

Total No. of Questions : 3]

SEAT No. :

PA-1956

[Total No. of Pages : 2

[5954]-101

First Year B.B.A. (Computer Application)

CA-101 : BUSINESS COMMUNICATIONS SKILLS

(CBCS 2019 Pattern) (Semester-I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) Figures to the right indicate full marks.*

Q1) A) Fill in the Blanks (Attempt any 5 out of 6) :

[5]

- a) The term “communis” derived from _____ word.
 - i) Greek
 - ii) Latin
 - iii) Chinese
 - iv) English
- b) Communication problems otherwise known as.
 - i) Enquire
 - ii) Barriers
 - iii) Encoding
 - iv) Decoding
- c) Letters should be answerd _____.
 - i) Promptly
 - ii) Orally
 - iii) Non Verbally
 - iv) Softly
- d) Which of these is not a medium of e-mail?
 - i) Intranet
 - ii) Internet
 - iii) Extranet
 - iv) Paper
- e) _____ is the easiest way of communication.
 - i) E-mail
 - ii) Telephone
 - iii) Fax
 - iv) Letter
- f) The first page of a letter should be typed on a _____.
 - i) Letterhead
 - ii) Correctness
 - iii) Inside Address
 - iv) Courtesy

P.T.O.

B) Match the following : [5]

- | A | B |
|--|----------------------------|
| a) Mentioning the number of the documents/papers are enclosed in the | i) Reference Numbers |
| b) Element which causes disturbance in the flow of communication | ii) Official communication |
| c) Office circulars should consists | iii) Channel |
| d) A memo is used as a means of | iv) Sender |
| e) Person who sends information to another person is | v) Enclosures |

C) True or False (Attempt any 4 out of 5) : [4]

- a) Voice mail is a computer based system.
- b) Orders and directives are the example of downward communication.
- c) SMS stands for Social Message Service.
- d) The word “memo” is a short form of Memorandum.
- e) Good manners come from one’s heart and not a formal etiquette book.

Q2) Short Answer (Attempt any 3 out of 4) : [24]

- a) Explain the Role of Communication in social & economic system.
- b) What are the merits & demerits of Oral communication?
- c) Explain in detail different layout of business letter.
- d) Explain the importance of fax communication & E-mails.

Q3) Long Answer (Attempt any 2 out of 4) [32]

- a) What is communication? Explain need & principles of effective communications.
- b) Explain in detail the Qualities and difficulties in written communication.
- c) Explain in detail various types of business letter.
- d) State and explain different media of communication.



Total No. of Questions : 3]

SEAT No. :

PA-1957

[Total No. of Pages : 2

[5954]-102

First Year .B.B.A.(Computer Application)
CA-102 : PRINCIPLES OF MANAGEMENT
(2019 Pattern) (Semester-I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figure to the right indicate full marks.*

Q1) a) Fill in the blanks (any 5) [5×1=5]

- i) _____ is second function of management.
- ii) _____ is a universal concept.
- iii) Management is a _____ because it is based on experiments.
- iv) _____ propounded Hawthorne experiments.
- v) _____ creates feeling of threat & fear among employees.
- vi) _____ means assigning work to others.

b) Match the following (5 marks) [5×1=5]

- | | |
|-------------------|--------------------------|
| i) Henry Fayol | a) Scientific Mgt-theory |
| ii) F.W Taylor | b) 14 principles |
| iii) Alton Mayo | c) Hawthorne experiments |
| iv) Peter Drucker | d) MBO |
| v) J.R.D Tat | e) Diplomat |

c) State True/False (any four) [4×1=4]

- i) Stress results from mismatch between demands & pressures on the person on one hand & their knowledge and abilities on other.
- ii) TQM is infinitely invariable & inadapttable.
- iii) David Mcclelland is known for Needs Hierarchy of Motivation
- iv) Forecasting is part of planning which involves estimating future course of action.
- v) There is a close relation between planning & decision making.

P.T.O.

