BCA/evoc/eSA
I, II, IV

Roll No. ....

GSE/D-22   1161

COMPUTER AND PROGRAMMING FUNDAMENTALS

Paper : BCA-111

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Quesions

1. (a) Write a short note on memory units.   4
   (b) Differentiate between application software and system software.   4
   (c) Explain the concept of structured programming. 4
   (d) Write a short note on sorting with suitable example. 4

Unit I

2. Define Computer. Explain various components of computer along with a block diagram. Compare the functioning of Computer with human being by taking any suitable example.   16

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3. (a) What are the applications of computers in various fields ? 8

   (b) Explain secondary storage devices. 8

Unit II

4. (a) Define operating system. Explain various functions of operating system. 10

   (b) Hardware and software are the two sides of same coin. Elaborate. 6

5. Give the classification of operating systems. Explain with examples. 16

Unit III

6. Explain the concept of flowcharting, algorithm and decision table with suitable examples. 16

7. (a) Write short note on errors, debugging and documentation. 8

   (b) Explain various types of programming methodologies by taking suitable example. 8

Unit IV

8. What is Searching ? Elaborate on different types of searching techniques along with suitable examples. 16

9. (a) Elaborate on the classification of computer languages. 8

   (b) Explain compiler, assembler and interpreter. 8

Roll No. ....

Total Pages : 02

WINDOWS AND PC SOFTWARE

BCA-112

1162

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Compulsory questions :

2×4=8

   (a) What do you understand by User Interface ?

   (b) Explain the purpose of ClipArt.

   (c) What is Spreadsheet ?

   (d) What do you mean by Consolidating Data ?

Unit I

2. (a) What is an Operating System ? Describe various functions of Operating System.   4

   (b) Explain the following :   4

      (i) Recycle Bin

      (ii) Disk Defragmentation

3. Describe various Entertainment Tools.   8

P.T.O.

Unit II

4. Explain various steps to Scan a disk using Scandisk Tool. 8

5. How can you install Printer ? Explain various steps to share a Printer on Network or LAN. 8

Unit III

6. Explain the various features of MS-Excel. 8

7. (a) Describe different views of Workbook. 4

   (b) Explain, various steps to Freeze specific rows or columns in a worksheet. 4

Unit IV

8. What is a Macro ? Explain the steps to record and run a Macro. 8

9. Explain the components of workbook. 8

3,900

(Compulsory Question)

1. (a) Draw Venn diagram for $A \cup B$.

(b) Define Lattices.

(c) Evaluate :

$$\lim_{x \to 5} \frac{x^2 - 9x + 20}{x^2 - 6x + 5}.$$

(d) Find order and degree of the differential equation

$$\frac{d^3 y}{dx^3} - \left(\frac{dy}{dx}\right)^{1/3} = xy.$$

(e) Solve the differential equation :

$$\frac{d^3 y}{dx^3} - 3\frac{d^2 y}{dx^2} + 3\frac{dy}{dx} - y = 0.$$

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9. (a) Solve the differential equation :

$$x^2 \frac{d^2 y}{dx^2} + x\frac{dy}{dx} - y = x^2 e^x.$$

(b) Determine the curve in which the length of the sub-normal is proportional to the square of the ordinate.

L-1163

Unit I

2. (a) Prove that :

$$A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$$

(b) Show that if R_1 and R_2 are equivalence relation on A then $R_1 \cap R_2$ is an equivalence relation.

3. (a) A box contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be drown from the box, if at least one black ball is to be included in the draw ?

(b) If $f(x,y,z) = (x \cup y) \wedge (x \cup y') \wedge (x' \cup z)$ be a given Boolean function, determine its DN form.

Unit II

4. (a) Prove that limit of a function at a point, if exists, is unique.

(b) Find the value of a if the function f given by

$$f(x) = \begin{cases} 2x-1, & 2 < x \\ a, & x = 2 \\ x+1, & x > 2 \end{cases}$$ is continuous at $x = 2$.

5. (a) Find $\dfrac{dy}{dx}$ if $y = \dfrac{\sqrt{x}(x+4)^{3/2}}{(4x-3)^{4/3}}$.

(b) Find $\dfrac{dy}{dx}$ if $y = (\sqrt{x})^x + (x)^{\sqrt{x}}$.

(c) If $= x^x$, show that :

$$\frac{d^2y}{dx^2} - \frac{1}{y}\left(\frac{dy}{dx}\right)^2 - \frac{y}{x} = 0.$$

Unit III

6. (a) Form the differential equation of the equation $(x-a)^2 + (y-b)^2 = r^2$ by eliminating the arbitrary constants a and b.

(b) Solve the differential equation :

$$y\sqrt{1-x^2}\,dy + x\sqrt{1-y^2}\,dx = 0.$$

7. (a) Solve the differential equation :

$$(x^2 - y^2)dx - xy\,dy = 0.$$

(b) Solve the differential equation :

$$(x^2 + y^2 + 2x)dx + 2y\,dy = 0.$$

Unit IV

8. (a) Solve the differential equation :

$$\frac{d^3y}{dx^3} + y = 3 + e^{-x} + 5e^{2x}.$$

(b) Solve the differential equation :

$$\frac{d^2y}{dx^2} - 4\frac{dy}{dx} + 4y = x^2 + e^x + \cos 2x.$$

Total Pages : 03

GSE/D-22

1164

LOGICAL ORGANIZATION OF COMPUTER–I

BCA-114

Time : Three Hours]　　　　[Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Attempt *four* more questions, selecting *one* question from each Unit. All questions carry equal marks.

1. Answer the following questions in brief :

  (a) What is Radix ? What are digits of hexadecimal number system ?　　2

  (b) Represent 'A' in ASCII and EBCDIC codes.　　2

  (c) What is principle of duality ? Explain.　　2

  (d) State DeMorgan's laws.　　2

  (e) What is XOR gate ? Draw truth table and symbol.　　2

  (f) What is AND gate ? Draw truth table and symbol.　　2

  (g) What is Multiplexer ? Draw the diagram for 4 ×1 multiplexer and explain its working.　　4

Unit I

2. (a) Convert $(37.23)_{10}$ into binary and hexadecimal number systems. 8

   (b) Add $(9)_{10}$ and $(-14)_{10}$ in two's complement form. 8

3. (a) What are BCD codes ? Write self-complementing and cyclic BCD codes. 8

   (b) What are error detecting and correcting code ? Explain with an example. 8

Unit II

4. (a) State the postulates of Boolean algebra. 8

   (b) Prove the following Boolean theorems using Boolean postulates : 8

   (i) $X + XY = X$

   (ii) $X + 1 = 1$.

5. (a) What are canonical representation of Boolean functions ? Explain POS and SOP form of representation with examples. 8

   (b) Simplify the following Boolean function using K-map : 8

   $F(a, b, c, d) = \Sigma (0, 1, 2, 4, 5, 6, 8, 9, 12, 13, 14)$.

Unit III

6. (a) What are NAND and NOR gates ? Why are these called as universal gates ? Explain. 8

   (b) Implement $F = A.B + C.D + E$ using NAND logic only. 8

7. (a) What is combinational logic ? What are characteristics of combinational circuits ? Also discuss design procedure of combinational circuits. 8

   (b) What is analysis procedure ? Explain with an example. 8

Unit IV

8. (a) What is full adder ? Design full adder circuit. 8

   (b) What is comparator circuit ? Design 3-bit comparator circuit. 8

9. (a) What is demultiplexer ? Design 1 × 4 demultiplexer circuit. 8

   (b) Design a circuit to convert 8421 BCD code into excess-3 BCD code. 8

GSE/D-22

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COMMUNICATIVE ENGLISH

BCA-115

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

Unit I

1. What according to Narayan are the blackspots of our education system.

Or

How did Gandhiji impart the training of spirit ?

2. (a) How did Holtz suffer in life ?

Or

What did MacIntosh advise Rory to do in the court ?

(b) How did Ranji lose his "magic" bat ?

Or

(c) How does Anand revive the saga of Old Bapu's life ?

What decision was taken against Foreman by the Vicar ?

Or

(d) What response did Petrov anticipate from Ivanych ?

What is the writer's opinion about the examination system ?

Or

(e) Where does produce of animal's toil go ?

Who was Jowett ? What does Lynd tell us about him ?

Or

What type of man a teacher be ?

Unit II

3. Read the passage and answer the questions that follow :

At a certain university in America I met an advanced soul. He taught political science. One month before the annual examination, he cyclostyled (or Zeroxed') the questions and distributed them among his students, who thereafter apent nearly twelve hours a day in the library in the 'assigned reading room'.

Questions :

(i) Name the chapter and the writer.

(ii) Why is the teacher called as "an advanced soul ?"

(iii) What did the teacher do one month before the examination ?

(iv) How did the students prepare themselves for the examination thereafter ?

(v) How much time did they spend in the library ?

4. (a) Write a fax to the Office of Principal of ABC College informing that you will be late in joining your duty as an Assistant Professor due to some personal reasons.

(b) Write an e-mail to your father telling him about your excellent performance in the exams.

(c) Compose a text message informing you mother that you will be late in coming to home.

Unit III

5. Do as directed :

(i) He lives..........Kurukshetra. (Preposition)

(ii) He abstains..........alcohol. (Preposition)

(iii) My brother is..........M.A. (article)

(iv) I have..........dog in my house. (article)

(v) He prayed......God for his success. (article)

(vi) He.......(drink) tea when i knocked at the door.

(vii) He.........(pray) to God daily.

(viii) He often.....(come) late.

(ix) He....(live) here for last four years.

(x) He caught the ball (Change the voice)

(xi) Tea is tasty. (tag question)

(xii) He said to me,"Do you know my name ?"
(Reported speech)

(xiii) He is sleeping. (Tag question)

(xiv) Honey is sweet. (Change the voice)

(xv) My mother said, "May you live long!"
(Reported speech)

(xvi) She is the....(intelligent) girl of the school.

(xvii) Mount Everest is the highest peak of the world.
(Rewrite using positive degree)

(xviii) He said to me,"I am your friend."(Reported speech)

6. Write a paragraph in about 150 words :

   (a) Population Explosion
   (b) Importance of Computers.

Unit IV

7. Write a letter to ABC technologies to change the defected printers they have delivered.

Or

Write an application to the Head of your Institute seeking his permission to organize a techfest in the institute.

8. You are visiting a railway station to reserve your ticket. Write a conversation that took place between you and the reservation clerk.

Unit V

9. What do you understand by RTI Act ? How does the act help in making the system transparent ?

10. Write an application to seek information from the UGC asking for the information about the benefits that are available to physically challenged students.

PROGRAMMING IN C

BCA-116

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) What is the role of comments ? How comments can be written in C ?

   (b) Differentiate between getch(), getche() and getchar().

   (c) Differentiate between break and continue.

   (d) What is recursion ?

   (e) Why goto statement should be avoided in a program ?

   (f) How arrays can be initialized ?

   (g) What is meant by typecasting ?

   (h) How can you declare a string in C ?   8×2=16

Unit I

2. (a) Explain various data types in C.   8

   (b) Explain structure of a C program using suitable example.   8

3. (a) What is the difference between constants and variables ? How can we declare constants in C ? Explain using suitable examples.   8

   (b) Explain various I/O functions in C using suitable examples.   8

Unit II

4. Describe various operators in C along with their hierarchy and associativity.   16

5. (a) Write a program in C to find greatest among three numbers.   8

   (b) Discuss switch statement with the help of suitable examples. Also discuss all the possible cases in switch statement.   8

Unit III

6. (a) Write a program in C to find the sum of the digits of the input number.   8

L-1166   2

   (b) What do you understand by function ? Explain the various benefits of using functions.   8

7. Describe various types of loops in C with the help of suitable examples.   16

Unit IV

8. Explain various storage classes in C in detail.   16

9. What do you mean by array ? Explain various types of arrays in detail. Write a program in C to biggest of n numbers.   16

GSM/D-22

1167

OBJECT ORIENTED PROGRAMMING

USING C++

BCA-231

Time : Three Hours] [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Compulsory question :

(i) Distinguish between Static Binding and Dynamic Binding.

(ii) Differentiate with call by value and call by reference.

(iii) Explain the rules of operator overloading.

(iv) What do you mean by stream ? What is the purpose of buffer ?

(v) Differentiate between static polymorphism and polymorphism. Explain its types.

(vi) Explain strcpy () with example.

(vii) Define local class ().

(viii) Discuss the various forms of get () functions ? How are they used ?

8×2=16

2. What is Object Oriented Programming ? Explain its features and benefits. Also explain the difference between object oriented programming and procedural oriented programming ?

16

3. Differentiate between object and class. Also explain scope resolution operator with its significance by giving suitable example.

16

Unit II

4. What is a copy constructor ? Explain its significance. Give an example to illustrate copy constructor.

16

5. (a) Explain various stream classes with examples. 8

   (b) What do you mean by destructor ? Explain it with example.

8

Unit III

6. What do you mean by Friend Function ? Explain it with example.

16

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2

7. What is Pointer ? Explain the concept of this pointer using example.

16

Unit IV

8. (a) Explain the concept of Inline Function by using examples. What are its advantages ? 8

   (b) Write a program to overload the "+"operator to find sum of two objects.

