Max. Marks: 70
Instr	ucti	ions: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from 3) Attempt any one question from 0		
Q.1		,	b)	as Number of attributes Number of constraints.
	2)	<ul><li>Cartesian product in relational algebra is</li><li>a) A Unary operator</li><li>c) A Ternary operator</li></ul>	b)	A Binary operator
	3)	An entity set that does not have sufficient	nt a	attributes to form a primary key is a
		,	,	Weak entity set Primary entity set
	4)	,	b)	ationship between tables. Foreign Key Child Key
	5)	The advantage of DBMS is a) Data independence c) To avoid the data redundancy	b) d)	 Centralized control of data All of these
	6)	, 3	b)	user. DBA Web user
	7)	The full form of DDL is Dynamic Data Laa) True	-	guage. False
	8)	Which of the following is not record data a) Relational model c) ER model	b)	odel? Network model Hierarchical model
	9)	The advantage of view is to provide the a) True		ta security. False
	10	)Which database level is closest to the u a) External c) Physical	b)	rs? Internal Conceptual
	11	<ul> <li>)What is ACID properties of Transaction</li> <li>a) Atomicity, Consistency, Isolation, Decomposition</li> <li>b) Atomicity, Consistency, Isolation, Decomposition</li> <li>c) Atomicity, Consistency, Inconsistency</li> <li>d) Automatically, Concurrency, Isolation</li> </ul>	ata ura cy,	bility Durability

	12	<ul><li>a) Lost Update</li><li>c) Inconsistent Data</li></ul>	b)	Uncommitted Dependency All of these	
	13	The transaction wants to edit the data in a) Exclusive Mode c) Inclusive Mode	b)	is called as Shared Mode Unshared Mode	
	14	<ul><li>2NF is based on the concept of</li><li>a) Semi functional dependency</li><li>c) Transitive dependency</li></ul>	,	Fully functional dependency Multi valued dependency	
Q.2	b)	What is database? Explain architecture What is concurrency control? Explain to Explain referential integrity with suitable	ov	phase locking protocol.	05 05 04
Q.3	<ul><li>a) Explain the storage manager of DBMS.</li><li>b) What is deadlock? Explain the concept of deadlock.</li><li>c) Write note on Database Language.</li></ul>				05 05 04
Q.4	b)	What is indexing? Explain sparse index Explain different types of keys. Write note on DBA.	( Wit	th suitable example.	05 05 04
Q.5	•	Describe the following relational algebra i) Project ii) Select iii) Carte Discuss the concept conflict serializabil	esia	perations with example. n product	07 07
Q.6		What is data model? Explain network a What is normalization? Explain 1 <sup>st</sup> and			07 07
Q.7	a) b)	rite a short notes on:- (Any 2) Generalization & Specialization 3 tier architecture & it's advantages Log based protocol			14

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# B.C.A. (Semester - III) (Old) (CGPA) Examination Mar/Apr-2018 CORE JAVA

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Time:	2½ Ho	urs	Max. Marks: 70
Instru	uctions	<ul><li>1) Q.1 and Q.7 are compulsory.</li><li>2) Attempt any two questions from Q</li><li>3) Attempt any one question from Q</li><li>4) Figures to the right place indicate</li></ul>	Q. 5 and 6.
Q.1	A) C	hoose the single correct alternative	e. 14
	1)	Package is imported by java compiler. a) io c) net	default in every java program by b) util d) none of these
	2)	The minimum and maximum value (a) -128 to +127 c) -127 to 128	for a byte data type in java is b) -127 to +127 d) -128 to +128
	3)	String is class in java which is included library.  a) Awt c) lang	ded in package of java b) swing d) util
	4)	Which of the following statements can break contents contents can be seen to be seen a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statements can be seen as a content of the following statement of the following sta	can be used in java? b) continue d) All of these
	5)	What is the name of the method use a) init() c) run()	ed to start thread execution? b) start() d) resume()
	6)	Which of the following is not a meth a) next() c) nextInt()	nod in java.util.Scanner class? b) nextLine() d) nextBoolean()
	7)	a) String c) StringBuilder	b) StringBuffer d) All of these
	8)	The default value of a chardatatype a) null c) false	e is b) a space d) None of these
	9)	'super' keyword is used to refer a) super class variable c) super class constructor	b) super class methods d) All of these
	10	O) All the methods of interface are a) public c) both a) and b)	b) abstract d) None of these
	11	The default value of Thread priorition     Thread.NORM_PRIORITY is  a) 5	
		c) 3	d) 7

,	1024 bytes 512 bytes	,	-		
a)	Card Layout	b)	Grid Layout		
a)	java.awt	b)	java.awt.event	package.	
<ul><li>a) Explain</li><li>b) Write a</li></ul>	n features of Java. I note on JDK tools in java.	estion.			14
<ul><li>a) Explain</li><li>b) Explain</li></ul>	n final keyword with suitable n finally block with suitable e	example. example.			14
<ul><li>a) Explain</li><li>b) What is types o</li></ul>	n FileWriter and FileReader is package? What are the ac of packages?	class with Ivantages	of packages? E	xplain different	14
, ,	•		nple.		14
•	. •		e.		14
<ul><li>a) AWT</li><li>b) Abstract</li><li>c) Instanct</li></ul>	ct class ce variable				14
	Answer and Explain by Explain by Write and Explain by What is types of type	c) 512 bytes  13) The default layout manager for a) Card Layout c) Flow Layout  14) All the Listener interfaces are a) java.awt c) javax.swing  Answer any two of the following quance a) Explain features of Java. b) Write a note on JDK tools in java. c) Explain looping structure in java. Answer any two of the following quance a) Explain final keyword with suitable b) Explain finally block with suitable c) What is event delegation model in Answer any two of the following quance a) Explain FileWriter and FileReader b) What is package? What are the act types of packages? c) Write a program to implement sing a) Explain user defined exception with b) Explain static method with an examal write a program to implement 2 into b) Explain constructor overloading with Write a short note (Any two)	c) 512 bytes d)  13)The default layout manager for any Fra a) Card Layout b) c) Flow Layout d)  14) All the Listener interfaces are included a) java.awt b) c) javax.swing d)  Answer any two of the following question. a) Explain features of Java. b) Write a note on JDK tools in java. c) Explain looping structure in java.  Answer any two of the following question. a) Explain final keyword with suitable example. b) Explain finally block with suitable example. c) What is event delegation model in java?  Answer any two of the following question. a) Explain FileWriter and FileReader class with b) What is package? What are the advantages types of packages? c) Write a program to implement single inherita a) Explain user defined exception with an examb b) Explain static method with an example. a) Write a program to implement 2 interfaces. b) Explain constructor overloading with example Write a short note (Any two) a) AWT b) Abstract class c) Instance variable	c) 512 bytes  13) The default layout manager for any Frame in awt is a) Card Layout b) Grid Layout c) Flow Layout d) Border Layout  14) All the Listener interfaces are included in a) java.awt b) java.awt.event c) javax.swing d) java.awt.geom  Answer any two of the following question. a) Explain features of Java. b) Write a note on JDK tools in java. c) Explain looping structure in java.  Answer any two of the following question. a) Explain final keyword with suitable example. b) Explain finally block with suitable example. c) What is event delegation model in java?  Answer any two of the following question. a) Explain FileWriter and FileReader class with an example. b) What is package? What are the advantages of packages? E types of packages? c) Write a program to implement single inheritance. a) Explain user defined exception with an example. b) Explain static method with an example. a) Write a program to implement 2 interfaces. b) Explain constructor overloading with example.  Write a short note (Any two) a) AWT b) Abstract class c) Instance variable	c) 512 bytes  d) 128 bytes  13)The default layout manager for any Frame in awt is a) Card Layout b) Grid Layout c) Flow Layout d) Border Layout  14) All the Listener interfaces are included in package. a) java.awt b) java.awt.event c) javax.swing d) java.awt.geom  Answer any two of the following question. a) Explain features of Java. b) Write a note on JDK tools in java. c) Explain looping structure in java.  Answer any two of the following question. a) Explain final keyword with suitable example. b) Explain finally block with suitable example. c) What is event delegation model in java?  Answer any two of the following question. a) Explain FileWriter and FileReader class with an example. b) What is package? What are the advantages of packages? Explain different types of packages? c) Write a program to implement single inheritance. a) Explain user defined exception with an example. b) Explain static method with an example. a) Write a program to implement 2 interfaces. b) Explain constructor overloading with example.  Write a short note (Any two) a) AWT b) Abstract class c) Instance variable