Q2) Answer any three :

[3×8=24]

- a) What are the types of decision making?
- b) Explain management as an art.
- c) What are principles of change?
- d) Explain Maslow's Law of Hierarchy.

Q3) Answer any two:

[2×16=32]

- a) What is TQM? Explain elements of TQM.
- b) What is planning? Explain its process with a flow diagram.
- c) Explain Scientific Management Theory in detail.



Total No. of Questions : 5]

SEAT No. :

PA-4204

[Total No. of Pages : 2

[5954]-103A
F.Y. B.B.A. (CA)
CA - 103 : C LANGUAGE
(2019 Pattern) (CBCS) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any Eight of the following (Out of Ten) :

[8 × 2 = 16]

- a) Define token.
- b) Explain break statement.
- c) Define Structure.
- d) What is Keywords?
- e) Define Associativity.
- f) What is pointer arithmetic?
- g) Explain two dimensional array.
- h) What do you mean by Variable?
- i) Define string.
- j) Explain the use of goto statement.

P.T.O.

Q2) Attempt Any Four of the following (Out of Five) : **[4 × 4 = 16]**

- a) Explain do ... while loop statement with syntax and example.
- b) Explain briefly structure declaration and accessing member from structure.
- c) Explain Logical operator with example.
- d) Explain briefly print() and scanf() I/O functions used in C.
- e) Write a program to find even number from Array.

Q3) Attempt Any Four of the following (Out of Five) : **[4 × 4 = 16]**

- a) Explain switch statement in detail.
- b) Explain Increment/Decrement operator.
- c) What is Array? Explain.
- d) Write a program to find factorial of a given number.
- e) Write a program to find sum of first n numbers.

Q4) Attempt Any Four of the following (Out of Five) : **[4 × 4 = 16]**

- a) What is function? Explain types of function.
- b) State and explain any four string functions used in C.
- c) Explain if else control statement.
- d) Write a program to find maximum of 2 numbers.
- e) Write a program to accept any number and display reverse digit of entered number.

Q5) Write a short note on any Two of the following (Out of Three) : **[2 × 3 = 6]**

- a) Pointer.
- b) *for* Loop.
- c) Data Types.



Total No. of Questions : 5]

SEAT No. :

PA-1959

[Total No. of Pages : 3

[5954]-104

F.Y. B.B.A. (C.A.)

CA - 104 : DATABASE MANAGEMENT SYSTEM

(2019 Pattern) (CBCS) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any Eight of the following :

[16]

- a) What is File? Enlist types of files.
- b) Define Data and Information.
- c) What is Generalization? Give Example.
- d) Explain the use of MIN 0 with example.
- e) Define Attribute and Tuple.
- f) What is RDBMS?
- g) What is SQL? Enlist two types of SQL Commands.
- h) What is Deletion Anomaly?
- i) Explain Logical Data Independence.
- j) Define Super Key.

Q2) Attempt any Four of the following :

[16]

- a) Explain in detail Sequential File Organization.
- b) What is DBMS? Explain applications of DBMS.
- c) Explain any four data types in SQL.
- d) Explain CREATE TABLE command with syntax and example.
- e) Explain functional dependency with example.

P.T.O.

Q3) Attempt any Four of the following :

[16]

- a) Consider the following Entities and Relationships & solve the queries :
Department (dept_no, dept_name, location)
Employee (emp_no, emp_name, address, salary, designation)
Relation between Department and Employee is **One to Many**.
• Find the name of department whose salary is above 10000.
• Display list of employees having designation 'CLERK'.
- b) Consider the following Entities and Relationships and solve the queries :
Donor (donor_no, donor_name, city)
Blood_Donation (bid, blood_group, quantity, date_of_collection)
Relation between Donor and Blood_Donation is **One to Many**.
Constraint : Primary key, blood_group should not be null.
• Display total blood quantity collected on 25th December 2013.
• Display total blood donated by each donor.
- c) Consider the following Entities and Relationships and solve the queries :
Bus (bus_no, capacity, depot_no)
Route (rout_no, source, destination, no_of_stations)
Relation between Bus and Route is **Many to One**.
Constraint : Primary key.
• Find out the route details on which buses whose capacity is 20 runs.
• Display number of stations from 'Chinchwad' to 'Katraj'.
- d) Consider the following Entities and Relationships and solve the queries :
Musician (mno, mname, addr, phno)
Album (title, copy_right_dae, format)
Relation between Musicians and Album is **One to Many**.
Constraint : Primary key.
• Display all albums composed by 'A R Rehman'.
• Display musician details who have composed Audio album.
- e) Consider the following Entities and Relationships & solve the queries :
Book (Book_no, title, author, price, year_published)
Customer (cid, cname, addr)
Relation between Book and Customer is **Many to Many**.
Constraint : Primary key, price should be >0.
• Display author wise details of book.
• Display customer name that has purchased more than 3 books.

