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No.				

# B.C.A.(Part-II) (Semester-III) Examination,November-2016 COMPUTER ORIENTED STATISTICAL METHODS(Paper-305) Sub. Code: 63400

Day and Date: Thursday, 03-11-2016

Total Marks: 80

Time: 2.30 p.m. to 5.30 p.m.

**Instructions:** 

- 1) Question number EIGHT is compulsory.
- 2) Attempt any four questions from question number 1 to 7.
- 3) Figures to the right indicate full marks.
- 4) Use of nonprogrammable calculator is allowed.
- 5) Graph paper will be supplied on request.
- Q1) a) Define the terms: Frequency, Frequency distribution, Discrete and continuous variables.
  - b) Define median and mode. Find median and mode for following data.

Class	10-20	20-30	30-40	40-50	50-60
Frequency	7,30	9	15		8

[16]

- Q2) a) Define combined S.D. for two groups. Two samples of sizes 40 and 50 have same mean 25 but different standard deviations 19 and 18 respectively. Find mean and S.D. of combined group.
  - b) State regression coefficients. Also state any two properties of regression coefficients. You are given the following information

 $\overline{X}$  =40,  $\overline{Y}$  =50, S.D. of X=2.5, S.D. of Y=3.5 and correlation coefficient( $\gamma$ )=0.8. Obtain equation of regression line of X on Y. Find best estimate of X when Y=45.

Q3) a) State the relation between correlation coefficient and regression coefficients and verify them by using following data.

X	2	3	4	7	6
Y	10	7	3	1	2

b) Define Time series and state its uses. Obtain three yearly moving averages from the following data.

Year	2006	2007	2008	2009	2010	2011	2012	2013
Value	20	24	22	25	28	30	33	30

[16]

- **Q4)** a) Define the terms: sample and population. State the advantages of sampling method over census method.
  - b) What is an Ogive curve? Draw a less than Ogive curve from the data given below and determine value of median from it.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No.of students	3	9	15	30	18	5

[16]

- **Q5)** a) Explain measure of Dispersion. Distinguish between absolute measure of dispersion and relative measure of dispersion.
  - b) Following data gives number of catches taken by A and B in 5 one day matches.

Catches taken by A	4	5	4	3	5
Catches taken by B	1	0	4	2	1

Find, who is consistent in the matter of taking the catches?

- Q6) a) Define the term correlation and write note on scatter diagram.
  - b) Explain stratified random sampling. A sample of size 400 is to be drawn from a population of 8000 units, which is divided into four strata of sizes 1200, 1800, 3000, 2000. Find the sample size from each stratum by stratified sampling with proportional allocation.

- Q7) a) What is meaning of statistics? Explain scope of statistics.
  - b) State the merits and demerits of mean. The mean salary of 50 workers were Rs.200. It was later found that two items 160 and 210 were wrongly taken as 130 and 190. Find correct mean salary.

[16]

- Q8) a) Describe the method of moving averages in time series.
  - b) Define M.D. about mean and M.D. about median. Find M.D. about mean from the following data.

31, 35, 29, 63, 55, 72, 37



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# B.C.A. (Part - II) (Semester - III) Examination, October - 2016 OBJECT ORIENTED PROGRAMMING WITH C++ Sub. Code: 63399

Day and Date: Thursday, 27 - 10 - 2016 Total Marks: 80

Time: 2.30 p.m. to 5.30 p.m.

Instructions:	1)	Attempt any	4 questions	from Q1 to Q7.

- 2) Q.8 is compulsory.
- 3) Figures in right side indicate full marks.
- Q1) a) What is inline function? Explain importance of inline function with help of example. [8]
  - b) Define function overloading. Write a program to calculate area of circle, triangle and rectangle using function overloading. [8]
- Q2) a) What is mean by static data member and member function? Explain with example. [8]
  - b) What is OOP? Explain features of OOP's. [8]
- Q3) a) Explain importance of friend function with proper example. [8]
  - b) Define class and object. Write a program to enter 3 digit numbers and display sum of digits using class. [8]
- Q4) a) What is constructor? Explain different types of constructor with syntax and example. [8]
  - b) Write a program to create employee pay slip using multilevel inheritance. [8]
- Q5) a) Define polymorphism. Explain types of polymorphism with example.[8]
  - b) What is file stream? Which operations are used for file manipulation?[8]