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# B.C.A. (Semester - III) (Old) (CGPA) Examination Mar/Apr-2018 FINANCIAL MANAGEMENT

Time	: 2½ ł	Hours Max. Marks: 70
Instr	uctio	<ul> <li>1) Q.1 and Q.7 are compulsory.</li> <li>2) Attempt any two questions from Q. 2 to Q. 4.</li> <li>3) Solve any one questions from Q.5 and Q.6.</li> <li>4) Figures to the right indicate full marks.</li> </ul>
Q.1	A)	Choose the correct alternatives.  1) As an objectives of financial management maximization is better than profit maximization.  a) Money b) Assets c) Wealth d) Profit after tax
		assets are defined as those assets which in normal course of business are convertible into cash usually within one year.     a) Fixed
		<ul> <li>3) Financial decision involves</li> <li>a) Investment, Financial and Dividend decisions.</li> <li>b) Sales decisions.</li> <li>c) Profit Decisions</li> <li>d) None of these</li> </ul>
		<ul> <li>4) When a corporation is earning an extraordinarily large return on its outstanding stocks it is said to be</li> <li>a) Working capital management.</li> <li>b) Over capitalization</li> <li>c) Under capitalization</li> <li>d) All of the above</li> </ul>
		<ul> <li>5) Short term assets which in the normal course of business are convertible into cash within</li> <li>a) 2 year</li> <li>b) 1 year</li> <li>c) 4 year</li> <li>d) 3 year</li> </ul>
		6) Holder receives a fixed rate of interest irrespective of profits made by the company. a) Debenture b) Equity c) Preference d) None of these
		7) The leverage of a firm is essentially related to measures. a) Assets b) Profit c) Expenses d) Cost
Q.1	В)	<ol> <li>State True or False.</li> <li>The financial manager takes key decisions on the allocation and use of funds by various departments.</li> <li>Working capital is considered to be the life blood of business.</li> <li>Operating cycle starts with cash and end with profit.</li> <li>The formula for computation of operating leverage = contribution/operating profit.</li> <li>The combined leverage is a measure of total risks of the firm.</li> <li>Financial planning is incomplete without cash budgets.</li> <li>EBIT is also known as operating profits.</li> </ol>

Q.2	Write a short note:- (Any two)
	a) Define capitalization and Explain over capitalization.
	b) Explain steps of financial planning.

### c) Define business finance.Q.3 Write a short note:- (Any two)

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- a) Define financial management and Explain objectives of financial management.
- **b)** Define working capital and Explain types of working capital.
- c) Explain operating cycle of working capital.

#### Q.4 Write a short note:- (Any two)

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- a) Define working capital and explain the Determinant/Factor affecting working capital.
- **b)** Explain the Degree of combined leverage.
- c) Discuss the role of financial manager.

#### Q.5 Write a short note:- (Any two)

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- a) Define finance. Explain function of financial manager.
- b) Banking committee computation of working capital.
- c) Merit and demerits of wealth maximization.
- Q.6 While preparing a project report on behalf of a client you have collected the following facts. Estimate the net working capital required for that project. Add 10 per cent to you computed figure to allow contingences.

Particular	Amount per unit (Rs)
Raw Material	80
Direct labour	30
Overheads	60
Total cash cost	170

#### Additional Information:

- 1) Selling price Rs. 200 per unit.
- 2) Level of activity 1,04,000 units of production per annum.
- 3) Raw material in stock average 4 weeks.
- 4) Work in progress (assume 50 per cent completion stage in respect of conversion costs and 100 per cent completion in respect of materials) average 2 weeks.
- 5) Finished goods in stock, average 4 weeks.
- 6) Credit allowed b supplier, average 4 weeks.
- 7) Credit allowed to debtors, average 8 weeks.
- 8) Lag in payment of wages, average 1.5 weeks.
- 9) Cash at bank is expected to be Rs. 25,000. You may assume that production is carried on evenly through the year (52 weeks) and wages and overheads accrue similarly all sales are on credit basis only.
- Q.7 a) Explain Operating, Financial and Combined leverage with suitable example.
  b) Define capitalization and Explain theories of capitalization.
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### B.C.A. (Semester - IV) (Old) (CGPA) Examination Mar/Apr-2018 SOFTWARE ENGINEERING

		SOFTWARE ENGINEERING	
Time	e: 2½	Hours Max. Marks:	70
Instr	uctio	2) Attempt any two questions from Q. 2 to Q. 4. 3) Solve any one questions from Q.5 and Q.6. 4) Figures to the right indicate full marks.	
Q.1	A)	Choose correct alternatives.  1) module gets parameters from super ordinate, process it and return back.  a) Afferent b) Efferent c) Co-ordinate d) Transform  2) Which of the following is not content of data dictionary? a) Physical Location b) Data Composition c) Data Aliases d) None of these  3) The radius is spiral model of SDLC tells us accumulated in	07
		system so far.  a) Time b) Risk c) Cost d) None of these	
		<ul> <li>4) Data structure diagram and structured chart are useful in phase of SDLC.</li> <li>a) Coding</li> <li>b) Testing</li> <li>c) Designing</li> <li>d) Requirement analysis</li> </ul>	
		5) is a black box testing method? a) Boundary value analysis b) Basic path testing c) Code path analysis d) None of these	
		<ul> <li>6) Enhancements, upgrades and bug fixes are done during the step in the SDLC.</li> <li>a) Maintenance and Evaluation</li> <li>b) Problem / Opportunity Identification</li> <li>c) Design</li> <li>d) Development and Documentation</li> </ul>	
		7) can allow excellent parallel implementation in the beginning. a) Top down implementation b) Bottom up implementation c) Sandwich implementation d) None of these	
Q.1	B)	<ol> <li>State whether True or False</li> <li>Data flow diagram is also known as Bubble chart.</li> <li>A television is relatively open system.</li> <li>HIPO chart is helpful in documenting a system.</li> <li>A requirement specification is an agreement between the system developer and the end user.</li> </ol>	04