Q4) Attempt any Four of the following :

[16]

- a) Explain Advantages and disadvantages of Indexed file organization.
- b) Write a note on Data Views.
- c) Explain the following SQL commands with syntax and example :
 - i) DROP TABLE
 - ii) UPDATE
- d) Consider the following Entities and Relationships and solve the queries :

Employee (emp_id, emp_name, address)

Investment (inv_no, inv_name, inv_date, inv_amount)

Relation between Employee and Investment is **One to Many**.

Constraint : Primary key, inv_amount should be > 0.

- Display employee details who have invested more than 100000.
- Display employee wise total investment amount.

- e) Consider the following Entities and Relationships & write queries for following.

Property (pno, desc, area, rate)

Owner (owner_name, addr, phno)

Relation between owner and Property is **One to Many**.

- Display owner details having rate of property less than Rs. 20,00,000.
- Display owner name having maximum no. of properties.

Q5) Write short notes on any Two of the following :

[6]

- a) Normalization
- b) E-R Model.
- c) SQL and Types of SQL



Total No. of Questions : 5]

SEAT No. :

PA-1960

[Total No. of Pages : 4

[5954]-105

F.Y. B.B.A. (CA) (Semester - I)
BUSINESS STATISTICS (CA-105)
(2019 Pattern)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Notations & abbreviations have their usual meaning.*
- 4) *Simple calculator is allowed.*

Q1) A) Fill in the blanks :

[10]

- i) The degree to which numerical data tend to spread about an average value is called the _____.
- ii) ΣX means _____.
- iii) Classification method in which upper limit of interval is same as of Lower limit class interval is called _____.
- iv) Summary and Presentation of data in tabular form with several non-overlapping classes is referred as _____.
- v) _____ diagrams are graphs of the data that are helpful in displaying the relationship between variables.

B) True or False :

[6]

- i) The coefficient of determination can take on a value between -1 & $+1$.
- ii) A series has its mean as 15 and its coefficient of variation as 20, its standard deviation is 10.
- iii) If $\bar{X}=20$, $M = 18.5$, then $Z = 15.5$

P.T.O.

Q2) Attempt any four of the following :

[16]

a)	Marks	10	20	30	40	50
	No. of Students	8	10	20	15	7

Computer Arithmetic Mean

b) Calculate the S.D. and C.V. from the following :

14, 8, 11, 10, 13, 16, 5, 9, 12, 2

c) Calculate coefficient of correlation for the following data :

X: 2 3 4 5 6 7 8

Y: 4 7 8 9 10 14 18

d) In a simple study about coffee habit in two towns the following information was received :

Town A : Females were 40%, Total coffee drinkers were 45% and male non-coffee drinkers were 20%

Town B : Males were 55%, Female coffee drinkers were 15% and male non-coffee drinkers were 30% Represent the above data in a tabular form.

e) Compute the mode from the following data :

Size	2	3	4	5	6	7	8	9	10	11	12	13
Frequency	3	8	10	12	16	14	10	8	17	5	4	1

f) Calculate Range and its coefficient from the following data :

53, 46, 18, 16, 75, 84 and 28

Q3) Attempt any four of the following :

[16]

a) Use a bar diagram to represent the following data :

Year : 1983 1984 1985 1986 1987

Profit of a : 2.5 2.0 1.0 2.8 3.0

company

(In Lakhs ₹)

b) Arithmetic mean of 50 items is 104. While checking it was noticed that observation 98 was misread as 89. Find the correct value of mean.