8

9. What is Operator ? Describe several different types of operator available in C++ with its precedence.

16

3

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GSM/D-22

DATA STRUCTURES

BCA-232

Time : Three Hours]

1168

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) Define Big O notation.   4

   (b) Define Linked List and its applications.   4

   (c) Explain Stack and Queue and its applications.   4

   (d) Difference between Tree and Graph.   4

Unit I

2. (a) What are the various applications of data structure ?
                                                                        8

   (b) Write various string operations.   8

3. (a) What is data structure ? Explain various types of data structure in detail.   8

   (b) Explain, what do you mean by complexity of algorithm ? How is it calculated ? Explain with suitable example.   8

UNIT II

4. Differentiate between row major and column major array index notation. How is index calculated in both ? **16**

5. What do you mean by linked list ? Write a function to insert and delete a node in linked list. **16**

Unit III

6. Define stack. How is it different from queue ? Write an algorithm to implement stack using linked list. **16**

7. Define circular queue. Write algorithm to insert an element in a circular queue. **16**

Unit IV

8. List the types of binary search trees. Explain insertion and deletion operation on a binary search tree. **16**

9. Define Graph. Explain sequential and linked representation of graphs by giving suitable example. **16**

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1169

COMPUTER ARCHITECTURE

BCA-233

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Section. Q. No. 1 is compulsory. All questions carry equal marks.

1. Write notes on the following :
   (a) Interrupt controlled data transfer
   (b) Register reference instructions
   (c) Register transfer language
   (d) RISC.

Section A

2. (a) What do you mean by Instruction Code ? Explain its various components.
   (b) Explain the various Input/Output Reference Instructions.

3. (a) Explain various approaches of Control Unit Design and Implementation.

(b) What are the various Addressing modes of basic computer ? Explain.

Section B

4. (a) What do you mean by Microoperation ? Explain the hardware implementation of Logic Microoperations.

(b) Explain the various CPU Registers.

5. (a) Explain the various Components of Microinstruction.

(b) What do you mean by Address Sequencing ? Explain.

Section C

6. What do you mean by Instruction Format ? What are the various types of Instruction formats ? Explain with suitable examples.

7. (a) What do you mean by Stack ? Explain PUSH and POP operations.

(b) What are the various features, advantages and disadvantages of CISC architecture ?

Section D

8. (a) What is Locality of Reference ? Explain its types.

(b) What do you mean by Associative Memory ? Explain its advantages and disadvantages.

9. (a) Distinguish between Memory Mapped I/O and I/O Mapped I/O.

(b) Explain the various methods of Strobe Control Asynchronous data transfer.

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GSM/D-22

1170

SOFTWARE ENGINEERING

BCA-234

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Explain the following terms in brief :

    (a) What is the need of Software ?   2

    (b) What are the various information gathering tools ?   2

    (c) Differentiate between product and process.   2

    (d) Define Software prototyping.   2

    (e) What are basic issues of SRS ?   2

    (f) What are the different types of nodes in decision tree ?   3

    (g) Define Software Metrices.   3

Unit I

2. (a) What are components of software ? Discuss how a software differs from a program.   8

    (b) What is the aim of Software Engineering ?   8

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P.T.O.

3. Compare the Waterfall model and the spiral model of Software development. 16

Unit II

4. (a) Explain various information gathering tools in detail. 8

   (b) What is Requirement Analysis ? 8

5. Explain the need of a SRS document in Software development process. 16

Unit III

6. (a) State the model of a data dictionary and its contents. What are its advantages ? 8

   (b) Explain decision tree with suitable example. 8

7. Write short notes on the following : 16

   (a) Data Dictionary

   (b) Structured English

   (c) Decision Table.

Unit IV

8. Explain various Software testing strategies by giving suitable example. 16

9. What is Software Quality Assurance ? Explain various tools to implement SQA. 16

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R-12

Total Pages : 03

GSM/D-22

1171

FUNDAMENTALS OF DATABASE SYSTEM

Paper : BCA-235

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (i) Define Record and File.

   (ii) Describe duties of Database Designers.

   (iii) What are three levels of DBMS ?

   (iv) Define Integrity rules.

   (v) Define tuple, attribute and domain.

   (vi) Distinguish between Primary key and Secondary Key.

   (vii) Define Relational Algebra.

   (viii) Explain various DBMS Languages.   8×2=16

Unit I

2. (a) Define data and information. Differentiate between traditional file based system and database approach.

8

8

P.T.O.

(b) Explain various advantages and disadvantages of DBMS. 8

3. (a) What is DBMS ? Explain its various components. 8

(b) Explain various responsibilities of Database Administrator. 8

Unit II

4. (a) Explain three level Architecture of Database System. 8

(b) Describe Schemas and Instances. 8

5. (a) What is Data Independence ? Explain Logical and Physical data independence. 8

(b) Explain client server architecture of DBMS. 8

Unit III

6. Explain various types of Data models along with their purpose. 16

7. (a) Explain Entity, Entity set, Attributes, Relationship types. 8

(b) What is an ER model ? Discuss the notations used to draw ER diagram based on the concept of ER model. 8

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Unit IV

8. Explain various relational algebra operations with example. 16

9. (a) Explain various Integrity Constraints over Relations. 8

(b) What are various properties of Relations. 8

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Total Pages : 03

1172

COMPUTER ORIENTED NUMERICAL METHODS

BCA-236

Time : Three Hours] [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. I is compulsory. All questions carry equal marks.

(Compulsory Question)

1. Attempt the following questions in short : 8×2=16

   (a) Explain Bairstow's method.

   (b) Define interpolation and approximation.

   (c) Discuss pitfalls in differentiation.

   (d) Discuss order of convergence of Newton-Raphson method.

   (e) Write the Taylor series formula.

   (f) Explain orthogonal properties of Chebyshev polynomial.

   (g) Explain the types of errors that occur in numerical computations.

   (h) Discuss Predictor Corrector method.

P.T.O.

Unit I

2. (a) How are floating point numbers represented in computer ?   8

    (b) Discuss Arithmetic operations with normalised floating point numbers.   8

3. Explain the following Iterative methods :

    (a) Newton-Raphson method   8

    (b) Bisection method.   8

Unit II

4. (a) Explain algorithms of Gauss-Elimination methods for three equations.   8

    (b) Solve the following equations by Gauss elimination method :   8

$$4x_1 + x_2 + 3x_3 = 11$$
$$3x_1 + 4x_2 + 2x_3 = 11$$
$$2x_1 + 3x_2 + x_3 = 7.$$

5. Find y for $x = 0.1$ by using Euler's method :   16

$$\frac{dy}{dx} = \frac{y - x}{y + x}, \; y = 1 \text{ at } x = 0 \text{ with initial condition.}$$

Unit III

6. Use Newton's formula for interpolation to find the net premium at age 25 from the table given ahead :   16

Age	20	24	28	32
Annual Net Premium	0.01427	0.01581	0.01772	0.01996

7. Explain Chebyshev polynomials. Prove the recursion relation $T_{n+1}(x) = 2x T_n(x) - T_{n-1}(x)$. Also find the first six Chebyshev ploynomials.   16

Unit IV

8. Evaluate $\int_0^6 \frac{1}{1 + x^2} dx$ by using :

    (i) Simpson's $\frac{1}{3}$ rule   8

    (ii) Simpson's $\frac{3}{8}$ rule.   8

9. Explain the following :

    (i) Numerical differentiation and integration   8

    (ii) Gaussian quadrature.   8

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Total Pages : 02

GSQ/D-22   1173

WEB DESIGNING FUNDAMENTALS

BCA-351

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

1. Explain the following :

   (a) Web server and search engines

   (b) Domain name and hypertext

   (c) Image tag and link tag

   (d) Forms in html

Unit I

2. What is WWW ? Explain the histroy of WWW.

3. What are the web casting techniques ? Explain the search tools.

Unit II

4. What is a homepage ? Explain planning and designing of a website.

(6-03/1) **L-1173**   P.T.O.

5. Explain web publishing in detail.

Unit III

6. Explain formatting of text in HTML. With example.

7. Explain page layout feature in HTML.

Unit IV

8. What is a Table ? How do we insert rows and columns in a table ?

9. What are Frames ? Explain their creation and layouts in html.

Total Pages : 02

GSQ/D-22   1174

OPERATING SYSTEM-I

BCA-352

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. With reference to the operating system, answer the following :   2×8=16

   (i) Multiprocessing   (ii) Distributed

   (iii) FCFS   (iv) Process

   (v) Semaphore   (vi) Swapping

   (vii) Deadlock   (viii) LRU

Unit I

2. Define Operating System. Explain its characteristics and components.   16

3. Explain the terms Batch, Timesharing, Parallel and Distributed with reference to Operating System. 16

Unit II

4. Define process and thread. Explain Process Control Block. 16

5. Explain FCFS, SJF, Priority, Multilevel Queue scheduling algorithms. 16

Unit III

6. Explain Prevention, Avoidance, Detection and Recovery with reference to dealock. 16

7. Explain Partition, Paging, Fragmentation and Segmentation with reference to memory management. 16

Unit IV

8. Explain FIFO, Optimal and LRU page replacement algorithms. 16

9. Explain various file allocations methods. 16

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GSO/D-22

1175

ARTIFICIAL INTELLIGENCE

Paper : BCA-353

Time : Three Hours] [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting, *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (i) Define artificial intelligence.

   (ii) State any *two* applications of AI.

   (iii) What is an expert system ?

   (iv) State any *two* limitations of expert systems.

   (v) What is meant by state space search ?

   (vi) What is Heuristic Search ?

   (vii) What does NLP stand for ?

   (viii) What does Local Maximum means ?   8×2=16

Unit I

2. (a) State and explain various applications of AI.   8

(b) What is a Turing test ? How is it performed ?
8

3. (a) Comment on "Can a Mechine Think". 6

(b) Define problem representation in Artificial Intelligence. What are the different methods of problem representation in Artificial Intelligence ?
10

Unit II

4. What are the components of Expert Systems ? Explain along with various characterics of an Expert System.16

5. Discuss Expert System Life-cycle process in detail. 16

Unit III

6. Explain the following :

(a) Breadth First Search

(b) Best First.
16

7. What is search process in AI ? Explain with different types of search techniques.
16

Unit IV

8. What is Robotics ? Explain the concept of a robot along with its major components.
16

9. What is Natural Language Processing ? What is its need ? What are the fundamental problems of Natural Language Processing ?
16

Total Pages : 03

GSQ/D-22

1176

COMPUTER NETWORKS

Paper : BCA-354

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (i) How many types of networking models are there ? List them.

   (ii) What is unit of measuring signal rate and data rate in data communication ?

   (iii) Token management protocols are used for........topology.

   (iv) Define Encryption and Protocol.

   (v) Full form of CRC.

   (vi) Explain the concept of Half Duplex Communication.

   (vii) What are the factors which are considered while using topology ?

   (viii) Explain MAC Address.   2×8=16

P.T.O.

Unit I

2. Explain OSI model in detail. 16

3. (a) Write short notes on the following : 8
   (i) NIC and PC cards
   (ii) Bridges
   (iii) Switch
   (iv) Router

   (b) What is a Topology ? Explain in detail different types of Topologies with their diagrams, advantages and disadvantages. 8

Unit II

4. (a) Explain guided transmisssion media in detail. 8

   (b) Explain multiplexing techniques using neat and clean diagram in detail. 8

5. (a) What is Modulation ? Explain various modulation techniques in detail. 8

   (b) Differentiate between packet switching and circuit switching. 8

Unit III

6. Explain sliding window protocols in detail. 16

L-1176 2

7. Write the frame format of Ethernet and explain the technology in detail. 16

Unit IV

8. (a) Explain the following techniques of congestion control : 6
   (i) Traffic Shaping
   (ii) Load Shedding
   (iii) Choke Packet.

   (b) Explain shortest path routing in detail using suitable example. 12

9. What is Congestion ? How does congestion occur ? Explain in detail the congestion control policies. 16

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GSQ/D-22   1177

PROGRAMMING USING VISUAL BASIC

BCA-355

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. Explain the following :   4×4=16

   (a)   Event Handler

   (b)   Named and Intrinsic Constants

   (c)   Nested Control Structure.

   (d)   Actual and Formal Parameters.

Unit I

2. What is IDE ? Explain the components of Visual Basic Integrated Development Environment.   16

3. Explain the following :   4×4=16

   (a)   Difference between Visual and Non-visual Programming

   (b)   Difference between Object Based and Eventdriven language

   (c)   Important features of VB.

(3-26/5) L-1177   P.T.O.

Unit II

4. What is forcing variable declaration ? How can we declare a variable? Explain scope and lifetime of variables. 16

5. Explain the following : 4×4=16

   (a) Input Box

   (b) Message Box

   (c) Print Statement.

Unit III

6. What are the decision statements in VB ? Explain select-case statement with the help of example. 16

7. (a) How will you declare a two-dimensional array in VB ? Explain with suitable example. 8

   (b) Differentiate between do loop and while wend loop. 8

Unit IV

8. (a) What is function and how does it differ from subroutine ? 8

   (b) How can we pass an array to function in VB ? 8

9. Write a program in VB to calculate factorial of a number. 16

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Roll No. ....