	C) Fill in the blanks	03
	<ol> <li> normal form is related to functional dependency.</li> <li> is an association between entities.</li> <li>Diagnosis and removal of residual errors related with maintenance.</li> </ol>	
Q.2	<ul> <li>Attempt any two of the following</li> <li>a) What is System? Explain its different elements.</li> <li>b) Explain the steps of traditional approach to implementation.</li> <li>c) What is system maintenance? Explain various categories of maintenance.</li> </ul>	14
Q.3	<ul> <li>Attempt any two of the followings:</li> <li>a) Who is System Analyst? Explain various roles of system analyst.</li> <li>b) Draw ER-Diagram for Railway reservation system.</li> <li>c) Explain Normalization up to 3<sup>rd</sup> form.</li> </ul>	14
Q.4	<ul> <li>Attempt any two of the followings:</li> <li>a) Explain different phases of System Development Life Cycle.</li> <li>b) Draw an HIPO chart for Payroll system.</li> <li>c) Explain any three fact finding techniques in details.</li> </ul>	14
Q.5	<ul> <li>a) Construct decision tree by considering following case study. A Co-operative bank XYZ will grant loans under the following conditions – <ul> <li>i) If a customer has an account with the bank and has no loan outstanding, loan will be granted.</li> <li>ii) If a customer has an account with the bank but some amount is outstanding from the previous loan, then loan will be granted if special management approval is obtained.</li> <li>iii) Reject loan applications in all other cases.</li> </ul> </li> <li>b) Design input screens for the library system.</li> </ul>	07
Q.6	<ul><li>a) Prepare Data dictionary for college Admission system.</li><li>b) Draw CLD and first level DFD for Mark sheet printing system.</li></ul>	07 07
Q.7	<ul> <li>Write short notes on the following (Any two)</li> <li>a) Structured English</li> <li>b) Waterfall Model</li> <li>c) Requirement Investigation &amp; requirement specification</li> </ul>	14

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### B.C.A. (Semester - IV) (Old) (CGPA) Examination Mar/Apr-2018

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Time: 2½	∕₂ Hours	Max. Marks: 70
Instruct	ions: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from 3) Attempt any one question from 0	
	noose the correct alternatives:  A is a set of tables physical shares a common column.  a) Index	b) Object
2)	c) Cluster is invalid data type. a) Char c) Varchar1	<ul><li>d) Non-index</li><li>b) Varchar2</li><li>d) Number</li></ul>
3)	Which of the following is not valid comma) Update c) Create	mand in PL/SQL? b) Delete d) All of these
4)	Oracle is a second generation relationa a) True	al database management system. b) False
5)	A stored procedure is a  a) stored in a compiled form in the data b) can be shared c) sequence of SQL statements d) all of these	abase
6)	Which of the following is correct about va) It is a virtual table c) Both a and b	view? b) It is derived from other table d) None of these
7)	The select statement is used toa) display the records from a table b) modify structure of a table c) update existing record d) none of these	
8)	Which of the following is used to define occur?  a) Cursor c) Both A and B	b) Trigger d) None of these
9)	Which SQL keyword is used to sort the a) order c) order by	,
10	<ul> <li>Which of the following is not a type of S</li> <li>a) Data Definition Language (DDL)</li> <li>b) Data Manipulation Language (DML)</li> <li>c) Data Standard Language (DSL)</li> <li>d) Data Control Language (DCL)</li> </ul>	

<b>.</b>	a) b) c)	SQL and its advantages Cursor attributes Domain and tuple Advantages of PL/SQL exceptions			14
Q.6 Q.7	b)	Write a cursor to display top 5 salaried What are triggers? How to create trigge ite short note on :-		•	07 07 14
Q.5	return salary of that employee.				07 07
Q.4	<ul><li>a) Give the syntax and example of sequence and synonym.</li><li>b) Differentiate between where clause and having clause with suitable example.</li><li>c) Explain advantages of views.</li></ul>				05 05 04
Q.3	<ul><li>a) Discuss on any five of the aggregate functions in SQL with examples.</li><li>b) Explain different conversion functions.</li><li>c) Explain like operator.</li></ul>				
Q.2	b)	Give the applications of triggers with su What is self-join? Give one example. Write not on cluster.	itak	ole example.	05 05 04
	14)	Which of the following is not predefined a) login_denied c) too_many_rows	b)	ception? no_data_found cursor_invalid	
	13)	In a relational schema, each tuple is di a) True		ed into fields called domains. False	
	12)	Which of the following is not type of joi a) equi-join c) inner join	b)	non-equi join outer join	
	11)	The update command is used to modify a) True		ructure of a table. False	

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## B.C.A. (Semester - IV) (Old) (CGPA) Examination Mar/Apr-2018 OPERATING SYSTEM

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Time: 21/2 Hou	urs	Max. Marks: 7	'0
Instructions:	<ul><li>1) Q.1 and Q.7 are compulsory.</li><li>2) Attempt any two questions from Q.5 a</li><li>3) Solve any one questions from Q.5 a</li><li>4) Figures to the right indicate full mark</li></ul>	nd Q.6.	
	noose correct alternatives from the formula that the critical task of time called as		0
	<ul><li>a) Soft Real time system</li><li>c) Time Sharing System</li></ul>	<ul><li>b) Hard Real Time System</li><li>d) Real time system</li></ul>	
2)	is a logical extension of a) Time sharing c) Distributed	multiprogramming system. b) Parallel d) Batch system	
3)	A program in execution is called a) Function c) Procedure	b) Instruction d) Process	
4)	Which process can be affected by other system?  a) Co-operating process c) Parent process	er processes executing in the b) Child process d) init process	
5)	FIFO scheduling is  a) Preemptive scheduling c) Deadlock scheduling	<ul><li>b) Non-Preemptive scheduling</li><li>d) None of these</li></ul>	
6)	Virtual memory is implemented using a) Demand paging c) Fragmentation	b) Swapping d) None of the Above	
7)	from the Memory of computer system.	ily removing inactive programs b) Spooling d) Swapping	
8)	The priority scheduling algorithm suffe a) Deadlock c) Starvation	rs by b) Aging d) All of these	
9)	File type can be represented by a) File name c) File identifier	b) File extension d) None of the above.	
10	The banker's algorithm is used for dea     a) Prevention     c) Detection	adlock b) Avoidance d) Recovery	

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	scier 2) Time 3) An o vario	ntific applicate quantum is perating sysous I/O device	ions. defined in pric tem can be vie es and user pr	ority schedo wed as "re ograms.	or many commercial and uling algorithm. esource allocator" to control address is done by MMU.	
Q.2	<ul> <li>Write the Answer of the following question. (Any Two)</li> <li>a) Explain The Different Services provided by Operating System.</li> <li>b) Explain process states with state transition diagram.</li> <li>c) What is process Scheduling? Explain different types of schedulers.</li> </ul>					
Q.3	<ul><li>a) Define the</li><li>b) What is m</li></ul>	e term deadlo neant by syno	•	ne necessa Explain the	ary conditions of deadlock.  Dining Philosophers Problem.	14
Q.4	a) Explain co	ontiguous alle the following		d for alloca	(Any Two) ating disk space. Priority and Round Robin	14
		Process	Burst Time	Priority		
		P1	21	2		
		P2	3	1		
		P3	6	4		
		P4	2	3		
	4) . D		e Time Slice=5			
	<u>-</u>		for above algo			
	•		erage waiting ti erage turnarou			
	c) Explain V		•	na time.		
	, ,		•			
Q.5		age replacer	owing question nent? Write the		LRU page replacement	14
	<b>b)</b> Define op	erating syste	m? Explain dit	fferent type	es of operating system.	
Q.6	Write Answe	er of the foll	owing question	on:-		14
			• •		voidance in detail.	
	<b>b)</b> Define pa	ging? Explai	n Demand Pag	ging in deta	ails.	
Q.7	Write short i	notes on the	following : (	Any Two)		14
	a) System C		5 (	,		
	b) Semapho	re and Critic	al Region.			
	c) Segmenta	ation.				

