Seat No.	T 4 asdi essler she nich ar	D-10 Total No. of Pages	7 :3
a) (b) [B.C.S. (Part -II) (S Examin COMP	Semester -III) (New) (Revised) ation, April - 2016 UTER SCIENCE	
Obj	ect oriented progra Sul	mming Through C++ (Paper - V) b. Code: 63801	
Day and Time :3.0	Date : Wednesday, 20 - 04)0 p.m. to 5.00 p.m.	- 2016 Total Marks : 5	0
Instructio	ns : 1) All questions ar 2) Figures to the ri	e compulsory. ight indicate full marks.	
Q1) Sele	ct the correct alternative a	nd rewrite: [10	1
. a)	The object name is also	called as	
	i) state	ii) identity	
	iii) behavior	iv) all of these	
b)	The memb the class.	pers of a class can be accessed from outside	
	i) private	ii) public and a second	
	iii) protected	iv) all of these	
c)	By default C++ follows	binding.	
1) early	ii) late	
i	ii) dynamic	iv) none of these	
		DTO	

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d)	When class inherits properties of more than one class then it is called inheritance.						
	i)	single	ii)	multilevel			
	iii)	multiple and the state of	iv)	hierarchical			
e)	Anc	constructor is called automatically	when	n an object is			
	i)	created	ii)	initialized			
	iii)	destroyed	iv)	both (i) and (ii)			
f)	_	function can access p	orivat	e members of a class.			
	i)	public member	ii)	friend			
	iii)	private member	iv)	all of these			
g)	Operator overloading function defined for overloading of relation operator returns value.						
	i)	0	ii)	1 and the second second			
	iii)	2	iv)	(i) or (ii)			
h)	class is not used to create the object.						
	i)	derived .	ii)	abstract			
	iii)	nested	iv)	container			
i)	Data	a is not secured in	-				
	i)	POP	ii)	OOP			
	iii)	both (i) and (ii)	iv)	none of these			
j)	The clas	member of a class s.	s is c	ommon to all objects of that			
	i)	Private	ii)	Public			
	iii)	Protected	iv)	Static			

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(2) Attempt any two of the following:

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- a) What is an OOP? Explain its basic concepts in detail.
- b) Explain different ways of defining a member function of a class? Give its example.
- c) How to implement a run time polymorphism in a C++ program? Explain it with suitable example.
- 3) Attempt any four of the following:

[4×5=20]

- a) What is a friend function? How to define it to class?
- b) How define overloading function to overload unary operator?
- c) Write and explain syntax of multi level inheritance.
- d) What are the different types of constructors?
- e) How to manage the memory using new and delete operators?
- f) Write an OOP to display only odd numbers between n to m.



Seat	D-108
No.	I Utal No. of Pages :3
B.C.S. (Part -II) (Semester -III) (COMPUTER System Analysis, Design an Engineering	New) Examination, April - 2016 R SCIENCE d Introduction to Software (Paper - VI)
Sub. Code	e: 63802
Day and Date : Thursday, 21 - 04 - 2016 Time :3.00 p.m. to 5.00 p.m.	Total Marks : 50
nstructions : 1) All questions are comput 2) Figures to the right indic	sory. ate full marks.
1) Select comment in	
1) Select correct alternative and rewrite en	ntire statement: [10]
a) In a DFD symbol i	is used to represent the external entities
i) Rectangle	ii) Ellipse
iii) Diamond shaped box	iv) Circle
b) Use the new system as the same tresults. This is known as	time as the old system to compare the
i) Procedure Writing	ii) Simultaneous processing
iii) Parallel Operation	iv) File conversion
c) A data flow can	A cross tile cycle activity
i) Only emanate from an external	l entity
ii) Only terminate in an external en	ntity
iii) May emanate and terminate in a	an external entity
iv) May either emanate or terminat	te in an external entity but not both
	ASILITIES. (1)

P.T.O.

			D - 108
d)	The main ingredient of the report doc cost benefit analysis.	cumer	nting the is the
	i) System Analysis	ii)	Feasibility Study
	iii) System Analyst	iv)	System design
.e)	can be defined as da form that is meaningful to the recipier in current or prospective decisions.	ta than the target the target the target tension tensi	at has been processed into a d is of real or perceived value
	i) Information	ii)	Data collection
	iii) Internal data	iv)	Sample data
f)	does not occur in pha life cycle (SDLC).	ase-I	V of the system development
	i) conduct interviews	ii)	train users
	iii) acquire hardware and software	iv)	test the new system
g)	Changes made periodically to a system as system	n, afte	er its implementation, is known
	i) Analysis	ii)	design
	iii) development	iv)	maintenance
h)	Mistakes made in the system analysi	is sta	ge show up in
ntes	i) implementation	ii)	system design
	iii) system developments	iv)	All of these
i)	A cross life cycle activity of system	deve	elopment is
í	i) object modeling	ii)	prototyping
	iii) fact finding	iv)	data modeling
j)	The approach is an various phases of a project can be co	SDL	C approach that assumes the etcd entirely sequentially.
	i) Waterfall	ii)	Prototype
	iii) Artifact	iv)	Spiral model

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D - 108 12) Attempt any TWO of the following: [20] What is normalization? Explain forms of normalization. a) What is software? Explain different qualities of software. **b**) What is system? Explain types of system. c) 3) Attempt any FOUR of the following: [20] Explain quality assurance. a) **b**) What is file design? Write different roles of system analyst. c) d) What are the characteristics of software? Explain initial investigation with example. e) Draw DFD for inventory management system. **f**)