Total Pages : 02

1178

MULTIMEDIA TOOLS

Paper : BCA-356

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) What is MPEG standard ?

 (b) What is NTSC ?

 (c) What do you mean by Raster Image ?

 (d) What is DPCM ?

 (e) What is HDTV standard ?

 (f) What do you understand by video compression ?

 (g) What is compression ratio ?

 (h) What is digital audio ? 8×2=16

Unit I

2. What is Multimedia ? Discuss various multimedia software tools. 16

P.T.O.

3. Write short notes on the following :   16

(a) Multimedia authoring tools

(b) History of VRML.

Unit II

4. Explain the following digital video standards :   16

(a) Chroma subsampling

(b) CCIR standards

5. What do you mean by a data type ? Explain various graphics/image data types.   16

Unit III

6. What is a digital audio ? Differentiate between analog and digital audio.   16

7. What do you mean by coding of audio ? Explain pulse code modulation in detail.   16

Unit IV

8. What do you understand by data compression ? Differentiate between run-length coding and variable length coding.   16

9. Differentiate between the following :   16

(a) MPEG-1 and H.261

(b) MPEG-1 and MPEG2

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BSD/D-22   **12086**

COMPUTER FUNDAMENTALS

BVSD-11

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Write short notes on the following :
   - (a) Addressing Capability
   - (b) Bar-Code Reader
   - (c) Video Disk
   - (d) Sign Magnitude Representation.

Unit I

2. (a) What are the characteristics of a computer system ?
   (b) Explain the components of a Digital Computer.

3. What is the processing speed of a computer ? How is it calculated ? Explain.

Unit II

4. Explain the following :
   Digitizing Tablet, OCR, OMR.

5. Differentiate the following :

   (a) Inkjet and Laser Printers

   (b) Printer and Speaker.

Unit III

6. What are primary and secondary data storage devices ? Explain the concept of volatile memory w.r.t. memory in computers.

7. Explain the following :

   Floppy Disks, DVD, Physical structure of storage devices.

Unit IV

8. Explain the sign magnitude representation of binary numbers. Differentiate between 1's complement and 2's complement representations.

9. Write short notes on the following :

   (a) $(16578)_{10} + (1000001)_2 = (?)_2$

   (b) $(EEEEAA00)_{16} - (23453)_8 = (?)_{10}$

   (c) $(67)_{10} - (109)_{10}$ using 1's complement and 2's complement representations.

   (d) $1232 + 3654$ using BCD coding method.

BSD/D-22

12087

PC SOFTWARE

BVSD-12

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. (a)   Write the steps to search file or folder in Windows.

4

    (b)   How to place a picture on slide in PowerPoint Presentation ?

3

    (c)   Write the steps to align text in MS-Word.

3

    (d)   Write the steps to change the wall paper of the syetem.

3

    (e)   What is range in MS-Excel ?

3

Unit I

2. (a)   Discuss the functions of control panel.

8

    (b)   What is the window explorer ? What are its features ?

8

3.   Explain the following file commands :

4×4=16

    (a)   Moving

(b) Copying

(c) Rename

(d) Delete.

Unit II

4. (a) Explain the components of the Word document window. 8

(b) What do you mean by Formatting ? Explain character paragraph and page formatting in detail. 8

5. (a) What are Auto Text and Auto Correct Utility in MS-Word ? Explain with example. 8

(b) Describe the concept of Mail Merge by giving suitable example. 8

Unit III

6. Explain the components of chart. How to change chart layout and chart style. 16

7. Explain the following in MS-Excel : 4×4=16

(a) Auto Fill

(b) Freezing Worksheet Panes

(c) Steps to protect a work sheet

(d) Hiding rows and columns.

Unit IV

8. (a) Explain the components of a slide in PowerPoint Presentation. 8

(b) Explain the steps to select a new slide and apply themes effects in PowerPoint Presentation. 8

9. (a) What is the procedure to insert sound and video in presentation ? 8

(b) How to animate text and objects in PowerPoint Presentation ? 8

BSD/D-22

12088

OPERATING SYSTEMS-I

BVSD-13

Time : Three Hours]　　　　　　　　　　[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory.

(Compulsory Question)

1. (a)　What is a system program ?　　　　　　　　4

　　(b)　Write a short note on PCB.　　　　　　　　4

　　(c)　Differentiate between Logical and Physical Addresses.　　　　　　　　　　　4

　　(d)　What is the need of disk scheduling ?　　4

Unit I

2. What is an Operating System ? What are the services provided by operating system ? Also discuss historical evolution of operating system.　　　　16

3. (a)　What is the need of a system call ? With the help of an example, explain how is it executed.　10

　　(b)　What are real-time systems ? Discuss.　6

4. (a) Differentiate between short-term, medium-term and long-term scheduling. 8

(b) What is Interrupt Processing ? Explain. 8

5. What are the criteria for comparing CPU-scheduling algorithms ? Consider the following set of processes, with the help length of the CPU-burst time given in milliseconds :

Process	Burst Time	Priority
P1	10	3
P2	1	1
P3	2	3
P4	1	4
P5	5	2

The processes are assumed to have arrived in the order P1, P2, P3, P4, P5, all at time 0.

(a) Draw four Gantt charts illustrating the execution of these processes using FCFS, SJF, a non-preemptive priority (a smaller priority number implies a higher priority) and RR (quantum = 1) scheduling.

(b) Find the turnaround time of each process for each of the scheduling algorithm in part (i).

(c) Find the waiting time of each process for each of the scheduling algorithm in part (i).

(d) Which of the algorithms results in the minimal average waiting time (over all process) ? 16

Unit III

6. What is Segmentation ? Discuss segmentation hardware with the help of diagram. What type of fragmentation can be caused by segmentation ? 16

7. Discuss various page replacement algorithms. 16

Unit IV

8. Discuss various structuring techniques and interface for the operating systems that enable I/O devices to be treated in a standard, uniform way. 16

9. (a) What are various implementation issues in device management ? Explain. 8

(b) Discuss swap space management. 8

Total Pages : 03

BSD/D-22   12089

PROGRAMMING FUNDAMENTALS AND C

BVSD-14

Time : Three Hours]   [Maximum Marks : 80

Note : Q. No. 1 is compulsory. In addition, attempt *four* more questions exactly selecting *one* question from each Unit. All questions carry equal marks.

1. Explain the following in brief :   4×4=16

    (i)   Computer languages

    (ii)   History of C language

    (iii)   Recursion

    (iv)   Pointer assignment.

Unit I

2. (a)   What is a decision table ? How can you draw a decision table ? Explain using suitable examples. 8

    (b)   Describe the various symbols used in a flowchart. Draw a flow chart to check whether the input number is prime or not.   8

3. (a) Differentiate between Assembler, Compiler and Interpreter. 8

(b) What is meant by documentation and debugging in programming ? 8

Unit II

4. (a) Explain the data types in C language. 8

(b) Describe the IF statement and its variations using suitable examples in C. 8

5. Explain various types of operators in C along with their hierarchy and associativity. Use suitable examples to describe operators. 16

Unit III

6. (a) Distinguish between the following : 8

(i) Automatic and Static Variables

(ii) Scope and Lifetime of Variables.

(b) Write a program in 'C' to search a number from a given list of numbers. 8

7. What is a function ? How can you categorize functions in C ? Write a user-defined function to return the highest number from a given array passed to a function. 16

Unit IV

8. Write a program in C to sort a given list of strings using pointers. 16

9. Differentiate between arrays, pointers, structures and unions in C. 16

BSD/D-22

12090

RDBMS-I

BVSD-31

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) What is database intension and extension ?

    (b) List the rules proposed by Dr.E.F. Codd.

    (c) What are spurious tuple ? How is it generated ?

    (d) Differentiate between full and partial functional dependency.

    (e) Write SQL syntax to sort data in descending order.

    (f) What do you mean by bit map index ?

    (g) State some features or programming constructs supported by PL/SQL.

    (h) What is the purpose of percentage data type ? Explain with suitable examples.   8×2=16

Unit I

2. (a) What are the important properties of Database Management System (DBMS) ? Discuss DBMS advantages.

   (b) Outline and explain important components of three tier architecture of DBMS.

   8+8=16

3. (a) What is Data Model ? Draw a comparison between hierarchical and network data model.

   (b) What is Relationship ? Discuss relation type and relation constraints with example.

   8+8=16

Unit II

4. (a) What is need of relational algebra ? Explain select, project and union operations of relational algebra with example.

   (b) What is meant by join operations ? Differentiate between equi-join and outer join with suitable example.

   8+8=16

5. What is Normalization ? Why we need normalization ? Draw and explain the similarities and dissimilarities between third normal form and BCNF. Which of the normal form is stronger among them ?

   16

Unit III

6. (a) Write the purpose and syntax of using update and alter statement with add, modify, drop and rename keywords.

   (b) What are Constraints ? How do you implement primary key, foreign key and check constraints ?

   8+8=16

7. (a) Write the purpose and syntax of the following SQL functions :

   (i) ROUND( )

   (ii) ADD_MONTHS( )

   (iii) LTRIM( )

   (iv) SUBSTR( )

   (b) What are Views ? Write the syntax to create and destroy view.

   8+8=16

Unit IV

8. (a) What is labelling a PL/SQL loop ? How PL/SQL loops iterate ? Write a PL/SQL block using FOR-LOOP statement.

   (b) Discuss logical block structure of PL/SQL. How do you assign SQL query result to PL/SQL variables ?

   8+8=16

9. (a) What do you mean by cursor ? Write a specimen PL/SQL block to implement implicit cursor.

   (b) Write a detailed note on PL/SQL security. 8+8=16

BSD/D-22

12092

SOFTWARE ENGINEERING

BVSD-33

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory.

(Compulsory Question)

1. (a) What do you mean by software engineering ? What is the need of engineering approach to software development ? Discuss. 4

   (b) Differentiate between behavioral and non-behavioral requirements. 4

   (c) What are follow-ups ? Who is responsible for these ? 4

   (d) What is validation testing ? 4

Unit I

2. Discuss the Waterfall model of software development. In what types of applications it should be used ? Also explain the advantages and limitations of this model. 16

3. (a) What is Software Crisis ? State its significance with reference to software engineering discipline.

8

(b) Discuss the quality attributes of software. Provide a concise definition for each of the quality attributes.

8

Unit II

4. Discuss the characteristics and components of Software Requirement Specification.

16

5. What is Coupling ? Discuss various types of coupling using suitable examples.

16

Unit III

6. (a) What are the benefits and limitations of code reviews and walkthroughs ?

8

(b) Discuss the steps involved in code inspection process.

8

7. What is functional testing ? Discuss various functional testing techniques using examples.

16

Unit IV

8. Discuss the following :

(a) Validation Testing

(b) System Testing

(c) Alpha Testing.

16

9. Discuss various types of software maintenance. Also discuss its characteristics.

16

Roll No. ....

Total Pages : 02

BSD/D-22   **12093**

OBJECT ORIENTED PROGRAMMING
WITH C++
BSVD-34

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

1. Attempt any *four* of the following :   4×4=16

   (a) Explain the use of template class.

   (b) Explain inline function.

   (c) Write syntax of constructors and destructors.

   (d) Explain 'new' and 'delete' operators.

   (e) Explain the use of template class.

Unit I

2. Explain the following :

   (a) Explain Data Hiding and Encapsulation using suitable example.   8

   (b) Explain Static data member and member function using suitable example.   8

(5-15/3) L-12093   P.T.O.

3. What is friend function ? Explain by giving suitable example. Write a program to calculate income tax of an employee and use friend function in it.   16

Unit II

4. Explain the roll and various types of constructors.   16

5. (a) Explain new and delete operators.   8

    (b) Explain Formatted and Unformatted I/O.   8

Unit III

6. What is Operator overloading ? Also write a program for unary operator overloading with and without friend function.   16

7. Explain the role of constructors and destructors in inheritance using suitable example.   16

Unit IV

8. Explain the various types of errors. Also explain the exception handling. Write a program to catch all handlers.   16

9. What is Template Class ? Write a program to overload function using template class.   16

BSD/D-22

12094

CURRENT TECHNOLOGIES

BVSD-51

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all. Question No. 1 is compulsory. In addition to compulsory question, attempt *four* more questions, selecting *one* question from each Unit. All questions will carry equal marks.

(Compulsory Question)

1. (i) What are the different versions of the cloud ?

(ii) What do you mean by cloud delivery models ?

(iii) What do you mean by Long Jump ?

(iv) What is the relationship between OGSA, WSRF, and Web Services ?

(v) How is grid computing different from cluster and P2P Computing ?

(vi) Explain the concept of Gaglia.

(vii) Which of the following is an example of the cloud ?

(a) Amazon Web Services (AWS)

(b) Dropbox

(c) Cisco WebEx

(d) All of the above

(viii) Which architectural layer is used as a backend in cloud computing ?

    (a)   cloud

    (b)   soft

    (c)   client

    (d)   All of the mentioned.   8×2=16

Unit I

2. What is a Cloud Computing ? What are some of the key features of Cloud Computing ? And also explain the drawback.   16

3. Describe the Cloud Computing Architecture. What are some issues with Cloud Computing ?   16

Unit II

4. Describe the Google App Engine Architecture and Core Concepts.   16

5. Explain the following :   2×8=16

    (a)   Windows Live

    (b)   Window Azure Platform.