Q.1 b) State True or False:-

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	D	WEB TECHNOL		•	
Time	: 2½	∕₂ Hours		Max. Marks	: 70
Instr	ucti	ions: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from Q 3) Attempt any one question from Q. 4) All questions carry equal marks.			
Q.1		noose the correct alternatives:  PHP is a widely used open source general especially suited for web development.  a) True		urpose scripting language that is	14
	2)	Which of the following php statement/stat num? a) int \$num = 111;	eme	ents will store 111 in variable int num = 111;	
	3)	c) \$num = 111; The function checks if the "en a) f_eof() c) feofs()	id-o b)	All of these f-file" (EOF) has been reached. f_of() feof()	
	4)	Which of the following method is suitable submissions?  a) Get c) Both a and b	whe	V	
	5)	Which of the following PHP statement will on the screen?  a) echo ("PHP is an Open Source"); c) printf ("PHP is an Open Source");	b)	print ("PHP is a Open Source");	
	6)	Which function is used to erase all sessio session?  a) Session_destroy()  c) Session_remove()	b)	ariables stored in the current Session_change () Session_unset()	
	7)	Which of the following keyword is used to a) Extends c) Inherits	b)	erit subclass into a superclass? Implements None of these	
	8)	What is the correct way to connect to a M a) dbopen("localhost"); c) mysql_connect("localhost");	b)	QL database? mysql_open("localhost"); connect _mysql("localhost");	
	9)	Which of the following statement is correct a) It is a server side scripting language b) A PHP file may contain text, html tags c) Both a and b d) None of these			
	10	) is a special variable, which can l a) Array c) Structure		Class	

11	<ul><li>)\$this is used to refer to properties or meth</li><li>a) True</li></ul>	ods within the class itself. b) False	
12	) new_rows()method is used to retrieve the INSERT, UPDATE, or DELETE query.  a) True	number of rows affected by an b) False	
13	<ul><li>a) PHP can be used to develop web app</li><li>b) PHP makes a website dynamic.</li></ul>	lications.	
14	)The PHP syntax is most similar to a) C Language c) VB Script	b) Java Script d) Visual Basic	
b)	Explain server side validation.	as server side languages.	05 05 04
b)	Write a program which uses the static met	•	05 05 04
b)	Explain working with PHP and MySQL en	vironment	05 05 04
-		asses and interfaces with example.	07 07
	<ol> <li>array_diff()</li> <li>asort()</li> <li>array_sum()</li> <li>array_merge()</li> </ol>		07
-	•	s and session object.	07
a) b) c)	Differentiate session and cookie Hidden field Use of final keyword		14
	12 13 14 a) b) c) a) b) c) a) b) Wa) b) c)	a) True  12) new_rows()method is used to retrieve the INSERT, UPDATE, or DELETE query. a) True  13) Which of the following is not true about Plance and person be used to develop web apperations by PHP makes a website dynamic. c) PHP applications support to the OOP d) PHP cannot be embedded into html  14)The PHP syntax is most similar to	12) new_rows()method is used to retrieve the number of rows affected by an INSERT, UPDATE, or DELETE query.  a) True  b) False  13) Which of the following is not true about PHP?  a) PHP can be used to develop web applications. b) PHP makes a website dynamic. c) PHP applications support to the OOP's Concept d) PHP cannot be embedded into html  14) The PHP syntax is most similar to

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# B.C.A. (Semester - IV) (Old) (CGPA) Examination Mar/Apr-2018 E-COMMERCE

Time	: 2½	Hours Max. Marks:	: 70
Instr	uctio	ons: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from Q. 2 to Q.4. 3) Attempt any one question from Q. 5 and Q.6.	
Q.1	A)	Select the correct alternatives:  1) The concept of electronic cash is to execute payment by  a) Credit Card  b) ATM Card  c) Using computers over network  d) Cheque	07
		<ul> <li>Which segment do eBay, Amazon.com belong?</li> <li>a) B2B<sub>s</sub></li> <li>b) B2C<sub>s</sub></li> <li>c) C2B<sub>s</sub></li> <li>d) C2C<sub>s</sub></li> </ul>	
		<ul> <li>3) The Methods of payment for online consumer are</li> <li>a) Electronic Cash</li> <li>b) Credit/Debit</li> <li>c) Electronic Checks</li> <li>d) All of the above</li> </ul>	
		<ul> <li>4) Which is not a function of E-Commerce?</li> <li>a) Marketing</li> <li>b) Advertising</li> <li>c) Warehousing</li> <li>d) None of the above</li> </ul>	
		5) Which of the following is not related to security mechanism? a) Encryption b) Decryption c) E-cash d) All of these	
		<ul> <li>6) Digital signature is</li> <li>a) Scanned signature on computer</li> <li>b) Code number of the sender</li> <li>c) Public key Encryption</li> <li>d) Software to recognize signature</li> </ul>	
		7) Which is not a feature of e-commerce? a) SCM b) EDI c) WWW d) BPR	
Q.1	B)	<ul> <li>Fill in the blanks:-</li> <li>1) A digital signature is</li> <li>2) The term ISP refers to</li> <li>3) The study of encryption is called</li> <li>4) E-Cheques are</li> <li>5) The presence of make the smart card smart.</li> <li>6) is the electronic transmission of business transaction documents directly between the computers of trading partner in a standard message format.</li> <li>7) Consumer interaction, the essence of consumer focused (B2C) ecommerce, is the front end to</li> </ul>	07

		SLR-CV-10
Q.2	<ul> <li>Write a short note. (Any Two)</li> <li>a) Define EDI and Explain benefits of EDI.</li> <li>b) Define E-Commerce perspectives.</li> <li>c) Define e- commerce. Explain scope of electronic commerce.</li> </ul>	14
Q.3	<ul><li>Answer the following:</li><li>a) Explain the web site evaluation model.</li><li>b) What is electronic Market?</li></ul>	14
Q.4	<ul><li>Answer the following:-</li><li>a) What is supply chain management?</li><li>b) Write the process of online share dealing.</li></ul>	14
Q.5	<ul><li>Answer the following:-</li><li>a) Explain the porter's model.</li><li>b) Explain the e-commerce security System.</li></ul>	14
Q.6	<ul><li>Answer the following:-</li><li>c) Explain the pen and thing.</li><li>d) Define E-Diversity.</li></ul>	14
Q.7	<ul><li>Write a short note:- (Any two)</li><li>a) Strategic implication of IT.</li><li>b) Virtual auction.</li><li>c) Electronic news paper.</li></ul>	14

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### B.C.A. (Semester - V) (CGPA) Examination Mar/Apr-2018