- c) Computer the quartile deviation and its coefficient from the following data :
- 100, 24, 14, 105, 21, 35, 106, 16, 100, 72, 68, 103, 61, 90, 20
- d) find correlation coefficient between X and Y, given that : $n = 25$ $\Sigma x = 75$, $\Sigma y = 100$, $\Sigma x^2 = 250$, $\Sigma y^2 = 500$, $\Sigma xy = 325$
- e) Find Median for the following data :
- | | | | | | | | |
|---------|-------|-------|-------|-------|-------|-------|--------|
| Wages : | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 |
| (in ₹) | | | | | | | |
| No. of | 1 | 3 | 11 | 21 | 43 | 32 | 9 |
| Persons | | | | | | | |
- f) Explain the Degree (strength) of correlation

Q4) Attempt any four of the following : [16]

- a) Define statistics. Explain the scope of statistics.
- b) Find the mid-point and width of each class given the classes below 10, 10-20, 20-40, 40-60, 60-70 above 70
- c) Draw a histogram to represent the following frequency distribution
- | | | | | | |
|-----------------|------|-------|-------|-------|--------|
| Size of forms : | 0-20 | 20-40 | 40-60 | 60-80 | 80-100 |
| (in hectares) | | | | | |
| No. of forms : | 12 | 38 | 16 | 5 | 3 |
- d) Write a note on Scatter Diagram.
- e) Two workers on the same job show the following results over long period of time :

	Worker 'A'	Worker 'B'
Mean time of completing the job (in minutes)	30	25
Standard Deviation	6	4

- i) Which worker appears to be more consistent in the time he requires to complete the job? Why?
- ii) Which worker is faster in completing the job? Why?
- f) Explain the different parts of statistical table

Q5) Attempt any one of the following :

[6]

a) From the data given below, find the regression equations :

i) Y on X

ii) X on Y

Marks : 25 28 35 32 31 36 29 38 34 32

(Economics)

Marks 43 46 49 41 36 32 31 30 33 39

(Statistics)

b) Calculate mean, median and mode from the following data :

Monthly salary : 400 600 800 1000 1200 1400 1600

(Less than)

No. of Workers : 0 4 14 33 45 49 50



Total No. of Questions : 7]

SEAT No. :

PA-1961

[Total No. of Pages : 3

[5954]-201

F.Y. B.B.A. (C.A.)

**CA-201 : ORGANISATION BEHAVIOR &
HUMAN RESOURCE MANAGEMENT
(2019 Pattern) (Semester-II)**

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *Q.1 & Q.2 are compulsory.*
- 2) *Solve any 3 questions from Q.3 to Q.7.*
- 3) *Figures to the right indicate full marks.*

Q1) Select the correct option: [16]

- a) The basis of ____ is economic resources with a managerial orientation of money.
 - i) Autocratic model
 - ii) Custodial model
 - iii) Collegial model
 - iv) Supportive model
- b) Fundamental concepts of OB revolve around ____ .
 - i) Nature of human beings
 - ii) Working of human beings
 - iii) Both (i) & (ii)
 - iv) None of above
- c) What is the most important purpose of diversity training?
 - i) Improve communication skills
 - ii) Increase workplace harmony
 - iii) Increase tolerance
 - iv) Increase cultural knowledge
- d) ____ refers to any alteration that occurs in total work environment.
 - i) Organisational change
 - ii) Organisational stress
 - iii) Organisational conflict
 - iv) None of the above
- e) Which of the following is not job related stress?
 - i) Role ambiguity
 - ii) Work overload
 - iii) Work underload
 - iv) None of the above
- f) Human Resource management is ____ management function.
 - i) Strategic
 - ii) Auxiliary
 - iii) Supporting
 - iv) Ancillary
- g) Employees in ____ are mostly treated as an economic man for his services are exchanged for wages or salaries.
 - i) Human resource Management
 - ii) Personnel Management
 - iii) Financial Management
 - iv) Scientific Management

P.T.O.