Unit III

6. What is OGSA ? Describe how it extends Web Services with suitable illustration.   16

7. Explain Grid Monitoring Architecture.   16

Unit IV

8. Explain the concept of Grid Security with example.   16

9. Explain various scheduling paradigm of Grid Scheduling.   16

Roll No. ....

BSD/D-22

E-COMMERCE

BVSD-52

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) Distinguish between pure and partial e-Commerce.

    (b) Write the benefit of e-commerce over traditional Commerce.

    (c) Write a note on information directories.

    (d) Briefly explain electronic banking system.

    (e) What is direct marketing ?

    (f) Describe the role of e-Commerce in financial services.

    (g) What are web rings ?

    (h) How do you market an e-Business ?   8×2=16

Unit I

2. Define e-Commerce. Discuss the features and issues related to e-Commerce. Explain customer to customer e-Commerce with suitable examples. 16

3. Explain in detail the drivers that promote e-Commerce and its applications. Why are they called drivers ? Explain the generic framework of e-Commerce. 16

Unit II

4. Elaborate the different methods for transferring fund electronically. Discuss the use of payment gateways for consumers in India. 16

5. Differentiate between :
   (a) Prepaid and postpaid Electronic Payment System (EPS)
   (b) Card costs and non-card costs. 8+8=16

Unit III

6. Explain the concept of Supply Chain Management in detail. Why is it important to any industry or any organization ? Illustrate by citing suitable examples. 16

7. Write the potential applications of e-Commerce. Which are the issues and obstacles that are faced while adopting e-Commerce applications ? 16

Unit IV

8. (a) Write a detailed note on information directory and search engines. How you can make your search effective ?
   (b) Explain backup procedure and recovery methods of e-Business transactions. 8+8=16

9. Discuss the following :
   (a) News Groups and Forums
   (b) Customer Communication. 8+8=16

BSD/D-22

12096

WEB TECHNOLOGY ASP.Net Dot Net

BVSD-53

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Write short notes on the following :

  (a) ASP.NET

  (b) Validation Controls

  (c) Authentication

  (d) Impersonation

  (e) Session Tracking

  (f) State management

  (g) Dynamically loaded user controls

  (h) Proxy.

8×2=16

Unit I

2. (a) Define web forms.   2

    (b) Describe CLR and class libraries.   14

3. Explain the architecture of ASP.NET framework. Also discuss the limitations of ASP.NET. 16

Unit II

4. (a) How can you implement event handlers using code behind classes ? 10

   (b) List various user control limitations. 6

5. (a) How to create a simple user control in ASP.NET ? 10

   (b) What are server-side controls ? 6

Unit III

6. (a) Explain session object with suitable example. Also list its limitations. 10

   (b) How to communicate with a web service ? 6

7. (a) Explain the process to create a web reference proxy for an XML web service. 8

   (b) What is the need of XML web services ? 4

   (c) How do you transfer information during navigation between pages using query string ? 4

Unit IV

8. (a) Explain the security process for forms authentication. 10

   (b) List various characteristics of ADO.NET. 6

9. Explain the following :

   (a) Output Caching 8

   (b) Data Caching. 8

Roll No. ....

BSD/D-22

Total Pages : 03

12097

ADVANCED JAVA

BVSD-54

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. (a) Enlist the various methods used in Applet life-cycle.

    (b) Enlist the various event classes that exists in java.awt.event package.

    (c) State the purpose of Stream Tokenizer class.

    (d) What are the various constructors used to create file objects ?

    (e) Comment on the purpose of Grid layout.

    (f) How can you create a scroll bar in Java ?

    (g) What is meant by a cookie ?

    (h) What is the purpose of using JTree class ? 8×2=16

P.T.O.

Unit I

2. (a) Create an applet in Java that receives a number as input and find the sum of the digits of the number and displays the result in Applet.   8

   (b) Explain various methods in Graphics class using suitable examples.   8

3. (a) Explain delegation event model in detail.   8

   (b) Write a program in Java to show the use of Component event class.   8

Unit II

4. (a) Write a program using String Tokenizer class to separate the tokens from a given string.   8

   (b) Write a program using ByteStream to merge contents of two files in a single file.   8

5. Write a program in Java using character stream to count the number of characters and line in a given file.   16

Unit III

6. (a) Write a program in Java using Border Layout to write left, right, top and bottom in the four borders and in the center it should display center.   8

   (b) What is Flow layout ? Write a program in Java using flow layout.   8

7. Describe working of Canvas, Panel, Window and Frame class in AWT.   16

Unit IV

8. (a) How can you create swing based applet ? Explain by writing a program.   8

   (b) How can you create popup menu using java swings ? Explain using suitable example.   8

9. (a) How database is handled by servlet ? Explain.   8

   (b) How are requests handled by servlets ? Explain using suitable examples.   8

BBA/D-22

24001

BUSINESS ORGANISATION

BBA-101

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

कुल पाँच प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है । सभी प्रश्नों के अंक समान हैं ।

Compulsory Question (अनिवार्य प्रश्न)

1. (a) Define Business Ethics and their significance.

व्यावसायिक नैतिकता और उसके महत्व को परिभाषित कीजिए ।

(b) Mention the distinguishing features of Cooperative Form of Organisation.

संगठन के सहकारी रूप की विशिष्ट विशेषताओं का उल्लेख कीजिए ।

(c) Elaborate the various types of company.

कंपनी के विभिन्न प्रकारों का विस्तार से वर्णन कीजिए ।

(d) Mention the reasons behind the formation of Trade Association.

व्यापार संघों के गठन के कारणों का उल्लेख कीजिए ।

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P.T.O.

(c) Explain the features and functioning of CII.

सी.आई.आई. की विशेषताओं और कार्यों की व्याख्या कीजिए।

2. What do you understand by Partnership Deed ? Explain its main contents. Also highlight the duties and responsibilities of partners involved therein.

साझेदारी संलेख से आप क्या समझते हैं ? इसकी मुख्य सामग्री को समझाइए। इसमें शामिल भागीदारों के कर्तव्यों और जिम्मेदारियों पर भी प्रकाश डालिए।

3. Discuss the rules and procedures regarding the Incorporation of a Joint Stock Company. Also mention the key matters to be stated in the prospectus of a Joint Stock Company.

संयुक्त स्टॉक कंपनी के निगमन से संबंधित नियमों और प्रक्रियाओं की चर्चा कीजिए। एक संयुक्त पूँजी कंपनी के विवरण-पत्र में बताए जाने वाले प्रमुख मामलों का भी उल्लेख कीजिए।

4. Why deciding a form of business organisation is quite relevant for success of any business ? Discuss the factors that determine the choice of the form of an organisation.

किसी भी व्यवसाय की सफलता के लिए व्यावसायिक संगठन के स्वरूप का निर्णय लेना क्यों आवश्यक है ? संगठन के स्वरूप के चयन को निर्धारित करने वाले कारकों की विवेचना कीजिए।

5. What is the scope of business activities of Multinational Corporations ? Discuss the contribution of MNCs in India's economic development.

बहुराष्ट्रीय निगमों की व्यावसायिक गतिविधियों का क्षेत्र क्या है ? भारत के आर्थिक विकास में बहुराष्ट्रीय कंपनियों के योगदान की चर्चा कीजिए।

6. Examine the objectives and functioning of FICCI and ASSOCHAM.

फिक्की और एसोचैम के उद्देश्यों और कार्यों का परीक्षण कीजिए।

7. Define Non-profit Organisation. How is it different from other forms of organisation ? What kind of activities usually they are involved with ?

गैर-लाभकारी संगठन को परिभाषित कीजिए। यह संगठन के अन्य रूपों से किस प्रकार भिन्न है ? वे आमतौर पर किस तरह की गतिविधियों में शामिल होते हैं ?

8. Define Values. Why do businesses function according to their Value system ? Mention certain examples of values usually pursued by Indian businesses.

मूल्यों को परिभाषित कीजिए। व्यवसाय अपनी मूल्य प्रणाली के अनुसार क्यों कार्य करते हैं ? आमतौर पर भारतीय व्यवसायों द्वारा अपनाए जाने वाले मूल्यों के कुछ उदाहरणों का उल्लेख कीजिए।

Unit IV (इकाई IV)

8. Justify the role of Government in economic development of US economy. 24

   अमेरिकी अर्थव्यवस्था के आर्थिक विकास में सरकार की भूमिका की पुष्टि कीजिए ।

9. Explore the lessons for Indian economy from the growth experience of 'Asian Tigers'. 24

   'एशियन टाइगर्स' के विकास के अनुभव से भारतीय अर्थव्यवस्था के लिए सबक अन्वेषण कीजिए ।

Roll No. ....

BBA/D-22   Total Pages : 04

24003

MANAGERIAL ECONOMICS-I

BBA-103

Time : Three Hours]   [Maximum Marks : 120

Note : Q. No. 1 is compulsory. Attempt *four* more questions selecting *one* question from each Unit. All questions carry equal marks.

प्रश्न संख्या 1 अनिवार्य है । प्रत्येक इकाई से एक प्रश्न चुनते हुए, चार प्रश्न और कीजिए । सभी प्रश्नों के अंक समान हैं ।

Part A (भाग 'अ')

1. Attempt all questions :   3×5=15

   (a) Cultural Revolution.

   (b) *Two* features of British Economy.

   (c) Main industries of USSR.

   (d) Define the term 'Glasnost'.

   (e) How is human development index computed ?

   सभी प्रश्नों के उत्तर दीजिए :

   (अ) सांस्कृतिक क्रांति

(व) ब्रिटिश अर्थव्यवस्था की दो विशेषताएँ।

(स) यू.एस.एस.आर. के मुख्य उद्योग।

(द) 'ग्लासनोस्ट' शब्द को परिभाषित कीजिए।

(इ) मानव विकास सूचकांक की गणना कैसे की जाती है ?

Part B (भाग 'ब')

Attempt *three* questions : 3×3=9

(a) Features of US infrastructure.

(b) Reasons of growth miracle of Singapore.

(c) *Two* reasons of Industrial revolution in Britain.

(d) Lessons for India from growth experience of Japan.

(e) Developmental role of government in any economy.

तीन प्रश्नों के उत्तर दीजिए :

(अ) अमेरिकी बुनियादी ढांचे की विशेषताएँ।

(ब) सिंगापुर के विकास चमत्कार के कारण।

(स) ब्रिटेन में औद्योगिक क्रांति के दो कारण।

(द) जापान के विकास के अनुभव से भारत के लिए सबक।

(इ) किसी भी अर्थव्यवस्था में सरकार की विकासात्मक भूमिका।

Unit I (इकाई I)

2. Highlight the major features of transport and communication system of British economy. 24

   ब्रिटिश अर्थव्यवस्था की परिवहन और संचार व्यवस्था की प्रमुख विशेषताओं पर प्रकाश डालिए।

3. Explain the features and trend of economic development of US economy. 24

   अमेरिकी अर्थव्यवस्था के आर्थिक विकास की विशेषताओं और प्रवृत्तियों की व्याख्या कीजिए।

Unit II (इकाई II)

4. Discuss the contribution of entrepreneurship and technology in the overall economic development of Japan. 24

   जापान के समग्र आर्थिक विकास में उद्यमिता और प्रौद्योगिकी के योगदान की चर्चा कीजिए।

5. Explain in detail the Economic Reforms adopted by China. 24

   चीन द्वारा अपनाए गए आर्थिक सुधारों को विस्तार से समझाइए।

Unit III (इकाई III)

6. Explain how Glasnost and Perestroika become the causes of disintegration of USSR. 24

   स्पष्ट कीजिए कि ग्लासनोस्ट और पेरेस्त्रोइका किस प्रकार सोवियत संघ के विघटन के कारण बने ?

7. Bring out the factors of speedy economic growth of Singapore economy. 24

   सिंगापुर की अर्थव्यवस्था के तीव्र आर्थिक विकास के कारकों पर प्रकाश डालिए।

BBA/D-22

BUSINESS ACCOUNTING

BBA-102

Time : Three Hours] [Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory.
All questions carry equal marks.

कुल पाँच प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है । सभी प्रश्नों के अंक समान हैं ।

1. State and describe the following :

  (a) Accounting equation.

  (b) Rules of accounting (debit and credit) entry

  (c) Matching principle

  (d) Generally Accepted Accounting Principles (GAAP)

  (e) Deferred revenue expenditure

  (f) Concept of conservatism. 3+3+2+3+3+2=16

निम्नलिखित का उल्लेख कीजिए और उनका वर्णन कीजिए :

  (अ) लेखा समीकरण

  (ब) लेखांकन (डेबिट और क्रेडिट) प्रविष्टि के नियम

  (स) मिलान सिद्धांत

  (द) आम-तौर पर स्वीकृत लेखा सिद्धांत (जी.ए.ए.पी.)