		ADVANCE	ED JAVA – I
Time	: 2½	∕₂ Hours	Max. Marks: 70
Instr	ucti	ions: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from 3) Solve any one questions from 4) Figures to the right indicate fu	om Q. 2 to Q. 4. n Q.5 and Q.6.
Q.1	_	noose the correct alternatives:  Which method is used to perform DD a) execute() c) executeUpdate()	DL statements in JDBC? b) executeQuery() d) executeResult()
	2)	Which driver is called thin driver.  a) Type-1 c) Type-3	b) Type-2 d) Type-4
	3)	To display status on applet window _ a) showString() c) showStatus()	method is used. b) drawString() d) printString()
	4)	Which package contains Graphics cla a) java.applet c) java.lang	lass? b) java.graphics d) java.awt
	5)	What does XML stand for? a) extra Modern Link c) example Markup Language	<ul><li>b) extensible Markup Language</li><li>d) X-Markup Language</li></ul>
	6)	What is the correct syntax of the decl a) <xml version="1.0"></xml> c) xml version="1.0"?	claration which defines the XML version? b) xml version="1.0" / d) None of the above
	7)	Which packages represent interfaces <ul><li>a) java.sql.*</li><li>c) Both A and B</li></ul>	s and classes for JDBC API? b) javax.sql.* d) None of the above
	8)	To run an applet comma a) java c) applet	nand is used. b) javac d) appletviewer
	9)	Sessions is a part of the SessionTract state at side.  a) client c) both a and b	cking and it is for maintaining the client  b) server d) none of the above
	10	)Which of the method does not define a) init() c) update()	e the Applet class? b) start() d) destroy()
	11	<ul><li>) Clean up process in servlet is handle</li><li>a) start()</li><li>c) init()</li></ul>	led by method. b) stop() d) destroy()

	12) Which is the correct xml comment?		
	a)	b) //	
	c) !	d) All of these	
	<ul><li>13) class is used to call sto</li><li>a) StoredStatement</li><li>c) CallableStatement</li></ul>	ored procedures and function. b) PreparedStatement d) None of these	
	<ul><li>14) Cookies are stored at</li><li>a) server</li><li>c) Both A and B</li></ul>	_ side. b) client d) None of these	
Q.2	<ul><li>A) Explain JDBC drivers.</li><li>B) Explain the applet life cycle.</li><li>C) What is XML? What are the uses of X</li></ul>	XML?	05 05 04
Q.3	<ul><li>A) Explain the servlet life cycle.</li><li>B) Explain session management in serv</li><li>C) What are the attributes of applet tag?</li></ul>		05 05 04
Q.4	<ul><li>A) Explain the methods of ResultSet into</li><li>B) Explain the elements and attributes in</li><li>C) What is the difference between doGe</li></ul>	n XML.	05 05 04
Q.5	<b>A)</b> Write a JDBC program to update the <b>B)</b> Write a Servlet program to forward re	•	07 07
Q.6	A) Write a program to demonstrate para B) Write a servlet program for handling	, , , ,	07 07
Q.7	<ul><li>Write a short note on the following:- (</li><li>A) Steps in JDBC connectivity</li><li>B) Types of Applet</li><li>C) XML validation</li></ul>	any 2)	14

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## B.C.A. (Semester - V) (CGPA) Examination Mar/Apr-2018 VISUAL PROGRAMMING

	VISUAL PROG	RAMMING	
Time: 2½	⁄2	Max. Marks: 7	70
Instruct	<ul><li>ions: 1) Q.1 and Q.7 are compulsory.</li><li>2) Attempt any two questions from</li><li>3) Attempt any one question from</li><li>4) All questions carry equal marks</li></ul>	Q.5 and Q.6.	
•	elect the correct alternatives:  Storage locations used by computer me application is  a) Pointers c) Variable		14
2)	We can use reserved keywords as ider a) True	ntifiers in c#. b) False	
3)	Which of the following converts a type (a) ToInt64() c) ToSingle()	to string in? b) ToSbyte() d) ToString()	
4)	a) Try c) Thrown	ndling keywords. b) Catch d) Finally	
5)	<ul><li>is namespace which support</li><li>a) System.net</li><li>c) System.Data</li></ul>	ts multithreading. b) System.Threading d) All of these	
6)	Which of these access specific should a) private c) protected	be used for main() method b) public d) None of these	
7)	To use .NET Framework Data Provider reference the namespace. a) System.Data.Client c) System.Data.Sql	b) System.Data.Sqlclient d) None of these	
8)	object is used to fill data in the DataReader c) DataAdapter	DataSet with query results in ADO.Net. b) DataSet d) DataTable	
9)	<ul><li>property of textbox is used to ch</li><li>Multiline</li><li>ReadOnly</li></ul>	ange single line textbox to multiline. b) Multiple d) ManyLine	
10	) comboBox is used to select only one it a) True	em from the list. b) False	
11	<ul><li>) Number of constructors a class can de</li><li>a) 1</li><li>c) Any number</li></ul>	fine is b) 2 d) None of these	

12)	<ul><li>) To implement delegate necessary con</li><li>a) Class declaration</li><li>c) run time polymorphism</li></ul>	b)	inheritance	
13)	<ul><li>Which of the following assemblies can</li><li>a) Private Assemblies</li><li>c) Shared Assemblies</li></ul>	b)	Friend Assemblies	
14)	JIT stands for Just-In Time Compiler. a) True	b)	False	
b)	What is Array? Explain its different type	s w	vith example.	05 05 04
b)	What is Exception? Explain try and finally block with example.			
<ul><li>a) What is Stream? Explain any two character base stream classes.</li><li>b) What are Anonymous methods? Explain with suitable example.</li><li>c) Write note on virtual keyword.</li></ul>				05 05 04
•	·	s a	dvantages.	07 07
•	• •			07 07
a) b)	Multithreading Fundamentals	2)		14
	13) 14) a) b) c) a) b) c) a) b) Wr a) b)	a) Class declaration c) run time polymorphism  13) Which of the following assemblies can a) Private Assemblies c) Shared Assemblies  14) JIT stands for Just-In Time Compiler. a) True  a) What are components of Microsoft Dot b) What is Array? Explain its different type c) What are different data types supported a) What is delegate? Explain delegate with b) What is Exception? Explain try and fina c) What is Interface? How to implement in a) What is Stream? Explain any two chara b) What are Anonymous methods? Explain c) Write note on virtual keyword. a) Explain ArrayList collection class with it b) Explain architecture of ADO.Net. a) Create a window application to read rec b) How to use DataReader and DataAdap Write short note on the following:- (Any a) Multithreading Fundamentals b) ComboBox and ListBox	a) Class declaration c) run time polymorphism d)  13) Which of the following assemblies can be a) Private Assemblies b) c) Shared Assemblies d)  14) JIT stands for Just-In Time Compiler. a) True b) a) What are components of Microsoft Dot Net b) What is Array? Explain its different types w c) What are different data types supported in a) What is delegate? Explain delegate with its b) What is Exception? Explain try and finally w c) What is Interface? How to implement interf a) What is Stream? Explain any two characte b) What are Anonymous methods? Explain w c) Write note on virtual keyword. a) Explain ArrayList collection class with its are b) Explain architecture of ADO.Net. a) Create a window application to read record b) How to use DataReader and DataAdapter Write short note on the following:- (Any 2) a) Multithreading Fundamentals b) ComboBox and ListBox	c) run time polymorphism d) Exceptions  13) Which of the following assemblies can be stored in Global Assembly Cache? a) Private Assemblies b) Friend Assemblies c) Shared Assemblies d) Public Assemblies  14) JIT stands for Just-In Time Compiler. a) True b) False  a) What are components of Microsoft Dot Net Framework? Explain in detail. b) What is Array? Explain its different types with example. c) What are different data types supported in C#? a) What is delegate? Explain delegate with its applications. b) What is Exception? Explain try and finally block with example. c) What is Interface? How to implement interface explain with example. a) What is Stream? Explain any two character base stream classes. b) What are Anonymous methods? Explain with suitable example. c) Write note on virtual keyword. a) Explain ArrayList collection class with its advantages. b) Explain architecture of ADO.Net. a) Create a window application to read record and display in gridview control. b) How to use DataReader and DataAdapter in windows form.  Write short note on the following:- (Any 2) a) Multithreading Fundamentals b) ComboBox and ListBox