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- Q6) a) Write C++ program to interchange values of two object of same class using friend function. [8]
  - b) Explain data types used in C++ with suitable example. [8]
- Q7) a) What is encapsulation? Explain its importance with suitable example.[8]
  - b) Write a C++ program to accept marks of student for 5 subjects and calculate result using array of object. [8]
- Q8) Write short notes (Any Two):

- a) Destructor.
- b) Constant and variable.
- c) Pure virtual function.
- d) Dynamic Binding.

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### B.C.A. (Part - II) (Semester - III) Examination, October - 2016

		SYSTEM ANALYSIS & DESIGN Sub. Code:63398	
		Date : Wednesday, 26 - 10 - 2016 Total Marks : 30 p.m to 5.30 p.m.	: 80
Inst	ructio	ns: 1) Attempt any 5 questions. 2) Figures in right side indicate full marks. 3) All question carries equal marks.	
Q1)	a)	Define system. Explain different types of system with example.	[8]
	b)	What is ERD? Draw ER diagram for bank management system.	[8]
Q2)	a)	What is SDLC? Explain phases in SDLC with neat diagram.	[8]
	b)	What do you mean by output design? Explain guidelines for output design.	[8]
Q3)	a)	What do you mean by file Design? Explain different types of files.	[8]
	b)	Write difference between sequential and direct file access.	[8]
Q4)	Exp	ain different fact finding techniques in software development.	16]
Q5)	a)	What is software testing? Explain types of software testing.	[8]
	b)	Explain need and importance of software maintenance.	[8]

[8]

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- Q6) Define DFD. What are different symbols used in DFD? Draw various levels of DFD for hospital management system.[16]
- Q7) a) What is system analysis? Explain role of system analyst in detail. [8]
  - b) Explain need and types of data storage required in system development.[8]
- **Q8)** Write short notes on:- (any 2)

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- a) Characteristics of system.
- b) Economical Feasibility.
- c) Input design.
- d) Validation testing.



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## B.C.A. (Part - II) (Semester - III) Examination, October - 2016 HUMAN RESOURCE MANAGEMENT (Paper - 302)

Sub. Code: 63397 Total Marks: 80 Day and Date: Tuesday, 25-10-2016 Time: 2.30 p.m. to 5.30 p.m. **Question No. 8 is Compulsory. Instructions:** 1) Attempt Any Four questions from Q.No. 1 to Q.No. 7. 2) 3) All questions carry equal marks. **O1)** What is HRM? Explain the functions & role of HRM. [16] Q2) What is selection? Explain the selection procedure followed in I.T. industry.[16] Q3) Explain the various training & development methods follwed in I.T. industry.[16] Q4) Explain the various steps in the process of HRP in I.T. industry. [16] Q5) What is stress? Explain various stress management practices in I.T. industry.[16] Q6) Explain the limitations & challenges of HRM in I.T. industry. [16] Q7) What do you mean by Recruitment? Explain various sources of Recruitment. [16] [16] **Q8)** Write short notes (Any Two): Virtual Organisation. a) HRD b) c) Retrenchment.

d) Organisation of HR department.



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### B.C.A.(Part -II) (Semester -III)(New) Examination, October - 2016 **COST ACCOUNTING**

Sub. Code: 63396

Day and Date Time :2.30 p.m			Total Marks :80
Instructions:	1) 2) 3)	Attempt any four questions from Q.no.1to7. Question No.8 is compulsory. All questions carry equal marks.	
Q1) Distingui	ish be	etween cost Accounting & Finacial Accounting.	[16]
Q2) Explain t	he m	nethods of pricing of material issues.	[16]
Q3) Prepare a	ı cosi	t sheet from the details given below.	[16]
Pa	rticul	lars	Rs.
Оре	ning	stock:	
Fini	shed	l stock	8,000
Rav	v Ma	terials	14,000
Wor	rk-in	- progress	20,000
Clo	sing	stock:	
Fini	ished	l stock	15,500
Rav	v Ma	terial	18,000
Wo	rk-in	-progress	19,200
Off	ice A	appliances	1,740
Plan	nt&	Machinery	46,050
	lding		20,000
		terials purchased	32,000
		CONTRACTOR OF CHIEF VERICES IN THE SOCIETY OF THE CONTRACTOR OF TH	P.T.O