  (इ) आस्थगित राजस्व व्यय

  (फ) रूढ़िवाद की अवधारणा ।

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8. How are International Financial Reporting Standards (IFRS) different from the Generally Accepted Accounting Principles (GAAP) ? How are the two (IFRS and GAAP) reconciled ? Explain. 16

अंतर्राष्ट्रीय वित्तीय रिपोर्टिंग मानक (IFRS) आम-तौर पर स्वीकृत लेखा सिद्धांतों (GAAP) से कैसे भिन्न हैं ? दोनों (IFRS और GAAP) का मिलान कैसे किया जाता है ? समझाइए ।

2. What do you understand by 'Dual Aspect Concept' of accounting ? Elucidate. 16

3. On January 1, 2022, the following were the ledger balances of ABC & Company :

Cash in hand : Rs. 900, Cash at Bank : Rs. 21,000, Soni (Cr) : Rs. 3,000, Zahir (Dr.) : Rs. 2,400, Stock : Rs. 12,000, Parsad (Cr) : Rs. 6,000, Sharma (Dr.) : Rs. 4,500, Lall (Cr.) Rs. 2,700.

Ascertain the capital and the transactions during the month were :

2022		(Rs. '000)
January 2	Bought goods from Parsad	2,700
January 3	Sold goods to Sharma	3,000
January 5	Bought goods from Lall for cash, paid by cheque	3,600
January 7	Took goods for personal use	200
January 13	Received from Zahir in full settlement	2,350
January 17	Paid to Soni in full settlement	2,950
January 22	Paid cash for stationery	50
January 29	Paid to Parsad by cheque	2,650
	Discount allowed by him	50
January 30	Provided interest on capital	100
	Rent due to landlord	200

Journalise the above transactions and post to the ledger and prepare a Trial balance. 2+5+5+4=16

4. From the following balances extracted from the books of M/s Rajendra Kumar & Sons, prepare a trading, profit and loss account and balance sheet : 16

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1 जनवरी, 2022 को एबीसी एंड कंपनी के बही खाते के शेष निम्नलिखित थे :

हाथ में नकद : 900 रुपये, बैंक में नकद : 21,000 रुपये, सोनी (जमा) : 3,000 रुपये, जहिर (नाम) : 2,400 रुपये, स्टॉक : 12,000 रुपये, प्रसाद (जमा) : 6,000, शर्मा (नाम) : 4,500 रुपये, लाल (जमा) 2,700 रुपये ।

महीने के दौरान पूँजी और लेन-देन निम्नलिखित मानिए :

2022		(Rs. '000)
जनवरी 2	प्रसाद से माल खरीदा	2,700
जनवरी 3	शर्मा को माल बेचा	3,000
जनवरी 5	लाल से नकद में माल खरीद, बैंक से भुगतान किया	3,600
जनवरी 7	निजी इस्तेमाल के लिए सामान लिया	200
जनवरी 13	जहिर से पूर्ण बंदोबस्त प्राप्त हुआ	2,350
जनवरी 17	सोनी को पूर्ण बंदोबस्त का भुगतान	2,950
जनवरी 22	स्टेशनरी के लिए नकद भुगतान	50
जनवरी 29	चेक द्वारा प्रसाद को भुगतान	2,650
	उसके द्वारा अनुमत छूट	50
जनवरी 30	पूँजी पर ब्याज प्रदान किया	100
	मकान मालिक को देय किराया	200

उपर्युक्त लेन-देन को जर्नलाइज कीजिए और खाता बही में पोस्ट कीजिए और एक तलपट तैयार कीजिए ।

Particulars	Amount (Rs. '000)	Particulars	Amount (Rs. '000)
Opening Stock	1,250	Plant and Machinery	6,230
Sales	11,800	Returns onwards	1,380
Depreciation	667	Cash in Hand	895
Commission (Cr.)	211	Salaries	750
Insurance	380	Debtors	1,905
Carriage Inwards	300	Discount (Dr.)	328
Furniture	670	Bills receivables	2,730
Printing charges	481	Wages	1,589
Carriage outwards	200	Returns inwards	1,659
Capital	9,228	Bank Overdraft	4,000
Creditors	1,780	Purchases	8,679
Bills Payable	541	Petty cash in hand	47
		Bad debts	180

Value of stock at the end of the year was Rs. 3,700.

मेसर्स राजेंद्र कुमार एंड संस की पुस्तकों से निकाले गए निम्नलिखित शेष से व्यापार खाता, लाभ और हानि खाता और बैलेंस शीट तैयार कीजिए :

विवरण	राशि (रु. '000)	विवरण	राशि (रु. '000)
ओपनिंग स्टॉक	1,250	संयंत्र और मशीनरी	6,230
बिक्री	11,800	जावक वापसी	1,380
ह्रास	667	नकद हाथ में	895
कमीशन (जमा)	211	वेतन	750
बीमा	380	देनदार	1,905
आवक भाड़ा	300	छूट (नाम)	328
फर्नीचर	670	प्राप्य बिल	2,730
मुद्रण शुल्क	481	मजदूरी	1,589
जावक भाड़ा	200	आवक वापसी	1,659
पूँजी	9,228	बैंक अधिविकर्ष	4,000
लेनदार	1,780	क्रय	8,679
देय बिल	541	खुदरा रोकड़ हाथ में	47
		डूबत ऋण	180

वर्ष के अंत में स्टॉक का मूल्य 3,700 रुपये था ।

5. What are different types of errors escaped in preparations of trial balance ? How are these errors rectified ? Explain. 16

   तलपट तैयार करने में कौन-सी विभिन्न प्रकार की त्रुटियाँ छूट जाती हैं ? इन त्रुटियों को कैसे सुधारा जाता है ? समझाइए ।

6. Write a detailed note on the operational functioning of the advanced Tally software in accounting. 16

   लेखांकन में उन्नत टैली सॉफ्टवेयर की परिचालन कार्यप्रणाली पर एक विस्तृत टिप्पणी लिखिए ।

7. State and differentiate between the capital expenditure and the revenue expenditure with suitable examples. 16

   उपयुक्त उदाहरणों के साथ पूँजीगत व्यय और राजस्व व्यय के बीच अंतर बताइए ।

BUSINESS MATHEMATICS-I

BBA-104

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, including the Q. No. 8 which is compulsory. All questions carry equal marks.

1. (a) Prove that :

$$A \cup (B \cup C) = (A \cup B) \cup C$$

(b) Prove by constructing truth table that :

$$\sim (p \Leftrightarrow q) = (p \wedge \sim q) \vee (\sim p \wedge q)$$

2. (a) If $^5P_r = 2 \cdot {}^6P_{r-1}$, find r.

(b) Solve :

$$\frac{4}{2x+1} + \frac{1}{2x-11} = \frac{5}{2x+5}$$

3. (a) From 6 gentlemen and 4 ladies, a committee of 5 is to be formed, so as to include at least one lady. In how many ways can this be done ?

(e) Find the middle term in the expansion of $\left(x + \dfrac{1}{x} \right)^6$.

(f) Find X and Y if $X + Y = \begin{pmatrix} 7 & 0 \\ 2 & 5 \end{pmatrix}$ and

$X - Y = \begin{pmatrix} 3 & 0 \\ 0 & 3 \end{pmatrix}$.

(g) If $A = \begin{pmatrix} 2 & 1 \\ 3 & 5 \end{pmatrix}$; find $(A)^{-1}$.

(h) Find $\dfrac{dy}{dx}$, if $x = 9t^2 + 7, y = 36t - 3$.

(b) Find the 2nd and 7th term in the expansion of

$$\left(\frac{x^2}{2} - \frac{2}{x^2}\right)^9.$$

4. (a) Evaluate :

$$\lim_{x \to 2} \frac{x^2 - 4}{\sqrt{3x-2} - \sqrt{x+2}}$$

(b) If $y = \left(x^2 + 1\right)^2 \sqrt{2x - 5}$, find $\frac{dy}{dx}$.

5. (a) Differentiate the function $x^x e^{2x+5}$ w.r.t. x.

(b) Find the local maximum and local minimum values of the function :

$$x^3 - 6x^2 + 9x + 15$$

6. (a) Solve the following system of equations by Cramer's rule :

$$6x + y - 3z = 5$$
$$x + 3y - 2z = 5$$
$$2x + y + 4z = 8$$

(b) If $A = \begin{pmatrix} 2 & 3 \\ 1 & 2 \end{pmatrix}$, show that $A^2 - 4A + I_2 = 0$. Hence find A^{-1}.

7. (a) If $A = \begin{pmatrix} 3 & -1 & 2 \\ 4 & 0 & 5 \end{pmatrix}$ and $B = \begin{pmatrix} -1 & 2 \\ 3 & -3 \\ -5 & 0 \end{pmatrix}$, then show that :

$$(AB)' = B'A'$$

Also find adj [(AB)'].

(b) Find the inverse of the matrix $A = \begin{pmatrix} 1 & 1 & 3 \\ 1 & 3 & -3 \\ -2 & -4 & -4 \end{pmatrix}$.

Compulsory Question

8. (a) Construct a truth table for $\sim p \vee \sim q$.

(b) In a class of 60 girls, there are 45 girls who play tennis and 30 girls play cricket. Also each girl likes to play at least one game. Find how many girls play both the games.

(c) Evaluate :

$$\lim_{x \to 2} \frac{x^2 - 5x + 6}{x^2 - 4}$$

(d) Solve the equation :

$$8x - 2 = \frac{3}{x}$$

BBA/D-22

HINDI

BBA-105

24005

Time : Three Hours]

[Maximum Marks : 80

नोट : सभी प्रश्नों के निर्देशानुसार उत्तर दीजिए ।

1. निम्नलिखित में से किन्हीं चार प्रश्नों के उत्तर दीजिए : 4×10=40

   (i) राष्ट्रपति के अध्यादेशों का वर्णन कीजिए ।

   (ii) केन्द्रीय सरकार की हिन्दी शिक्षण-योजना पर प्रकाश डालिए ।

   (iii) अर्द्धसरकारी पत्र को उदाहरण देकर लिखिए ।

   (iv) विज्ञापन क्या है ? उदाहरण सहित विस्तारपूर्वक समझाइए ।

   (v) निविदा सूचना से आपका क्या अभिप्राय है ? उदाहरण देकर लिखिए ।

   (vi) अनुवाद के स्वरूप बताते हुए उसकी प्रकृति का वर्णन कीजिए ।

   (vii) पल्लवन क्या है ? इसके गुण बताइए ।

   (viii) संक्षेपण का अर्थ बताते हुए, उसकी विधि एवं गुण का वर्णन कीजिए ।

2. निम्नलिखित में से किसी एक विषय पर 300 शब्दों में एक निबंध लिखिए : 12

   (i) विज्ञापन और वाणिज्य

(ii) वाणिज्य अध्ययन में हिंदी की उपयोगिता

(iii) महँगाई

(iv) काला धन

(v) वैश्वीकरण और भारतीय उद्योग ।

3. निम्नलिखित पारिभाषिक शब्दों को हिन्दी में लिखिए : 14

(i) Adverse entry   (ii) Circular

(iii) Demi official letter (iv) Face value

(v) Industrious   (vi) Mover

(vii) Levy   (viii) Repudiate

(ix) Tariff   (x) Write

(xi) Survey of General (xii) Paucity

(xiii) Pact   (xiv) Nayes.

(ix) Sticky loan

(x) Housing boom

(xi) Issued

(xii) Ought to be going

(xiii) At hand

(xiv) Will you eat bread ?

4. Use the following terminology in your own sentence so as to make their meaning clear : 14

(i) In order of merit

(ii) As far as practicable

(iii) Void of common sense

(iv) In course of time

(v) On compassionate ground

(vi) According to one's ability

(vii) Black sheep of society

(viii) Concillation officer

Total Pages : 05

BBA/D-22   24007

COMPUTER FUNDAMENTALS

BBA-106

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. In addition to that attempt *four* more questions. All questions carry equal marks.

कुल पाँच प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है । इसके अतिरिक्त चार और प्रश्न कीजिए । सभी प्रश्नों के अंक समान हैं ।

1. (a) What are the various types of computer ? कम्प्यूटर के विभिन्न प्रकार क्या हैं ?

    (b) Differentiate between CUI and GUI. सी.यू.आई और जी.यू.आई. के बीच अंतर बताइए ।

    (c) What do you mean by IP address ? आई.पी. एड्रेस से आपका क्या आशय है ?

    (d) What are the various types of margins setting in MS-Word ? एमएस-वर्ड में मार्जिन सेटिंग के विभिन्न प्रकार क्या हैं ?

(e) Comment on the purpose of slide sorter view.

स्लाइड सॉर्टर व्यू के उद्देश्य पर टिप्पणी कीजिए ।

(f) What is meant by fill handle in MS-Excel ?   16

एम.एस.-एक्सेल में फिल हैंडल का क्या अर्थ है ?

2. (a) Explain the purpose of the following in Excel : 8

एक्सेल में निम्नलिखित के उद्देश्य की व्याख्या कीजिए :

   (i) Auto Format

   (ii) Formula Bar

   (iii) Auto Correct

   (iv) Filter.