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## B.C.A. (Semester - V) (CGPA) Examination Mar/Apr-2018

	LINUX AND SHELL PI	ROGRAMMING
Time: 2	2½ Hours	Max. Marks: 70
Instruc	ctions: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from 0 3) Attempt any one questions from 0 4) Figures to the right indicate full m	Q.5 and Q.6.
	,	cutable file. b) lib d) etc
2	,	sort in numeric order. b) –c d) –n
3	•	the cursor one character to the right.  b) n  d) w
2		e character in file name. b) _ d)
Ę	,	nission are b) 642 d) 654
6	, ·	s lines of files. b) more d) tee
7	7) symbol matches all character in a) ? c) *	file name. b) _ d) \$
8	3) In Is option used to list a other file.  a) -a c) -f	all the hidden files along with the  b) -I d) -x
Ş	, 9 1	? b) File permission d) All of these
1	<ul><li>10) In a Linux file system root is the top leve</li><li>a) True</li></ul>	l directory. b) False
1	<ul><li>11) Kernel acts as agent between user and c) True</li></ul>	network. d) False
1	<ul><li>12) cat command used to only create a file.</li><li>a) True</li></ul>	b) False

	<ul><li>13) All Linux command must always</li><li>a) True</li></ul>	be entered in small case letter. b) False	
	<ul><li>14) Bourne shell offers a command I</li><li>a) True</li></ul>	history feature. b) False	
Q.2	<ul><li>a) Explain boot loader.</li><li>b) What is shell? Explain it's types.</li><li>c) Write note on X-window.</li></ul>		05 05 04
Q.3	<ul><li>a) What is file? Explain it's types.</li><li>b) Explain history of Linux Operating</li><li>c) Explain Chmod command.</li></ul>	g system.	05 05 04
Q.4	<ul><li>a) Explain listing a file.</li><li>b) What is Redirection? Explain it's</li><li>c) Explain chown and chgrp comma</li></ul>		05 05 04
Q.5	<ul><li>a) Explain pipe command.</li><li>b) Write a program to display give n</li></ul>	umber is prime or not.	07 07
Q.6	<ul><li>a) Explain vi-editor.</li><li>b) Write a program to display give n</li></ul>	umber is Armstrong or not.	07 07
Q.7	<ul><li>Write short notes on :- (any two)</li><li>a) NFS</li><li>b) File Compression</li><li>c) grep command</li></ul>		14

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### B.C.A. (Semester - V) (CGPA) Examination Mar/Apr-2018 INTRODUCTION TO DATA MINING & WAREHOUSING

	INTRÒDUCTION TÓ DATA	MINING & WAREHOUSING
Time: 2	½ Hours	Max. Marks: 70
Instruc	tions: 1) All questions are compulsor 2) Figures to the right indicate	
	Choose correct alternatives:  ) Set of items whose support count i support are called as a) Frequent Set c) Maximal Set	
2	<ul><li>2) The partition of overall data wareho</li><li>a) Database</li><li>c) Data Mart</li></ul>	b) Date Cube d) OLTP
3	a) OLAP c) SQL	al query tool. b) OLTP d) MySQL
4	<ul><li>type of relationsh</li><li>a) One to One</li><li>b) Many to One</li></ul>	ip is present in star schema. b) One to Many d) Many to Many
Ę	<ul> <li>Any subset of a frequent set is a frequent</li> <li>a) Upward closure property</li> <li>c) Frequent closure property</li> </ul>	
6	<ul><li>The next step to data selection in k</li><li>a) Data transformation</li><li>c) Data Cleaning</li></ul>	(DD process is b) Data Integration d) Data Coding
7	<ul> <li>OLAP is nothing but</li></ul>	 essing
8	<ul><li>B) The second step of A Priori algorith</li><li>a) Rule</li><li>c) Large Set</li></ul>	nm is Generation. b) Candidate d) Itemset
Ç		n high-quality information from text. b) Text Mining d) Spatial Mining
1	<ul><li>0) of the following is a d</li><li>a) Sequence discovery</li><li>c) Regression</li></ul>	b) Prediction

	11) The operation of OLAP or more dimensions.		
	<ul><li>a) Drilling</li><li>c) Dicing</li></ul>	b) Rolling d) Slicing	
	<ul><li>12) Removing duplicate records is called</li><li>a) True</li></ul>	ed as data pruning. b) False	
	<ul><li>13) Data in data warehouse are modified</li><li>a) True</li></ul>	ed. b) False	
	<ul><li>14) is used to discover use</li><li>a) Web content mining</li><li>c) Web Structure mining</li></ul>	b) Web Usage mining	
Q.2	<ul><li>Answer the following:</li><li>a) Explain continuous growth of data a warehouse.</li><li>b) Explain Multidimensional Association</li></ul>	•	07 07
Q.3	<ul><li>Answer the following:</li><li>a) What is data warehouse? Explain data cube technology in det</li></ul>	ata mart in detail.	07 07
Q.4	<ul><li>Attempt any one:-</li><li>a) What is KDD? Explain KDD in detail warehouse in detail.</li><li>b) Explain Text mining and Spatial min</li></ul>		14
Q.5	<ul> <li>b) Explain Text mining and Spatial mining in detail.</li> <li>Attempt any one:-</li> <li>a) What is data pre-processing? Explain different stapes involved in data pre-processing in detail.</li> <li>b) Why Apriori algorithm is used? What are problems related with Apriori algorithm? How to increase efficiency of Apriori algorithm? Find strong association from following table (Min_support=2 and min_confidence=70%)</li> </ul>		

Tra. ID	Milk	Bread	Butter	Beer
1	1	1	0	0
2	0	1	1	0
3	0	0	0	1
4	1	1	1	0
5	0	1	0	0
6	1	0	0	0
7	0	1	1	1
8	1	1	1	1

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## B.C.A. (Semester - V) (CGPA) Examination Mar/Apr-2018 MANAGEMENT INFORMATION SYSTEM

		MANAGEMENT INFOR	RM.	ATION SYSTEM
Time	: 2½	∕₂ Hours		Max. Marks: 70
Instr	uct	<ul><li>ions: 1) Q.1 and Q.7 are compulsory.</li><li>2) Attempt any two questions from 3) Solve any one questions from 4) Figures to the right indicate full</li></ul>	2.5	and Q.6.
Q.1	<b>C</b> l 1)	noose the correct alternatives:  The back bone of any organization is _ a) Information c) Management		
	2)	Top level manager usea) Strategic information c) Operational Information	b) d)	Tactical Information None of these
	3)	MIS is normally found in a manufacturing the  a) Service Sector  c) Agricultural Sector	b)	Banking Sector
	4)	The information of MIS comes from the a) Internal source c) Both a & b	b)	External Source None of these
	5)	An is a set of process and proc Information & knowledge. a) Information System c) Database system	b)	Knowledge system
	6)	Data base is pivotal to  a) MIS c) ESS	,	TPS GIS
	7)	Expert System lack human self-awarer a) True		s and self analysis tool. False
	8)	EIS/ESS improves user productivity. a) True	b)	False
	9)	MIS also refers to computer system an a) True		anual system. False
	10	a) Expert System is OPP application.	b)	False
	11	) is features of organization a) Security c) Peaceful	b)	Planning None of these