- h) Employment, Human Resource Development. Compensation, Human Relations, HR effectiveness are all the ___ functions of Human Resources Management.
- i) Managerial
 - ii) Operational
 - iii) Financial
 - iv) Technical
- i) Handling canteen, medical, transport, legal functions are _____ role of HR Managers.
- i) HRD
 - ii) Administrative
 - iii) Industrial Relation
 - iv) Development
- j) _____ is process by which an organization should move from its current man power position to its desired manpower position.
- i) Human Resource Planning
 - ii) Human Resource Management
 - iii) Training
 - iv) All the above
- k) _____ involves a collection of job related information.
- i) Job description
 - ii) Job analysis
 - iii) Job designing
 - iv) All the above
- l) Employee referral is _____ .
- i) an internal source of recruitment
 - ii) an external source of recruitment
 - iii) Both (i) & (ii)
 - iv) None of the above
- m) A campus placement is the example of _____ method of recruitment.
- i) Direct
 - ii) Indirect
 - iii) Internet
 - iv) Third party
- n) Under _____ method an imaginary situation is created and trainees are asked to act on it.
- i) Lectures
 - ii) Case-study
 - iii) Simulation
 - iv) Job Instruction
- o) The methods of training which are adopted for the development of employees away from the field of the job are known as _____ methods.
- i) On the job
 - ii) Off-the-job
 - iii) Both (i) & (ii)
 - iv) None of above
- p) The following is (are) the benefit(s) of training.
- i) Increase productivity
 - ii) Reduce accidents
 - iii) Reduce supervision
 - iv) All the above

Q2) Write short notes on (Any four): [24]

- a) Methods of Recruitment.
- b) Internal sources of Recruitment.
- c) Autocratic model
- d) Effects of stress.
- e) Scope of organisational behaviour.
- f) Recent Trends in Training.

Q3) What is cultural diversity? Explain the strategies for managing workforce diversity. [10]

Q4) Define selection? Explain the steps involved in selection process. [10]

Q5) What do you mean by Human Resource Planning? Explain the importance of HR planning? [10]

Q6) Define “HRM”.Explain the objectives of HRM. [10]

Q7) What is “Training & Development”? Explain any four methods of off-the-job training methods. [10]



Total No. of Questions : 4]

SEAT No. :

PA-1962

[Total No. of Pages : 3

[5954]-202

First Year B.B.A. (C.A.)

CA - 202 : FINANCIAL ACCOUNTING

(CBCS 2019 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Use of simple calculator is allowed.*

Q1) A) a) Fill in the blanks. [5]

i) _____ is an art of recording in the books of accounts in the monetary term.

- | | |
|--------------------|----------------|
| 1) Cost Accounting | 2) Bookkeeping |
| 3) Auditing | 4) Taxation |

ii) The owner of a business is called as_____.

- | | |
|--------------|---------------|
| 1) Creditors | 2) Debtors |
| 3) Employee | 4) Proprietor |

iii) An account of a person which may be natural person, artificial person or representative group of person is referred as_____.

- | | |
|-----------------|--------------------|
| 1) Real account | 2) Nominal account |
| 3) Personal | 4) Debtors |

iv) The amount contributed by the partners in the firm is known as_____.

- | | |
|------------|------------|
| 1) Loan | 2) Reserve |
| 3) Surplus | 4) Capital |

v) Balance Sheet is_____.