   (i) ऑटो फ़ार्मेट

   (ii) फॉर्मूला बार

   (iii) ऑटो करेक्ट

   (iv) फिल्टर ।

(b) How can you create charts in MS-Excel ? Explain various types of charts that can be developed in Excel.   8

आप एम.एस.-एक्सेल में चार्ट कैसे बना सकते हैं ? एक्सेल में विकसित किए जा सकने वाले विभिन्न प्रकार के चार्टों की व्याख्या कीजिए ।

3. (a) Explain any *four* types of slides in detail.   8

किन्हीं चार प्रकार की स्लाइडों का विस्तार से वर्णन कीजिए ।

(b) Explain various types of views used in Power-point in detail.   8

पॉवर-प्वाइंट में प्रयुक्त होने वाले विभिन्न प्रकार के व्यूज़ को विस्तार से समझाइए ।

4. (a) How can you perform the following in MS-Word ? 8

   (i) Change case

   (ii) Check spelling and grammar

   (iii) Alignments

   (iv) Inserting comments.

निम्नलिखित का प्रदर्शन आप एम.एस.-वर्ड में कैसे कर सकते हैं ?

   (i) केस बदलना

   (ii) वर्तनी और व्याकरण की जाँच करना

   (iii) संरेखण

   (iv) टिप्पणियाँ सम्मिलित करना ।

(b) Explain various steps to add a hyperlink in MS-Word.   8

एम.एस.-वर्ड में हाइपरलिंक जोड़ने के विभिन्न चरणों की व्याख्या कीजिए ।

5. Explain various topologies for LAN along with their advantages and disadvantages. 16

लैन के लिए विभिन्न टोपोलॉजी को उनके लाभ और हानियों सहित समझाइए ।

6. What do you mean by e-Mail ? How e-Mail is better as compared to normal postoffice mail ? Name a few servers that provide facility to create your e-Mail account. Discuss various types of services provided by a standard e-Mail facility provider. 16

ई-मेल से आप क्या समझते हैं ? सामान्य पोस्ट ऑफिस मेल की तुलना में ई-मेल किस प्रकार बेहतर है ? कुछ सर्वरों के नाम बताइए जो आपका ई-मेल खाता बनाने की सुविधा प्रदान करते हैं । एक मानक ई-मेल सुविधा प्रदाता द्वारा प्रदान की जाने वाली विभिन्न प्रकार की सेवाओं की चर्चा कीजिए ।

7. Describe the working of a computer using block diagram along with major components of a computer. Discuss the various applications and limitations of computer. 16

कम्प्यूटर के प्रमुख घटकों के साथ-साथ ब्लॉक आरेख का उपयोग करते हुए कम्प्यूटर की कार्यप्रणाली का वर्णन कीजिए । कम्प्यूटर के विभिन्न अनुप्रयोगों एवं सीमाओं की चर्चा कीजिए ।

8. (a) Discuss the major features and drawbacks of Windows. 8

विंडोज की प्रमुख विशेषताओं और कमियों की चर्चा कीजिए ।

(b) Discuss the various ways to connect to an internet. 8

इंटरनेट से जुड़ने के विभिन्न तरीकों की चर्चा कीजिए ।

Roll No. ....

Total Pages : 02

BBA/D-22   24008

UNDERSTANDING HUMAN BEHAVIOUR

BBA-201

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory.

कुल पाँच प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है ।

1. Short answer type questions :

   (i)   Define behaviour.

   (ii)   What is the nature and meaning of personality.

   (iii) What is the nature and meaning of perception ?

   (iv)   Define Learning.

   (v)   What is the nature of emotions ?

   (vi)   What are the main causes of forgetting ?

   लघु उत्तरीय प्रश्न :

   (i)   व्यवहार को परिभाषित कीजिए ।

   (ii)   व्यक्तित्व की प्रकृति और अर्थ क्या है ?

   (iii) धारणा की प्रकृति और अर्थ क्या है ?

   (iv)   अधिगम को परिभाषित कीजिए ।

   (v)   भावनाओं की प्रकृति क्या है ?

   (vi)   विस्मरण के मुख्य कारण क्या हैं ?

2. Explain the nature of human behaviour with the help of cognitive approach.

   संज्ञानात्मक उपागम की सहायता से मानव व्यवहार की प्रकृति की व्याख्या कीजिए ।

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3. Explain social learning theory and its implication for work behaviour.

सामाजिक शिक्षण सिद्धांत और कार्य व्यवहार के लिए इसके निहितार्थ की व्याख्या कीजिए ।

4. What are the different types of emotions ? Explain with the help of physiological symptoms of emotions.

संवेग कितने प्रकार के होते हैं ? संवेगों के शारीरिक लक्षणों की सहायता से व्याख्या कीजिए ।

5. What is the nature of motivation ? Explain two factors theory of motivation and its implications for work behaviour.

अभिप्रेरणा की प्रकृति क्या है ? अभिप्रेरणा के द्वि-कारक सिद्धांत और कार्य व्यवहार के लिए इसके निहितार्थों की व्याख्या कीजिए ।

6. What are the laws of perceptual organisation ? How do they affect perception ? Explain with the help of suitable examples.

प्रत्यक्षात्मक संगठन के नियम क्या हैं ? वे धारणा पर कैसे प्रभाव डालते हैं ? उपयुक्त उदाहरणों की सहायता से व्याख्या कीजिए ।

7. What is operant conditioning theory of learning ? How do the principles of operant conditioning help in shaping of human behaviour ?

अधिगम का क्रियाप्रसूत अनुबंधन सिद्धांत क्या है? क्रियाप्रसूत अनुबंधन के सिद्धांत मानव व्यवहार को आकार देने में किस प्रकार सहायता करते हैं ?

8. "Memory and forgetting both go side by side." Discuss.

"स्मृति और विस्मरण दोनों साथ-साथ चलते हैं ।" विचार-विमर्श कीजिए ।

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BBA/D-22

24009

MICRO BUSINESS ENVIRONMENT

BBA-202

Time : Three Hours]　　　　　　　　　[Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

कुल **पाँच** प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है । सभी प्रश्नों के अंक समान हैं ।

1.　Write short notes on the following :

　(a)　Country risk

　(b)　Demographic Environment

　(c)　Economic System

　(d)　SWOT analysis

　(e)　PSUs

　(f)　Business ethics.

निम्नलिखित पर संक्षिप्त टिप्पणियाँ लिखिए :

　(अ)　देश जोखिम

　(ब)　जनसांख्यिकीय पर्यावरण

　(स)　आर्थिक प्रणाली

(द) एस.डब्ल्यू.ओ.टी. विश्लेषण

(इ) सार्वजनिक क्षेत्र के उद्यम

(क) व्यावसायिक नैतिकता

2. How business environment is dynamic in nature ? What factors trigger changes in the business environment ?

व्यावसायिक वातावरण किस प्रकार गतिशील होता है ? कारोबारी माहौल में कौनसे कारक परिवर्तन को ट्रिगर करते हैं ?

3. Why should social responsibility be social objective of business ? How far social objective affects economic objective of the firm ?

सामाजिक उत्तरदायित्व व्यवसाय का सामाजिक उद्देश्य क्यों होना चाहिए ? सामाजिक उद्देश्य फर्म के आर्थिक उद्देश्य को कहाँ तक प्रभावित करता है ?

4. What do you mean by environment scanning ? Discuss the techniques of environment scanning.

पर्यावरण स्कैनिंग से आप क्या समझते हैं ? पर्यावरण स्कैनिंग की तकनीकों पर चर्चा कीजिए ।

5. What are the objectives of economic planning in India ? What types of plans are worked upon in Indian economy ?

भारत में आर्थिक नियोजन के क्या उद्देश्य हैं ? भारतीय अर्थव्यवस्था में किस प्रकार की योजनाओं पर कार्य किया जाता है ?

6. Explain the nature of business ethics. What ethical standards modern companies can set in the present times ?

व्यावसायिक नैतिकता की प्रकृति की व्याख्या कीजिए । वर्तमान समय में आधुनिक कम्पनियाँ कौनसे नैतिक मानक निर्धारित कर सकती हैं ?

7. Discuss the impact of regulatory framework on industrial structure and performance.

औद्योगिक संरचना और प्रदर्शन पर नियामक ढाँचे के प्रभाव की चर्चा कीजिए ।

8. Write a detailed note on Competition Act. How does it affect the competitive environment of a country ?

प्रतिस्पर्धा अधिनियम पर विस्तृत टिप्पणी लिखिए । यह किसी देश के प्रतिस्पर्धी माहौल को कैसे प्रभावित करता है ?

BBA/D-22

BUSINESS STATISTICS-I

BBA-203

Time : Three Hours]   [Maximum Marks : 80

Note : Q. No. 1 is compulsory and each part of it carries 2 marks. Attempt *four* questions out of the remaining questions. Each question carries 16 marks.

प्रश्न क्र. 1 अनिवार्य है और इसके प्रत्येक भाग के 2 अंक हैं । शेष प्रश्नों में से चार प्रश्न कीजिए । प्रत्येक प्रश्न 16 अंक का है ।

1. Explain the following in upto **50** words each :

(a) Use of statistics in management decisions

(b) Observation method of data collection

(c) Histogram

(d) Pictorial diagram

(e) Line chart

(f) Merits and suitability of Mode

(g) Moments and Kurtosis

(h) Name of Weighted Index Methods

निम्नलिखित प्रत्येक को अधिकतम **50** शब्दों में समझाइए :

(अ) प्रबंधन निर्णयों में सांख्यिकी का उपयोग

(व) डेटा संग्रह की अवलोकन विधि

निम्नलिखित प्रश्नों के उत्तर दीजिए :

(i) सूचकांक संख्याएँ क्या होती हैं ?

(ii) सूचकांक संख्याओं के उपयोग क्या हैं ?

(iii) भारित सूचकांक बनाने की किन्हीं दो विधियों की गणना कीजिए ।

(iv) किसर विधि अन्य विधियों से किस प्रकार श्रेष्ठ है ?

24010

(स) हिस्टोग्राम

(द) विच्छेदिता आरेख

(इ) लाइन चार्ट

(फ) बहुलक के गुण तथा उपयुक्तता

(ग) आद्य्पूर्ण और कटीसिस

(ह) भारित सूचकांक विधियों का नाम ।

2. The following table gives the frequency distribution of the weekly wages (in '000 Rs.) of 200 workers in a factory :

Weekly Wages	No. of Workers
20 – 24	14
25 – 29	20
30 – 34	22
35 – 39	35
40 – 44	41
45 – 49	30
50 – 54	23
55 – 59	15
Total	**200**

Draw the histogram and frequency polygon of the distribution.

निम्नलिखित तालिका एक कारखाने में 200 श्रमिकों की साप्ताहिक मजदूरी ('000 रुपये में) का बारंबारता वितरण देती है :

साप्ताहिक मजदूरी	श्रमिकों की संख्या
20 – 24	14
25 – 29	20
30 – 34	22
35 – 39	35
40 – 44	41
45 – 49	30
50 – 54	23
55 – 59	15
कुल	**200**

वंटन का आवर्तचित्र और बारंबारता बहुभुज बनाइए ।

3. Explain meaning and sources of secondary data. Also explain any *two* methods of collecting primary data.

द्वितीयक समंकों का अर्थ और स्रोत स्पष्ट कीजिए । प्राथमिक आँकड़ों को एकत्रित करने की किन्हीं दो विधियों को भी समझाइए ।

4. Write down formulas of computing the following :

Arithmetic mean of a continuous series and discrete series; Harmonic Mean, Median, Mode, Standard deviation, Variance, Coefficient of variation and Geometric mean.

निम्नलिखित की गणना के सूत्र लिखिए :

एक सतत् श्रृंखला और असतत् श्रृंखला का अंकगणितीय माध्य; हासोंनिक माध्य, माध्यिका, मोड, मानक विचलन, विचरण, विचरण का गुणांक और ज्यामितीय माध्य ।

5. Calculate the Mode, Median and Arithmetic Mean from the following data :

Class	Frequency
0 – 10	05

10 – 20	10
20 – 30	15
30 – 40	15
40 – 50	20
50 – 60	15
60 – 70	15
70 – 80	15
80 – 90	05

निम्नलिखित आँकड़ों से बहुलक, माध्यिका और अंकगणितीय माध्य की गणना कीजिए :

वर्ग	आवृत्ति
0 – 10	05
10 – 20	10
20 – 30	15
30 – 40	15
40 – 50	20
50 – 60	15
60 – 70	15
70 – 80	10
80 – 90	05

6. Explain various methods of collecting primary data. Also explain the difference between sample and census method. of conducting survey.

प्राथमिक ऑंकड़ों को एकत्रित करने की विभिन्न विधियों की व्याख्या कीजिए। सर्वेक्षण करने की प्रतिदर्श और जनगणना पद्धति में अंतर भी स्पष्ट कीजिए।

7. For the following data prove that the Fisher's Ideal Index satisfies both the Time reversal test and Factor reversal tests :

Commodity	Base Year		Current Year	
	Price	Quantity	Price	Quantity
A	6	50	10	56
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24

निम्नलिखित ऑंकड़ों के लिए सिद्ध कीजिए कि फिशर का आदर्श सूचकांक समय उत्क्रम्यता परीक्षण और कारक उत्क्रम्यता परीक्षण दोनों को संतुष्ट करता है :

वस्तुएँ	आधार वर्ष		चालू वर्ष	
	मूल्य	मात्रा	मूल्य	मात्रा
A	6	50	10	56
B	2	100	2	120
C	4	60	6	60
D	10	30	12	24

8. Answer the following questions :
   (i)   What are index numbers ?
   (ii).   What are uses of index numbers ?
   (iii) Enumerate any *two* methods of constructing weighted index numbers.
   (iv)   How Fisher's method is better than other methods ?