	<ul> <li>12) CRM Stands for</li> <li>a) Customer Relationship Management</li> <li>b) Cost Relationship Management</li> <li>c) Currency Relationship Management</li> <li>d) None of these</li> </ul>	
	<ul> <li>13) BIS stands for</li> <li>a) Busy Information Management</li> <li>b) Business Intelligence System</li> <li>c) Bio-Information System</li> <li>d) None of these</li> </ul>	
	<ul> <li>14) KMS Stands for</li> <li>a) Knowledge Management System</li> <li>b) Key Management System</li> <li>c) King Information System</li> <li>d) None of these</li> </ul>	
Q.2	<ul><li>a) Explain the features of organization.</li><li>b) Explain Quality of information.</li><li>c) Write a short note on types of decision.</li></ul>	05 05 04
Q.3	<ul><li>a) Write down enterprise application.</li><li>b) Explain the advantages of CRM.</li><li>c) Short note on ERP.</li></ul>	05 05 04
Q.4	<ul><li>a) Write down benefit of DSS.</li><li>b) What is role and Importance of Information System?</li><li>c) Write a short note on Accounting System.</li></ul>	05 05 04
Q.5	<ul><li>a) What is MIS? Explain the characteristics of MIS?</li><li>b) Explain the application of MIS in Service Industry.</li></ul>	07 07
Q.6	<ul><li>a) Explain the advantages &amp; Disadvantages of SCM.</li><li>b) Explain the application of MIs in Manufacturing Sector.</li></ul>	07 07
Q.7	<ul> <li>Write a short note on the following:-</li> <li>a) Features of ESS.</li> <li>b) Characteristics of BIS.</li> <li>c) System Vulnerability.</li> <li>d) Computer Literacy.</li> <li>e) Role of Manager in Organization.</li> </ul>	14

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#### B.C.A. (Semester - VI) (CGPA) Examination Mar/Apr- 2018 ADVANCED JAVA - II

		1 1	-		
Time:	21/2	≨ Hours		Max. Marks:	70
nstrı	ucti	<ul> <li>ons: 1) Q.1 and Q.7 are compulsory.</li> <li>2) Solve any two questions from Q. 2 to 0</li> <li>3) Solve any one question from Q. 5 and 4) Figures to the right indicate full marks.</li> </ul>	Q.6		
Q.1	_	which JSTL tag catches any exception that or a) <c:catch> c) <c:exception></c:exception></c:catch>	b)	rs in a program body? <c:try> All of these</c:try>	14
	2)	TLD stands for Tag Library Descriptor a) True	b)	False	
	3)	Which is / are true about Hibernate? a) An open source c) Is a framework interact with database	,	A light weight All of these	
	4)	Which of the following tags are used for handl a) errorPage c) both a and b	b)	the exception in JSP? isErrorPage none of these	
	5)	a) True c) int	b)	attribute in jsp. False session	
	6)	ORM Stands Object Relational Mapping. a) True	b)	False	
	7)	JSP page is Translate into servlet and applet. a) True	b)	False	
	8)	'session' is an implicit object in JSP. a) True	b)	False	
	9)	In Spring,fetch the records from the database JdbcTemplate class. a) query() c) submit	b)	ng method of feth() None of these	
	10)	<ul><li>) Which jsp tag element is used to display mes</li><li>a) action</li><li>c) scriplet</li></ul>	b)	ges and variable values? expression page	

	<ul><li>a) assigned</li><li>b) increment</li></ul>	rnate? b) native d) none of these	
	<ul><li>12) WAP stands for Wireless Application P</li><li>a) True</li></ul>	Protocol. b) False	
	<ul><li>13) JdbcTemplate class can defined in org</li><li>a) True</li></ul>	.springframework.jdbc.core.* package. b) False	
	<ul><li>14) In spring, AOP stands for Active Object</li><li>a) True</li></ul>	t Program. b) False	
Q.2	<ul><li>Attempt any two of the followings:-</li><li>a) Explain JSTL XML tags in details.</li><li>b) Explain WAP Architecture.</li><li>c) Write a JSP page to check given no is a</li></ul>	Armstrong or not.	14
Q.3	<ul><li>Attempt any two of the followings:-</li><li>a) Explain JSP action tags with suitable ex</li><li>b) What is WAP? Explain advantages and</li><li>c) Explain constructor dependency injection</li></ul>	disadvantages of WAP.	14
Q.4	<ul><li>Attempt any two of the followings:-</li><li>a) Explain Spring Architecture.</li><li>b) Write a program to demonstrate use of</li><li>c) Explain JSP life cycle with suitable example.</li></ul>	•	14
Q.5	<ul><li>a) Write a program to store Employee info intoemp table using Hibernate annotation</li><li>b) Explain 'RowMapper' interface of Spring</li></ul>	on. (oracle table)	07 07
Q.6	<ul><li>a) What is internationalization? Explain us</li><li>b) Write a program to display data from da oracle database).</li></ul>		07 07
Q.7	<ul><li>Write short notes on the following (Any a) WAP model</li><li>b) Hibernate Framework</li><li>c) Spring architecture</li></ul>	two)	14

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## B.C.A. (Semester - VI) (CGPA) Examination Mar/Apr-2018 CYBER LAWS AND SECURITY CONTROL

		CYBER LAWS AND SECU	RITY CONTROL	
Time	: 2½	Hours	Max. Marks:	70
Instr	uctio	ons: 1) Q.1 and Q.7 are compulsory. 2) Attempt any two questions from Q. 3) Attempt any one question from Q. 4) Figures to the right indicate full mar	5 and Q.6.	
Q.1	A)	Choose the correct alternatives: -  1) It is stealing ideas or creations of other a) Plagiarism c) Piracy	ers. b) Intellectual Property Rights d) All of above	10
		<ul><li>2) As per IT act cannot be in each a) form</li><li>c) cheques</li></ul>	electronic form. b) license d) records	
		<ul><li>3) Firewalls are used to protect against _</li><li>a) Data driven attack</li><li>c) Virus attacks</li></ul>	b) Fire attacks d) Unauthorized access	
		4) Super market usesfor trans a) E-market c) Internet	saction with their suppliers. b) EDI d) None of these	
		<ul><li>5) Authentication is</li><li>a) Modification</li><li>c) Identify user</li></ul>	<ul><li>b) Insertion</li><li>d) None of these</li></ul>	
		<ul><li>6) is a contract between the purch</li><li>a) License</li><li>c) Cyber law</li></ul>	naser & publisher of the software? b) Copy right d) IT Act.	
		7) backup all selected data. a) Full c) Copy	<ul><li>b) Incremental</li><li>d) None of these</li></ul>	
		<ul><li>8) Scope of e-commerce is</li><li>a) Global</li><li>c) Both a and b</li></ul>	b) Local d) None of these	
		<ul><li>9) converted data from plain tea</li><li>a) Decryption</li><li>c) Both a and b</li></ul>	xt to cipher text. b) Encryption d) EDI	
		10) A is a process of making cop copies may be used to restore the original Backup	ginal data. b) Crime	
Q.1	B)	c) Security  Answer in one sentence:-  1) What is mean by theft?  2) What is mean by UNCITRAL?  3) What is mean by license?	d) All of above	04

4) What is mean by information?