- | | |
|---------------|----------------|
| 1) An account | 2) A statement |
| 3) A report | 4) A draft |

b) State whether the following statements are True or False. [5]

- i) Voucher is created by an accountant
- ii) Goods given as free samples should be debited to advertisement account
- iii) The debts which are to be paid in a short period of time are called as current liabilities
- iv) Debit what comes in and credit what goes out is a rule of nominal account
- v) Cash is an example of fixed asset

P.T.O.

c) Match the following pairs. [5]

Group A

- i) Fixed Assets
- ii) Accounting Software
- iii) Cost Accounting
- iv) Ledger
- v) Intangible Asset

Group B

- 1) Branch of Accounting
- 2) Secondary Book
- 3) Tally ERP 9.0
- 4) Goodwill
- 5) Plant and Machinery

B) Write short notes (Any Three). [15]

- a) Subsidiary books.
- b) Accounting Software Packages.
- c) Role of computers and Financial application.
- d) Accounting Process.
- e) Importance of Bank Reconciliation Statement.

Q2) Journalise the following transactions in the books of M/s Poonawala, Pune for March 2022. [12]

March 2022.

- 1. Mr. Poonawala started business with cash Rs. 1,50,000.
- 2. Purchased Machinery for cash Rs.70,000.
- 8. Bought goods for cash Rs. 20,000 and for credit Rs. 10,000 from KK retail store.
- 14. Sold goods to JK Brothers Rs. 18,000 and cash sales Rs. 8,000.
- 18. Withdrew Rs. 20,000 for personal use.
- 22. Paid Rs. 10,000 to KK retail store.
- 26. Received Rs. 18,000 from JK Brothers.
- 30. Paid salaries Rs. 5,000.

Q3) From the following particulars prepare a Bank Reconciliation Statement to find out the causes of difference in two balances as on March 31, 2022 for Star Ltd. [12]

	Rs.
a) Bank Overdraft as per Bank Statement	34,000
b) Check issued but not encashed during the August	4,400
c) Dividends on shares collected by banker	4,600
d) Interest charged by the bank recorded twice in the Cash Book	1,000
e) Check deposited as per Bank Statement not entered in Cash Book	6,800
f) Credit side of the Bank column in Cash Book cast short	2,000
g) Clubs dues paid by bank as per standing instruction not recorded in Cash Book.	2,400
h) Uncredited check due to outstation.	7,800

Q4) Following is the Trial Balance extracted from books of M/s Sahil as on 31st March 2022. Prepare Trading, Profit and Loss Account for the year ended 31st March 2022 and Balance sheet as on that date. [16]

Particulars	Dr.	Particulars	Cr.
Land and Building	1,15,000	Capital	2,00,000
Drawing	68,000	Loans	65,000
Plant and Machinery	75,000	Sales	1,00,000
Furniture and Fixture	17,500	Commission Received	4,500
Purchases	25,000	Sundry Creditors	60,000
Opening stock	25,000	Interest	13,000
Establishment charges	15,000	Provision for bad debts	2,000
Bad debts	1,500		
Wages	3,500		
Insurance	1,000		
Debtors	28,000		
Cash at Bank	15,000		
Cash in Hand	5,000		
Salaries	50,000		
	4,44,500		4,44,500

Adjustments:

- The closing stock is valued at Rs. 32,000.
- Outstanding wages are Rs.500.
- Prepaid insurance is Rs. 400.
- Depreciation Land and Building and Plant and Machinery @ 10%.
- Make a provision of 5% on debtors for bad debts.



Total No. of Questions : 5]

SEAT No. :

PA-1963

[Total No. of Pages : 3

[5954]-203

F. Y B.B.A. (C.A.)

CA-203 : BUSINESS MATHEMATICS

(2019 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) All questions are compulsory.
- 2) Neat diagram must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.

Q1) A) Fill in the blanks :-

[5 × 2 = 10]

- i) If the interest is calculate on the principal alone, then it is known as _____.
(Simple Interest, Compound Interest, Annuity)
- ii) The price at which the articles are sold is called the _____ price.
(Cost, Selling, Purchase)
- iii) If A and B matrices are of same order and $A+B = B+A$, this law is known as _____.
(Commutative law, Associative law, Cramer's law)
- iv) The variables that help to decide the outcome are called _____.
(Decision variables, Dependent variables)
- v) The column, which is introduced in the transportation matrix to balance the rim requirements is known as _____.
(Key Column, Idle column, Dummy Column)

B) State whether the following statement are true or false

[3 × 2 = 6]

- i) Market value of the share is the current price at which the share is being traded in stock market.
- ii) The inverse ratio is the ratio in reverse order of the original ratio.
- iii) The zero matrix is not the additive identity for the matrices.