Roll No. ....

BBA/D-22

MANAGEMENT ACCOUNTING

BBA-204

Total Pages : 06

24011

Time : Three Hours]

[Maximum Marks : 80

Note : *Attempt Five questions in all. Q. No. 1 is compulsory. All questions carry equal marks.*

कुल पाँच प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है । सभी प्रश्नों के अंक समान हैं ।

1. Explain the following in brief : 3+3+2+3+3+2=16

   (i) Explain any *four* characteristics of Management Accounting.

   (ii) Cost Sheet

   (iii) Meaning of Budget

   (iv) Break-even Point

   (v) Classification of Cost

   (vi) Activity Based Costing.

   निम्नलिखित की संक्षेप में व्याख्या कीजिए :

   (i) प्रबन्धकीय लेखांकन की किन्हीं चार विशेषताओं का वर्णन कीजिए ।

(iv) ₹ 12,00,000 की बिक्री पर सुरक्षा की सीमा ।

(v) ₹ 2,00,000 का लाभ अर्जित करने के लिए आवश्यक बिक्री ।

	₹
बिक्री	8,00,000
घटाया : परिवर्ती लागत	6,00,000
योगदान	2,00,000
घटाया : निश्चित लागत	60,000
शुद्ध लाभ	1,40,000

(ii) लागत पत्र

(iii) बजट का अर्थ

(iv) सम-विच्छेद बिन्दु

(v) लागत का वर्गीकरण

(vi) गतिविधि आधारित लागत ।

2. What is the meaning of Management Accounting ? What are its functions ? Also explain the main techniques of Management Accounting.

प्रबन्धकीय लेखांकन का क्या अर्थ है ? इसके क्या कार्य हैं ? प्रबन्धकीय लेखांकन की मुख्य तकनीकों का वर्णन भी कीजिए ।   16

3. What is Cost Accounting ? What are its objectives ? Also explain the methods of costing.   16

लागत लेखांकन क्या है ? इसके क्या उद्देश्य हैं ? लागत लेखांकन की विधियों का वर्णन भी कीजिए ।

4. What do you mean by Budgetary Control ? What are its advantages ? Also describe the limitations of budgetary control.

बजटरी नियन्त्रण से आपका क्या अभिप्राय है ? इसके क्या लाभ हैं ? बजटरी नियन्त्रण की सीमाओं का वर्णन भी कीजिए ।   16

5. Explain the following in brief :   5+5+6=16

(i) Five characteristics of Standard Costing

(ii) Target Costing

(iii) Flexible Budget.

निम्नलिखित की संक्षेप में व्याख्या कीजिए :

(i) प्रमाप लागत की पाँच विशेषताएँ

(ii) लक्षित लागत

(iii) परिवर्तनशील बजट ।

6. What is meant by Responsibility Accounting ? What steps are being taken for introducing it ? Also discuss the advantages of Responsibility Accounting.   16

उत्तरदायित्व लेखांकन का क्या अर्थ है ? इसको लागू करने के लिए कौनसे पग उठाए जाते हैं ? उत्तरदायित्व लेखांकन के लाभों का वर्णन भी कीजिए ।

7. Below is the enumerated expenditure for a year in the manufacture of a product :   16

	₹		₹
Raw Material	56,000	Rent (Factory)	4,000
Fuel	14,000	Tax & Insurance (Factory)	800
Electric Power	2,800	Depreciation on Machine	4,800

Process and		Advertisement	1,000
General Wages	1,26,000	Salaries to Sales Agent	1,600
Repairs	4,800	Carriage on Sales	400
Carriage Inward	4,000		
Light & Water	800		
Office Salary	14,000		
Administrative			
Expenses (Office)	10,000		
Units manufactured	40,000		

Prepare a cost sheet for the year showing cost per unit for each item of expenses and also the total cost of the production.

एक उत्पाद के निर्माण में एक वर्ष में निम्नलिखित व्यय किये गए :

	₹
कच्चा माल	56,000
ईंधन	14,000
विद्युत शक्ति	2,800
प्रक्रिया एवं सामान्य	
मजदूरी	1,26,000
मरम्मत	4,800
ढुलाई व्यय	4,000
प्रकाश तथा पानी	800

	₹
किराया (कारखाना)	4,000
कर तथा बीमा (कारखाना)	800
मशीन पर छूट	4,800
विज्ञापन	1,000
विक्रय प्रतिनिधि का वेतन	1,600
विक्रय पर भाड़ा	400

	₹
कार्यालय वेतन	14,000
प्रशासनिक व्यय	
कार्यालय	10,000
निर्मित इकाइयाँ	40,000

वर्ष के लिए लागत-पत्र तैयार कीजिए जिसमें व्यय के प्रत्येक मद की प्रति इकाई लागत तथा उत्पादन की कुल लागत दर्शायी गयी हो ।   16

8. From the following find out :
   (i) P/V Ratio
   (ii) B.E.P.
   (iii) Profit for the sale of ₹ 10,00,000.
   (iv) Margin of Safety from the sale of ₹ 12,00,000
   (v) Required sales to earn a profit of ₹ 2,00,000

	₹
Sales	8,00,000
Less : Variable Cost	6,00,000
Contribution	2,00,000
Less : Fixed Cost	60,000
Net Profit	1,40,000

निम्नलिखित से ज्ञात कीजिए :
   (i) लाभ-मात्रा अनुपात
   (ii) सम-विच्छेद बिन्दु
   (iii) ₹ 10,00,000 की बिक्री पर लाभ

BBA/D-22 24012

FUNDAMENTALS OF DBMS & ORACLE

BBA-205

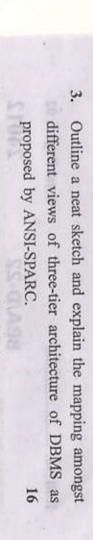Time : Three Hours] [Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) What do you mean by keys ? Discuss primary key, unique key and foreign key.

   (b) What is data independence ? Differentiate between physical and logical data independence.

   (c) Why do we use group by and order by clause in SQL ?

   (d) Draw comparison among any *two* types of SQL operators.

   (e) Distinguish between group and scalar functions.

2. What are the important properties of Data Base Management System (DBMS) ? Elaborate the advantages of DBMS over traditional file based approach. Write in brief about DBMS components.

3. Outline a neat sketch and explain the mapping amongst different views of three-tier architecture of DBMS as proposed by ANSI-SPARC.   16

4. What is meant by Data Model ? Distinguish between hierarchical and network data model along with database anomaly, advantages and disadvantages.   16

5. Discuss the uses of computer for the following :
   (a) Inventory control system
   (b) Banking and accounting.   8+8=16

6. What is SQL ? Discuss data types used in SQL. Write the purpose, syntax and example of create and insert SQL statements.   16

7. Distinguish between the following along with its syntax and example :   8+8=16
   (a) Alter and update SQL statement
   (b) Delete; Drop and Truncate SQL statement

8. What are the advantages of report writing? List and explain the commands to be used for report writing.   16

BBA/D-22   24013

BUSINESS COMMUNICATION-II

BBA-206

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, including the compulsory Q. No. 1. All questions carry equal marks.

अनिवार्य प्रश्न संख्या 1 सहित कुल पाँच प्रश्नों के उत्तर दीजिए । सभी प्रश्नों के अंक समान हैं ।

Compulsory Question (अनिवार्य प्रश्न)

1. (i) Write a short note on public-speaking.   2.5

सार्वजनिक भाषण पर संक्षिप्त टिप्पणी लिखिए ।

(ii) Briefly describe the importance of Effective Listening.   2.5

प्रभावी श्रवण के महत्त्व का संक्षेप में वर्णन कीजिए ।

(iii) What are the essentials of Telephonic Conversation ?   2.5

टेलीफोनिक वार्तालाप के आवश्यक तत्व क्या हैं ?

(iv) Write a short note on commercial letter writing. 3.5

व्यावसायिक पत्र लेखन पर संक्षिप्त टिप्पणी लिखिए ।

(v) Discuss briefly the role of communication structure in an organization. 2.5

एक संगठन में संचार संरचना की भूमिका की संक्षेप में चर्चा कीजिए ।

(vi) Write a note on Non-Verbal Communication. 2.5

अमौखिक संचार पर एक टिप्पणी लिखिए ।

2. Discuss in detail the importance and Nature of Business Communication. 16

व्यापार संचार के महत्व और प्रकृति पर विस्तार से चर्चा कीजिए ।

3. Describe the barriers and gateways in communication. 16

संचार में बाधाओं और गेटवे का वर्णन कीजिए ।

4. What are the essential steps for writing academic reports ? 16

अकादमिक रिपोर्ट लिखने के लिए आवश्यक कदम क्या है ?

5. Discuss various aspects of mechanics of writing ? 16

लेखन की यांत्रिकी के विभिन्न पहलुओं पर चर्चा कीजिए ।

6. Define Organization Communication. Describe the components of organization communication. 16

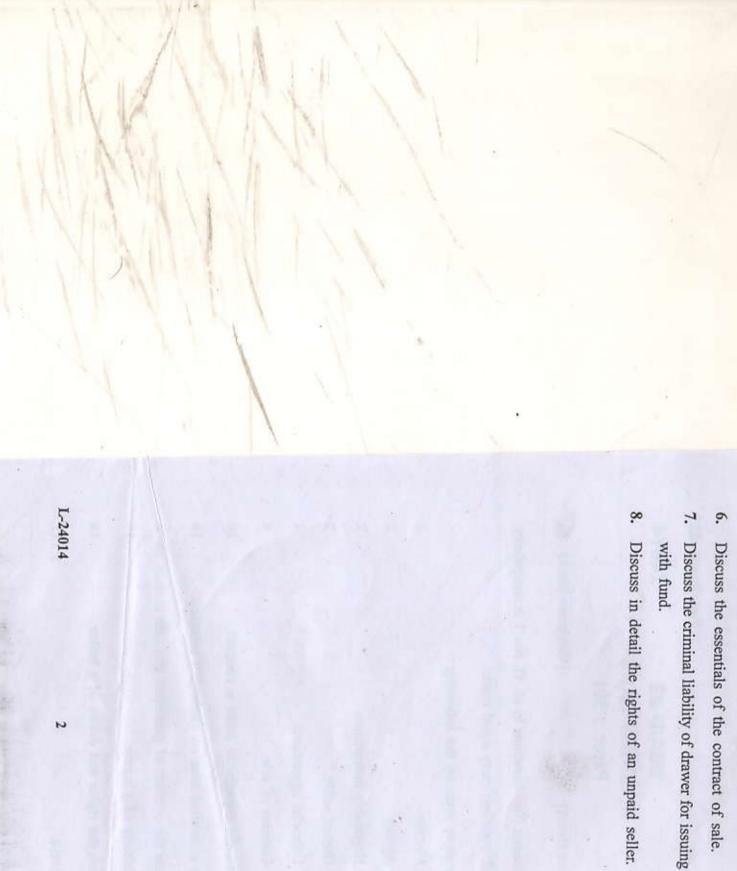संगठन संचार को परिभाषित कीजिए संगठन संचार के घटकों का वर्णन कीजिए ।

7. Describe the essential elements of Business Writing. 16

व्यावसायिक लेखन के आवश्यक तत्वों का वर्णन कीजिए ।

8. Discuss the importance of effective business communication skills. 16

प्रभावी व्यावसायिक संचार कौशल के महत्व पर चर्चा कीजिए ।

Roll No. ....

Note : Attempt *Five* questions in all, Q. No. 1 is compulsory.
All questions carry equal marks.

1. Write short notes on the following :

   (a) Mistake   2

   (b) Agency   2

   (c) Negotiable instruments   2

   (d) Unpaid seller   2

   (e) Unlawful agreements   4

   (f) Contract of sale.   4

2. Discuss the capacity to make a contract.   16

3. Write a detailed note on contingent contracts. 16

4. Discuss the contract of guarantee and also discuss about
   the liability of a surety.   16

5. Discuss the rights and duties of a bailee.   16

6. Discuss the essentials of the contract of sale. 16

7. Discuss the criminal liability of drawer for issuing cheques with fund. 16

8. Discuss in detail the rights of an unpaid seller. 16

BBA/D-22

24015

PRINCIPLES OF RETAILING

Paper : 302

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

कुल पाँच प्रश्नों के उत्तर दीजिए । प्रश्न संख्या 1 अनिवार्य है । सभी प्रश्नों के अंक समान हैं ।

Compulsory Question (अनिवार्य प्रश्न)

1. Write short notes on the following :

   (a) Factors affecting retailing

   (b) Service Retailing

   (c) Trading Area Analysis

   (d) What is grid layout in retailing ?

   (e) What are impulse sales ?

   (f) What is Bar-code Technology ?