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Seat No.	D -114 Total No. of Pages :3
B.C.S. (Par Ex CC	rt -II) (Semester -IV) (Revised) amination, April - 2016 OMPUTER SCIENCE
Data Struct	ture Through C++ (Paper - VII) Sub. Code: 63810
Day and Date : Wednesday, 2 Time :12.00 noon to 2.00 p.m	20 - 04 - 2016 Total Marks : 50
Instructions : 1) All questi 2) Figures to	ions are compulsory. o the right indicate full marks.
Q1) Select correct alternative	and rewrite the statement: [10]
a) The number of swa 13 in ascending or	pping needed to sort numbers 8, 22, 7, 9, 31, 19, 5, ler using bubble sort is
i) 11 () going	ii) 12
iii) 13	iv) 14
b) The following sequ push(2), pop, push(of popped out value	ence of operation is performed on stack push(1), 1), push(2), pop, pop, pop, push(2), pop.Sequence es are
i) 2,2,1,1,2	ii) 2,2,1,2,2
iii) 2,1,2,2,1	iv) 2,1,2,2,2
c) What is the result	of the following operation Top (Push (S, X))
i) X solo	ii) null
iii) stadado (e	iv) none of these
	<i>P.T.O.</i>

Esteral	d) Sr	area matricas have		D - 11		
	a) oh	arse matrices have	*	in the second second		
	1)	no zero	(II) (Semicator	many zero		
	iii)	higher dimension	iv)	none of these		
e	e)	case de	oes not exist in co	mplexity theory.		
	i)	Best case	i) i)	Worst case		
	iii)	Average case	iv)	Null case		
f) Ea ab	itly, or explicitly the informatic				
	i)	the name of array		structions: D All questi		
	ii)	the data type of ar	ray			
	iii)	the first data from	the set to be store	ed		
	iv)	the index set of the	earray			
g	g) method is used to remove elements from a					
	i)	Push ()	ii)	Remove ()		
	iii)	pop ()	iv)	lspop ()		
h) The	e memory address	of the first ele	ement of an array is calle		
	n slatte	no homistican ai m				
	i)	floor address	ii)	foundation address		
	ій)	first address	iv)	base address		
i)	Wh	en inorder traversing versal would return	a tree resulted E A	ACKFHDBG; the preord		
	i)	FAEKCDBHG	ii)	FAEKCDHGB		
	iii)	EAFKHDCBG	ivities and iv)	FEAKDCHBG		
j)	The	The complexity of Bubble sort algorithm is				
	i)	O(n)	ü)	O(log n)		
	iii)	O(n2)	iv)	O(n log n)		

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Q2) Attempt any two of the following:

- a) What is sorting? Explain insertion sort.
- b) What is stack? Write a program for static implementation of stack.
- c) What is an array? Explain multi dimensional arrays with example.
- Q3) Attempt any Four of the following:

[20]

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[20]

- a) Write any five differences between stack and queue.
- b) What are the limitations of simple queue?
- c) What is circular queue?
- d) Compare selection sort with insertion sort.
- e) Explain any five data types used in data structure.
- f) What is queue? Explain linear queue.

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Sale - El		
Seat No.	N	· D-115
D		Total No. of Pages :3
ay and Date ime :12.00 r	C.S. (Fart -II) (S Examina COMPU RDBMS with (Sub. e: Thursday, 21 - 04 - 20 noon to 2.00 p.m.	emester -IV) (Revised) (New) ation, April - 2016 JTER SCIENCE ORACLE (Paper - VIII) Code: 63811 D16 Total Marks : 50
structions :	 All questions are constrained. Figures to right incompared. Draw diagram wheteen the second seco	ompulsory. licate full marks. enever necessary.
a) In dat	rect alternative and rewr	rite the sentence: [10]
i) a	ccess	vide user with command.
iii) pr	rivilege	iv) none of these
) Retriev will be	al of information, inserti possible in	ng of row and modification of information
i) DE)L	ii) DML
iii) DC	L ^{TURNIND} (I	iv) none of these
Granting	of authorization of data	a access is the job of
iii) progr	isticated user	ii) naive user
m) hrofi	ammer	iv) administrator

C

) Notre	als model has been income	11		D - 1			
G) Netwo	rk model has been invente	d by _	······································	. Ins			
	i) E	F. Codd	ii)	Charles bachman	n			
	iii) bo	th (i) and (ii)	iv)	none of these	a			
e)	Domain	Domain, entity and referential integrity are the types of						
	i) cla	use	ii)	cursor	- 1			
	iii) Tri	gger	iv)	constraints				
f)	entity.	is a collection of attril	bute w	hich describe some	real wor			
	i) rela	ation	ii)	tuple				
	iii) attu	ibute	iv)	domain				
g)		is a set to tuple.						
	i) rela	tion to matche other and	ii)	tuple				
	iii) attr	ibute diny teau objection	iv)	domain				
h)	match.	is use to match the v	alue sp	ecifically character	value a			
	i) in		ii)	between				
	iii) like		iv)	none of these				
i)	Parent, constraii	child relationship will be nts.	maint	ain in	integri			
	i) enti	ty anon (vi	ii)	domain				
	iii) refe	rential	iv)	none of these				
j)	Not null constrair	and check are coming nature.	mainly		integri			
	i) enti	y minutes (M	ii)	domain				
	iii) refe	rential	iv)	none of these				

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Q2) Attempt any TWO:

- a) Discuss while and for loop in pl/sql in details with suitable example.
- b) Write commands in DML with suitable syntax and example.
- c) What is role of relational algebra in SQL?

Q3) Attempt any FOUR:

- a) What is DBA?
- b) Write any five data types in SQL.
- c) Write SELECT command with group by command and give example.
- d) What is trigger.
- e) Write any five arithmetic function.
- f) What is index.

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[20]