P.T.O.

Q2) Attempt any Four of the following (Four out of Six) : **[4 × 4 = 16]**

- a) Find fourth proportional to 6,8,10.
- b) Find the simple interest on ₹ 7000 at 50/3% for 9 months.
- c) A TV set is sold for ₹ 36,375 at a loss of 15% find the purchase price of the TV set.
- d) Find the number whose 30% is 360.
- e) What are the components of Linear programming?
- f) Define the term matrices?

Q3) Attempt any Four of the following (Four out of Six) : **[4 × 4 = 16]**

- a) What is percentage and how it is calculated?
- b) Find $A + B = B + A$ When matrices.

$$A = \begin{bmatrix} 1 & 2 \\ 2 & -1 \end{bmatrix}, B = \begin{bmatrix} 3 & 1 \\ -1 & -2 \end{bmatrix}$$

- c) What we mean by objective function in LPP.
- d) An Amount of ₹ 1,200 is deposited in a bank paying an annual interest rate of 5% compounded yearly. Find the Balance after 2 years.
- e) What is transportation model?
- f) Find out the total income received from the investment. If Rohit invested ₹ 99,000 in 7½% Stocks at Rs. 81½ plus brokerage of ₹ 1.

Q4) Attempt any four of the following (Four out of six) **[4 × 4 = 16]**

- a) At what price will ₹ 4,250 buy shares worth ₹ 5000? (They are ₹ 100 shares).
- b) A person invests his money in bank worth ₹ 24,000. It is increasing at the rate of 5% every year. What will be the growth in his investment after 3 years?
- c) What is the 20% of 150 ?
- d) Alfred buys an old scooter for ₹ 4700 and spend ₹ 800 on its repairs. If he sells the scooter for ₹ 5800, his gain percent is what?
- e) Write the steps of LPP formulation
- f) Explain the North - west corner method (NWCM) method of TP?

Q5) Attempt any one out of two:

[1 × 6 = 6]

- a) Determine an initial basic feasible solution to the following transportation problem by using VAM method.

	Destination					
		D ₁	D ₂	D ₃	D ₄	Supply
Source	A	11	13	17	14	250
	B	16	18	14	10	300
	C	21	24	13	10	400
	Demand	200	225	275	250	

OR

- b) Compute the inverse of A :-

$$\text{Where } A = \begin{bmatrix} 0 & 1 & 2 \\ 1 & 2 & 3 \\ 3 & 1 & 1 \end{bmatrix}$$



Total No. of Questions : 5]

SEAT No. :

PA-1964

[Total No. of Pages : 3

[5954]-204

B.B.A. (CA)

**CA-204: RELATIONAL DATABASE MANAGEMENT
SYSTEM**

(2019 Pattern) (Semester - II)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) All questions are compulsory.*
- 2) Figures to the right indicate full marks.*

Q1) Attempt any EIGHT of the following (Out of TEN) : [8 × 2 = 16]

- a) Define RDBMS?
- b) Define Database?
- c) Write syntax for Nested if statement in PLSQL with example.
- d) What is PLSQL Block?
- e) Define serializability?
- f) What is schedule? List types of schedule
- g) What is transaction?
- h) What is procedure?
- i) What is trigger?
- j) Define upgrading and downgrading?

P.T.O.

Q2) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]

- a) Explain difference between DBMS and RDBMS in detail.
- b) What is deadlock? Explain methods to prevent deadlock.
- c) What is exception handling? Explain predefined exceptions.
- d) Explain two-phase locking protocol in detail.
- e) Explain RDBMS packages in detail.

Q3) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]

- a) What is function? Explain with an example.
- b) List and explain properties of transaction.
- c) Explain % type and % row type with an example.
- d) Explain failure classification in detail.
- e) What is log? Explain log based recovery.