   निम्नलिखित पर संक्षिप्त टिप्पणियाँ लिखिए :

   (अ) रिटेल (खुदरा) व्यापार को प्रभावित करने वाले तत्व

   (ब) सेवा रिटेलिंग

   (स) व्यापारिक क्षेत्र का विश्लेषण

   (द) रिटेलिंग में ग्रिड-लेआउट से क्या अभिप्राय है ?

(ड) आवेग बिक्री क्या है ?

(फ) बार-कोड प्रौद्योगिकी से क्या अभिप्राय है ?

2. Define Retailing. What is changing concept of retailing ? What are the major factors affecting retailing ?

रिटेल व्यापार की परिभाषा दीजिए । रिटेल व्यापार की बदलती अवधारणा क्या है ? रिटेल व्यापार को प्रभावित करने वाले तत्व कौनसे हैं ?

3. What is organised and unorganised retailing ? Differentiate between organised and unorganised retailing.

संगठित एवं असंगठित रिटेलिंग क्या है ? संगठित एवं असंगठित रिटेलिंग में अन्तर स्पष्ट कीजिए ।

4. Describe the social factors that affect the consumer buying decision process in retailing.

रिटेलिंग में उपभोक्ता की क्रय निर्णय प्रक्रिया को प्रभावित करने वाले सामाजिक तत्वों का वर्णन कीजिए ।

5. What is the importance of store location in retail business ? Explain the factors affecting the choice of the general location.

रिटेल व्यापार में स्टोर के स्थान का क्या महत्त्व है ? सामान्य स्थान चयन को प्रभावित करने वाले कारकों का वर्णन कीजिए ।

6. Explain the importance of Human Resources in a retail organization along with its implications.

एक रिटेल संगठन के लिए मानव संसाधन के महत्व के साथ-साथ उसके आशय का वर्णन कीजिए ।

7. What is Merchandise Management ? Explain the process of merchandise planning in detail.

व्यापार नियोजन क्या है ? व्यापार नियोजन की प्रक्रिया को विस्तार से समझाइए ।

8. Describe in detail the advantages and disadvantages of using information technology in a retail business.

एक रिटेल व्यापार में सूचना प्रौद्योगिकी के लाभ और हानियों का विस्तार से वर्णन कीजिए ।

BBA/D-22

24016

PRINCIPLES OF BANKING

BBA-303

Time : Three Hours]

[Maximum Marks : 80

Note : Q. No. **1** is compulsory and each part of its carries 2 marks. Attempt *four* questions out of the remaining questions carrying 16 marks each.

प्रश्न संख्या **1** अनिवार्य है तथा इसका प्रत्येक भाग 2 अंक का है । शेष प्रश्नों में से प्रत्येक 16 अंक के चार प्रश्न कीजिए ।

1. Write down one pages notes on the following :

  (a) Commercial Banks

  (b) Retail Banking

  (c) RTGS

  (d) Google pay and UPI

  (e) Priority-sector lending

  (f) Mobile banking

  (g) Spread

  (h) Net Interest Income.

निम्नलिखित पर एक पृष्ठ की टिप्पणियाँ लिखिए :

  (अ) वाणिज्यिक बैंक

  (ब) खुदरा बैंकिंग

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8. Explain the following :

  (a) Role of MUDRA Bank in Micro Finance

  (b) What are Security issues in use of technology in banks ?

  (c) Role of RBI as Issuer of Currency

  (d) Open market operations.

निम्नलिखित की व्याख्या कीजिए :

  (अ) सूक्ष्म वित्त में मुद्रा बैंक की भूमिका

  (ब) बैंकों में प्रौद्योगिकी के उपयोग में सुरक्षा संबंधी मुद्दे क्या हैं ?

  (स) मुद्रा जारीकर्ता के रूप में आर.बी.आई. की भूमिका

  (द) ओपन मार्केट ऑपरेशंस (खुले बाजार की क्रियाएँ) ।

(स) आर.टी.जी.एस.

(द) गूगल पे और यू.पी.आई.

(इ) प्राथमिकता-क्षेत्र उधार _____

(फ) मोबाइल बैंकिंग

(ग) फैलाव

(ह) शुद्ध ब्याज आय ।

2. Explain the classification of banks. Why banking sector was opened for private entrepreneurs ? Whether the objectives of entry of private sector banks have been achieved ? Give comments.

बैंकों के वर्गीकरण की व्याख्या कीजिए । निजी उद्यमियों के लिए बैंकिंग क्षेत्र क्यों खोला गया ? क्या निजी क्षेत्र के बैंकों के प्रवेश के उद्देश्यों को प्राप्त कर लिया गया है ? टिप्पणियाँ दीजिए ।

3. What are objectives of Cooperative banks ? Describe sources of financing these banks. Also explain role of rural banks.

सहकारी बैंकों के उद्देश्य क्या हैं ? इन बैंकों के वित्तपोषण के स्रोतों का वर्णन कीजिए । ग्रामीण बैंकों की भूमिका भी समझाइए ।

4. Describe the organisational set up and important functions of Reserve Bank of India. Also explain the provision of Banking Regulation Act, 1949 regarding Provisioning and CRR.

भारतीय रिजर्व बैंक के संगठनात्मक ढाँचे और महत्त्वपूर्ण कार्यों का वर्णन कीजिए । प्रोविजनिंग और सी.आर.आर. के संबंध में बैंकिंग विनियमन अधिनियम, 1949 के प्रावधानों को भी समझाइए ।

5. Define the term 'bank customer' as per the Banking Regulation Act. Explain the special relation between a banker and a customer with suitable examples.

बैंकिंग विनियमन अधिनियम के अनुसार 'बैंक ग्राहक' शब्द को परिभाषित कीजिए । एक बैंकर और एक ग्राहक के बीच विशेष संबंध को उचित उदाहरण सहित समझाइए ।

6. (a) Elaborate the role of banks in Financing agriculture, small scale industry and rural sector in general.

सामान्य रूप से कृषि, लघु उद्योग और ग्रामीण क्षेत्र के वित्तपोषण में बैंकों की भूमिका को विस्तृत कीजिए ।

(b) Prepare a list of major reforms in India's banking sector since 1991.

1991 से भारत के बैंकिंग क्षेत्र में प्रमुख सुधारों की एक सूची तैयार कीजिए ।

7. Describe the following :

(a) e-Banking

(b) Role of OTP

(c) Meaning and functions of 'small banks'

(d) Tools for evaluating bank performance.

निम्नलिखित का वर्णन कीजिए :

(अ) ई-बैंकिंग

(ब) ओ.टी.पी. की भूमिका

(स) 'छोटे बैंकों' का अर्थ और कार्य

(द) बैंक के प्रदर्शन के मूल्यांकन के लिए उपकरण ।

Roll No. ....

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

कुल **पाँच** प्रश्नों के उत्तर दीजिए । प्रश्न संख्या **1** अनिवार्य है । सभी प्रश्नों के अंक समान हैं ।

Compulsory Question (अनिवार्य प्रश्न)

1. (a) What is meant by e-commerce and e-business ? List the benefits of e-commerce.

   ई-कॉमर्स और ई-बिजनेस का क्या अर्थ है ? ई-कॉमर्स के लाभों की सूची बनाइए ।

   (b) Write a detailed note on internet service providers. What are the most commonly used internet service ?

   इंटरनेट सेवा प्रदाताओं पर एक विस्तृत टिप्पणी लिखिए । सबसे अधिक उपयोग की जाने वाली इंटरनेट सेवा कौन-सी है ?

   (c) Why is cryptography necessary for e-commerce ? Discuss its security related issues.

   ई-कॉमर्स के लिए क्रिप्टोग्राफी क्यों आवश्यक है ? इसके सुरक्षा संबंधी मुद्दों पर चर्चा कीजिए ।

8. (a) Explain the principles of risk management. Describe risk paradigm.

   जोखिम प्रबंधन के सिद्धांतों की व्याख्या कीजिए । जोखिम प्रतिमान का वर्णन कीजिए ।

   (b) Is there any difference between risk management and risk control ? Discuss controls in risk management.   8+8=16

   क्या जोखिम प्रबंधन और जोखिम नियंत्रण के बीच कोई अंतर है ? जोखिम प्रबंधन में नियंत्रणों पर चर्चा कीजिए ।

(d) Briefly explain partially integrated EDII systems.

आंशिक रूप से एकीकृत EDII सिस्टम को संक्षेप में समझाइए।

(e) Draw comparison between traditional EDI and Web based EDI.

पारंपरिक EDI और वेब आधारित EDI के बीच तुलना कीजिए।

(f) What are the types of intelligent agent available in e-commerce?

ई-कॉमर्स में कितने प्रकार के बुद्धिमान एजेंट उपलब्ध है?

2. What can different business operations be performed by e-commerce? Discuss the implications of e-commerce for accounting professionals.

ई-कॉमर्स द्वारा कौन-से विभिन्न व्यवसाय संचालन किए जा सकते हैं? लेखांकन पेशेवरों के लिए ई-कॉमर्स के निहितार्थों पर चर्चा कीजिए।

3. Discuss the historic evolution of e-commerce which differentiate e-commerce from traditional commerce. Explain the role of internet in e-commerce. 16

ई-कॉमर्स के ऐतिहासिक विकास पर चर्चा कीजिए जो ई-कॉमर्स को पारंपरिक कॉमर्स से अलग करता है। ई-कॉमर्स में इंटरनेट की भूमिका की व्याख्या कीजिए।

4. Define firewall. Describe the components of firewall technology and the various approaches to firewall implementation. Is firewall better than VPN? 16

फायरवॉल को परिभाषित कीजिए। फायरवॉल प्रौद्योगिकी के घटकों और फायरवॉल कार्यान्वयन के विभिन्न दृष्टिकोणों का वर्णन कीजिए। क्या फायरवॉल वी.पी.एन. से बेहतर है?

5. (a) How does a domain name dispute arise? Explain different types of domain name disputes with case laws. 8

डोमेन नाम विवाद कैसे उत्पन्न होता है? केस कानूनों के साथ विभिन्न प्रकार के डोमेन नाम विवादों की व्याख्या कीजिए।

(b) Differentiate between TCP/IP and OSI reference model. 8

टी.सी.पी./आई.पी. और ओएसआई संदर्भ मॉडल के बीच अंतर कीजिए।

6. Differentiate between EDI and VAN. Elaborate different types of VAN along with its benefits and challenges. 16

EDI और VAN में अंतर स्पष्ट कीजिए। VAN के विभिन्न प्रकारों को उनके लाभों और चुनौतियों के साथ विस्तृत कीजिए।

7. What is EDI? How does EDI work? Discuss the historic evolution of EDI along with its advantages and disadvantages. 16

EDI क्या है? EDI कैसे काम करता है? EDI के ऐतिहासिक विकास के साथ-साथ इसके लाभ और हानियों पर चर्चा कीजिए।

BBA/D-22

Total Pages : 03

24019

PRINCIPLES OF PRODUCTION MANAGEMENT

BBA-306

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, including the compulsory Q. No. 1. All questions carry equal marks.

अनिवार्य प्रश्न संख्या 1 सहित कुल पाँच प्रश्नों के उत्तर दीजिए। सभी प्रश्नों के अंक समान हैं।

Compulsory Question (अनिवार्य प्रश्न)

1. Discuss briefly the following :

(a) TQM 2½

(b) LIFO 2½

(c) Ordering Cost 2½

(d) Inspection 2½

(e) Warehousing 3

(f) Economic Order Quantity. 3

निम्नलिखित की संक्षेप में चर्चा कीजिए :

(अ) टी.क्यू.एम.

(ब) एल.आई.एफ.ओ.

(स) आदेश देने की लागत

(द) निरीक्षण

(इ) भंडारण

(फ) आर्थिक आदेश मात्रा ।

2. Discuss the characteristics, features, significance and usage of Continuous and Intermittent Production Systems. 16

सतत् और आंतरायिक उत्पादन प्रणालियों की विशेषताओं, लक्षणों महत्व और उपयोग पर चर्चा कीजिए ।

3. Clarify the concept of a 'Product' and discuss different types of products. 16

'उत्पाद' की अवधारणा को स्पष्ट कीजिए और विभिन्न प्रकार के उत्पादों की चर्चा कीजिए ।

4. What do you understand by the term 'Inventory' ? Discuss some of the inventory classification techniques. 16

'सूची' शब्द से आप क्या समझते हैं ? सूची वर्गीकरण तकनीकों में से कुछ पर चर्चा कीजिए ।

5. Throw light on the concepts of Production Planning and Control. Why and how are these done ? 16

उत्पादन योजना एवं नियंत्रण की संकल्पनाओं पर प्रकाश डालिए । ये क्यों और कैसे किये जाते हैं ?

6. Throw light on the steps followed in purchasing. Is purchasing different in case of Private and Government Organisations. 16

क्रय में अपनाए जाने वाले चरणों पर प्रकाश डालिए । क्या निजी और सरकारी संगठनों के मामले में खरीद अलग है ?

7. What is Statistical Quality Control in production ? How and why is it used ? 16

उत्पादन में सांख्यिकीय गुणवत्ता नियंत्रण क्या है ? इसका उपयोग कैसे और क्यों किया जाता है ?

8. Why and how is ISO certification done ? 16

ISO प्रमाणीकरण क्यों और कैसे किया जाता है ?