Freight paid on Raw materials purchased	1,600
Purchase Returns	480
Sales di 02 - Todato Chautanimază	76,800
Sales Returns	1,400
Direct Wages	16,000
Indirect Wages	1,800
Factory supervision	1000
Repairs and upkeep: Factory	1,400
Light & Water	6,500
Rates & Taxes	630
Other factory expenses	1,870.
Salesman Commission	3,360
Sales Travelling	1,100
Sales promotion	2,250
Distribution Department-salaries & Expenses	1,800
Other salaries & Expenses	860
Income- Tax paid	540
Dividend paid	500
Accrued Expenses:	
Direct Labour	800
Indirect Labour	120

#### Additional information given as under:

- a) Depreciation to be provided as under:
  - i) Office Appliances @ 5%
  - ii) Plant & Machinery @ 10%
  - iii) Building @ 4%
- b) Light & Water to factory, office & distribution in the ratio 8:1:1
- Depreciation on Building to factory office & selling in the ratio 8:1:1
- d) Rates & Taxes  $\frac{2}{3}$  to factory and  $\frac{1}{3}$  to office.

Q4)	The profit as per cost accounts is Rs.1,50,000. The following	details are	
	ascertained on comparision of cost & financial accounts.		

ascert	ained on comparision o	f cost & financial according	ounts.	[16]
	Particulars	Cost Accounts	Financial Accoun	nts
		Rs.	Rs.	
a)	Opening stock-			
	Materials	10,000	15,000	
•	Finished Goods	18,000	16,000	
b)	Closing stock-			
	Materials	12,000	13,000	
	Finished goods	20,000	17,000	
c)	Interest charged but r	ot paid Rs.10,000		
d)	Write off- preliminary	expenses Rs.500, Go	oodwill Rs.1500	
e)	Dividend on unit trus	of india received Rs.	1000	
f)	Indirect expenses cha but Rs.75,500 recove		ounts Rs.80,000	
	Find out the profit as Reconciliation statem		by drawing up a	
Q5) Expla	in Elements of cost.			[16]
Q6) Expla	in classification of overl	neads.		[16]
	e overhead cost. Explaination of overhead costs		ation, Apportionme	nt & [16]
en e				[17]

Q8) Write short notes(any four):

- a) Contract costing
- b) Cost unit
- c) Labour Turnover
- d) Overtime
- e) Time-Booking method
- f) Process costing.



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Total No. of Pages: 2

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### B.C.A. (Part - II) (Semester - IV) Examination, November - 2015 DBMS USING MS - ACCESS Sub. Code: 63405

	Day and Date : Monday, 16 - 11 - 2015  Time : 11.00 a.m. to 2.00 p.m.		
Instr	uction	ons: 1) Attempt any five questions. 2) Figures to right indicates full marks.	
Q1)	a)	Differentiate between traditional file system and DBMS.	[8]
	b)	What is DBMS? Explain the components of DBMS	[8]
Q2)	a)	Explain in detail serial file organization & random access file organizat	ion.[8]
	b)	What are the types of DBMS? Explain in brief.	[8]
Q3)	a)	What is object based data model? Explain entity relationship mod	el . [8]
	b)	Explain different integrity constraints in detail.	[8]
Q4)	a)	What is join operator? Explain with example.	[8]
	b)	What are different DDL commands? Write its syntax with example	e. [8]
Q5)	Desi	ign normalized database for library management system with ERD.	[16]
Q6)	a)	Explain different features of MS-Access.	[8]
	b)	Write steps of table creation & record insertion in MS-Access.	[8]

<i>Q7</i> ) a)	What is data abstraction? Explain with example.	[8]
b)	Explain different types of files.	[8]
<b>Q8)</b> .Wr	ite notes on (Any Two)	[16]
a)	Normalization.	
b)	DML commands.	

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Data independence.

c)