Q4) Attempt any FOUR of the following (Out of FIVE) : [4 × 4 = 16]

- a) Consider the following relational database.
Customer (cno, cname, city).
Account (ano, acc-type, balance, cno)
Define a trigger that restricts insertion or updation of account having balance less than 100.
- b) Consider the following transaction. Give two non-serial schedules that the serializable:

T1	T2
Read(X)	Read(Z)
X = X + 100	Read(X)
Write (X)	X= X –Z
Read (Y)	Write (X)
Read(Z)	Read(Y)
Y=Y+ Z	Y = Y –100
Write(Y)	Write(Y)

- c) Following is the list of events in an interleaved execution of set T1, T2, T3 and T4. Assuming 2PL (Two Phase Lock). Is there a deadlock? If yes, which transactions are involved in deadlock?

Time	Transaction	Code
t ₁	T1	Lock(A,X)
t ₂	T2	Lock(B,S)
t ₃	T3	Lock(A,S)
t ₄	T1	Lock(C,X)
t ₅	T2	Lock(D,X)
t ₆	T1	Lock(D,S)
t ₇	T2	Lock(C,S)

- d) Consider following relational database
 Doctor (dno, dname, dcity)
 Hospital (hno, hname, hcity)
 Doct-Hosp (dno, hno)
 Write a function to return count of number of hospitals located in Mumbai City
- e) Consider the following relational database:
 Customer (cno, cname, city)
 Loan (lno, lamt, no_of_years, cno)
 Write a procedure to display total loan amount from Mumbai City.

Q5) Write a short note on ANY TWO of the following (Out of THREE) :
[2 × 3 = 6]

- Functions in PLSQL.
- Concurrent Execution.
- Control Statements in PLSQL.



Total No. of Questions : 5]

SEAT No. :

PA-1965

[Total No. of Pages : 3

[5954]-205

F.Y. B.B.A. (CA) (Semester - II)

CA-205 : WEB TECHNOLOGY (HTML-JS, CSS)

(2019 Pattern)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates :

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*

Q1) Attempt any Eight of the following (out of Ten) :

[8 × 2 = 16]

- i) List any four tags used in HTML.
- ii) Explain javascript array methods.
- iii) Define CSS.
- iv) Explain HTTP request & response message.
- v) Explain <background> tag.
- vi) List any two benefits of CSS.
- vii) Define website.
- viii) What is browser?
- ix) Explain <form> tag.
- x) Define :
 - a) FTP
 - b) IP

Q2) Attempt any four of the following : (out of five)

[4 × 4 = 16]

- i) What is CSS? Explain with its types.
- ii) Explain HTML structure.

P.T.O.

- iii) Explain the use of <frameset> tag with an example.
- iv) Explain ordered and unordered list
- v) Explain any 4 tag in HTML with syntax.

Q3) Attempt any four of the following : (out of five)

[4 × 4 = 16]

- i) Explain the working of caching.
- ii) Explain concepts of effective web design in details.
- iii) Explain client side and server side Image mapping.
- iv) Write a Javascript program to accept a number from user and check whether it is Armstrong number or not.
- v) Write a Javascript to create an image slider (use array to store image)

Q4) Attempt any four of the following : (Out of Five)

[4 × 4 = 16]

- i) Write a note on FTP.
- ii) Explain Dom.
- iii) Write a Javascript code to accept a number 'n' from user and display first 'n' terms of Fibonacci series.
- iv) Write HTML Code to Create following table.

Course	Fee structure			Year
	Fy	Sy	Ty	
B.A.	20,000	25,000	30,000	2019
B.Com.	15,000	20,000	25,000	2020
B.Sc.	25,000	30,000	35000	2021

- v) Write HTML code which generate the following output and display each element of list in different size, color and font
 - Coffee
 - Tea
 - Black Tea
 - Green Tea
 - 1) Africa
 - 2) China

Q5) Attempt any two of the following : (out of three)

[2 × 3 = 6]

- i) Write short note on internet.
- ii) Explain embedding Audio, video in HTML.
- iii) Explain Date objects in Javascript.