Q.2	b)	Explain digital signature in detail.  Explain information society.  Write a short on cyber crime.	05 05 04
Q.3	b)	What are the duties of subscriber of digital signature certificate? Explain UNCITRAL law in detail. Write a short note on data protection.	05 05 04
Q.4	b)	Explain hardware & software security. Explain benefits of EDI. Short note on data encryption.	05 05 04
Q.5	•	What is cyber law? Explain intellectual property aspects. Explain difference between Authentication and Authorization.	07 07
Q.6	Í	Explain about encryption techniques and differentiate between secret key encryption & public key encryption.  Explain information technology 2000.	07 07
Q.7	Wı	rite short notes on: -	
	•	Copyright	04
	•	Security audit	04
	•	Data backup	04
	d)	Indian economy	02

### B.C.A. (Semester - VI) (CGPA) Examination Mar/Apr-2018 SOFTWARE PROJECT MANAGEMENT

		SOFTWARE PROJECT	MANAGEMENT
Time	21/2	Hours	Max. Marks: 70
Instru	ucti	<ul> <li>ons: 1) Q.1 and Q.7 are compulsory.</li> <li>2) Attempt any two questions from Q</li> <li>3) Attempt any one question from Q</li> <li>4) Figures to the right indicate full m</li> </ul>	. 5 and Q.6.
Q.1		oose the correct alternatives: CPM is	14
	',	a) Critical Pan Method c) Critical path Method	<ul><li>b) Critical Path Mode</li><li>d) None of the above</li></ul>
	2)	SRS includes the specification of a) User requirement c) Both a & b	b) System requirement d) None of the above
	3)	The likelihood and consequences of the a) Planning c) Coding analysis	risks are assessed in : b) Risk analysis d) Content analysis
	4)	A procedural Code-oriented approach es a) KLOC c) PBS	timates each module in b) SLOC d) WBS
	5)	What is Risk?  a) Negative consequence that could occub. Negative consequence that will occur c) Negative consequence that must occub. Negative consequence that shall occub.	ır
	6)	What Direct measure include in the Softva) Line of Code (LOC) c) Defect reported	vare product? b) Execution speed d) All of these
	7)	In Waterfall Model, output of one phase is a) False	s input to next phase. b) True
	8)	Each activity in network diagram should to a) Actors and process c) Start date and end date	nave b) Resource and actors d) Duration and process
	9)	Backward pass means  a) Calculating latest date to start and en b) Calculating dates to start and end act c) Calculating time period to start and er d) Calculating end date of an activity.	ivity time.
	10)	) is path finding, a) Manager, Management c) Management, Leadership	b) Leader, Leadership

	<ul><li>11) The ISO 9126 sets the standard for</li><li>a) Software Processes</li></ul>	b) Project Progress	
	c) Software Planning	d) Software Quality	
	12) budget shows the forecast a) TimeLine c) BaseLine	growth in earned value through time. b) Growth Line d) Gnatt Chart	
	<ul><li>13) A plan takes and converts it to</li><li>a) Methodology</li><li>c) Activity</li></ul>	real Activities. b) Method d) Time	
	<ul><li>14) Dummy activities are shown with</li><li>a) Dashed Lines</li><li>c) Double Lines</li></ul>	lines on the network diagram. b) Dotted Lines d) Arrow Lines	
Q.2	<ul> <li>A) Write the answer of the following:- (and 1) What is an Activity? Explain objective 2) Explain techniques to enhance softwork</li> <li>3) What is Critical Path? Explain Identification</li> </ul>	es of Activity Planning. are quality.	10
	B) What is ROI?		04
Q.3	<ul> <li>Write the answer of the following:- (any 2)</li> <li>a) What is Resource Allocation? Explain S</li> <li>b) Explain Spiral Software Process Model.</li> <li>c) What is Project Monitoring and control? values.</li> </ul>	cheduling Resources.	14
Q.4	Write the answer of the following:- (any a) Explain different ways of visualizing prob Explain Risk Planning and controlling with the c	ress. th proper example.	14
Q.5	<ul><li>Answer the following:</li><li>a) Explain Oldham-Hackman Job Characte</li><li>b) List the various typical terms of a contra</li></ul>		07 07
Q.6	<ul><li>Answer the following:</li><li>a) Explain step wise planning activities for</li><li>b) What are the different types of visualizing</li></ul>	. ,	07 07
Q.7	<ul> <li>Write short notes on the following (Any to a) Software Quality Standard ISO 9126s</li> <li>b) Prototyping</li> <li>c) Strategic assessments</li> <li>d) Forward &amp; Backward Pass</li> </ul>	wo)	14

### B.C.A. (Semester - VI) (CGPA) Examination Mar/Apr-2018 WEB TECHNOLOGY - III

		WEB TECHNOL	.00	GY - III	
Time	: 21/	≨ Hours		Max. Marks	: 70
Instr	ucti	ons: 1) All questions are compulsory. 2) All questions carry equal marks.			
Q.1		noose the correct alternatives: In asp.net directory occur a) Script c) Single page.	b)	rst line. Page Master	14
	2)	IIS Stands for a) Internet Information System c) Internet Information Service			
	3)	Which object can help you maintain data a) Application Object c) Response object	b)	ross users? Session object Server object	
	4)	Property to post data from or a) PostBack c) PostBackURL.	b)	page to another. nevigate PostBackresource	
	5)	We can manage states in asp.net applica a) Session Objects c) Viewstate	b)	n using Application Objects All of the above	
	6)	DLL stands for  a) Data Link Library  c) Data Load Library	,	Data Linkage Library None of these	
	7)	Which set of symbols are used to signify a) <@ c) <\$	b)	presence of ASP.Net code? <# <%	
	8)	Which interface you will use wrap an AJA control?  a) IScriptManager c) IScriptAJAX	b)	IScriptControl None of the above.	
	9)	control is required for every ASP.NET? a) UpdatePanel c) ContentPanel	b)	ge that has AJAX Extensions for ScriptManager None of the above	
	10)	)WCF services can communicate with a) All programming languages b) XML c) Only the languages included with Vis d) Multiple platforms and multiple langu	ual	Studio.NET	

	<ul><li>11)The standard method for storing damachine or platform to another is _</li><li>a) XML</li><li>c) WSDL</li></ul>	ata that can be transferred easily from one  b) SOAP d) WCF	
	12) is a popular standard requests and responses including oparameters.  a) XML	that includes a set of rules for handling class names, method names and  b) WCF	
	c) WSDL	d) SOAP	
	<ul><li>13)Which property is used to name a v</li><li>a) ControlName</li><li>c) ID</li></ul>	web control? b) Designation d) Name	
	<ul><li>14)Which is not a property of the Com</li><li>a) Show</li><li>c) Font</li></ul>	mon control class? b) BackColor d) ForeColor	
Q.2	<ul><li>Attempt the following.</li><li>a) What is the file upload control? Exp</li><li>b) Explain compilation technique in As</li></ul>	•	14
Q.3	<ul><li>Attempt the following:-</li><li>a) Explain about webservice protocol</li><li>b) What is master page? Give examp</li></ul>		14
Q.4	<ul> <li>Attempt the following. (Any One)</li> <li>a) What is personalization? Explain in details with basic syntax.</li> <li>b) What is Site Navigation? Explain site navigation in detail.</li> </ul>		14
Q.5	<ul><li>Attempt the following. (Any One)</li><li>a) Explain in brief Asp.Net Page life c</li><li>b) Explain Silverlight Architecture in b</li></ul>	·	14