2. (a) Answer any six of the following questions in a word.

Think of me as a useless tool, I was small and insignificant. Did you think I was big and important? Before I tell you what I am, I wish I were seen and appreciated. I am also ugly, I've been used by many others. I wish I were appreciated. That is why I am ugly. I wish I could look better. I am not perfect. I wish I were appreciated. I wish I were valued. I wish I were appreciated.

(b) Briefly explain the reference to the context:

Note: Attempt all questions.

Maximum Marks: 80

Time: Three Hours

(For Regular Students Only)

ENGLISH

CSM-M16

Roll No. 4
5. (a) Translate the following passage into English:

"Children, celery, neglect
Given a chance, the following:

Deficiency: 8
"A high-grade student.
Read
Cope with. Still in the same boat. To keep a cool
Your own
Use the following words/phrases in sentences of
From each part
Answer any if the following, selecting at least one
Bold, ruthless, specialise.
Often, dearly, innumerable, honest, vague.
Give antonyms of any five of the following words:
Auditory, commission.
Quoty, whisper, ragged, genial, influence, anger.
Give synonyms of any five of the following words
(For blind students only)

OR

(i) Give phonemic transcription with the primary stress on
Any of the following

(ii) Give all antonyms of "farewell"

15

In circumstances, newspapers criticising the growing use of unfair means
You are really. Send an e-mail to the editor of a

OR

Job profile, and write a covering letter for this resume.
As Chaudhary office, prepare a covering letter and submit this
Good interview skills are supposed to be expressed at such seminars

12

The Daily Newspaper is looking for fresh undergraduates with
How I was Eugene O'Neill in Before Breakfast, succeeded

OR

Discuss the appropriateness of the title of the play "The Playboy.

(i) Answer the following in about 200 words:

(a) Describe the atmosphere and setting of the play "The

(b) Comment on the use of dramatic irony in "The Swan"

(c) Give any two of the following questions in about 100

(1×6=6)

The Monkey's Paw

(Ω) Which did Morris get for losing his arm?

(Ω) Why did the rabbit pull a spell in the paw?

(Ω) Before breakfast?

(Ω) Where does Mrs. Rowland find her husband's vest?
(9+6=12)

1. Explain the concept of time and its significance in our daily lives. (6)

2. Discuss the importance of renewable energy sources and their role in sustainable development. (6)

(8=4+4)

(a) Explain the concept of time and its significance in our daily lives. (6)

(b) Discuss the importance of renewable energy sources and their role in sustainable development. (6)
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7. (8=11)

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11. In the following sentences

Translate in English: (10)

a. हाँ, तुम चाहते हो, क्योंकि मैं तुमसे हासिल कर लेता हूँ।

b. हां, तुम चाहते हो, क्योंकि मैं तुमसे हासिल कर लेता हूँ।

c. हां, तुम चाहते हो, क्योंकि मैं तुमसे हासिल कर लेता हूँ।

Maximum Marks: 20

Time: Three Hours

Sanskrit

1998

Total Pages: 3
(8=8)
1. Choose the correct answer from the multiple choice questions.

**Compulsory Question (Attempt Any)***

Each question carries 2 marks.

(8x2=16)

Time: Three Hours

Note: Attempt all the questions in all the question No. 1 is compulsory.

Maximum Marks: 80

Q1

[Question Text]

Note: Handicapped candidates only.

To explain how you will carry full marks for visually impaired question set select one question from each unit. All questions carry equal marks. The question set contains five main questions.

1. Choose the correct answer from the multiple choice questions.

**Compulsory Question (Attempt Any)***

Each question carries 2 marks.

(8x2=16)

Time: Three Hours

Note: Attempt all the questions in all the question No. 1 is compulsory.

Maximum Marks: 80

Q1

[Question Text]
2. What were the causes and circumstances which led to the birth of India?

(a) Jinnah
(b) Bose
(c) Gandhi
(d) Patel

The slogan of "Jai Hind" was given by (a) Jinnah
(b) Bose
(c) Gandhi
(d) Patel

Who was the first Governor General of Independent India?
(a) Jinnah
(b) Bose
(c) Nehru
(d) Gandhi

(a) 1947
(b) 1935
(c) 1911
(d) 1919
UNIT II  (1V-1V) 

8. On the outline map of India, show the places of importance.

UNIT III (2V-2V) 

9. On the outline map of India, show the areas and centres of

UNIT III (2V-2V) 

10. Give an essay on the activities of the Revolutionaries in India.

UNIT III (2V-2V) 

11. Give a brief account of Civil Disobedience Movement of 1930-

UNIT III (2V-2V) 

12. What was its significance?

UNIT III (2V-2V) 

13. Describe the ideology, method and main activities of the

UNIT III (2V-2V) 

14. Describe its contribution of Neoty Subhash Chandra Bose.

UNIT III (2V-2V) 

15. Describe the causes of the birth of Muslim Communism.

UNIT III (2V-2V) 

16. And Indian National Army to the cause of Indian Independence.
Discuss the contribution of G.D.H. Cole to political thought.

4. Discuss the major political ideas of Mao-Tse-Tung.

5. Examine the changes introduced by Lenin in the doctrines of Marx.

6. History is a record of class struggle. (Marx) Discuss it.

1. Discuss Hegel's Theory of Dialectics.

Time: Three Hours

Maximum Marks: 80
16. Discuss the Enlightenment theory of justice.


18. Examine Laski's views on state and sovereignty.

VIII. When was the book of Anarchy, State and Liberty published?
(a) In 1975
(b) In 1980
(c) In 1977
(d) In 1974

VII. Who is the writer of Poverty of Philosophy?
(a) Lenin
(b) Hobbes
(c) Mao
(d) Hegel

VIII. Who led the Russian Revolution?
(a) Lenin
(b) Trotsky
(c) Lênin
(d) Stalin

VII. Who said "State is omnipotent?"
(a) Marx
(b) Hume
(c) Blumenfeld
(d) Laski

VI. Who said "Society is Federal authority must be limited?"
(a) Otis
(b) Laski
(c) John Rawls
(d) C.D. Cole

VI. Who gave the Guild Socialism?
(a) In 1894
(b) In 1880
(c) In 1977
(d) In 1974
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<tr>
<th>Year</th>
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When was the China declared, People's Republic of China?
1606/7,500/KD/211

(a) Both (a) and (b).
(b) No effect.
(c) Negatively.
(d) Positively.
(e) All are correct.
(f) All are incorrect.

1. (a) Which of the following is TRUE or FALSE?
   
   Compospo Question (Short Answer)
   
   Note: Attempt all questions in all C. No. 1 is compulsory. Select one question from any unit. All questions carry equal marks.
   
   Time: Three Hours
   
   Maximum Marks: 80

   (a) Macroeconomics-II

   1606

   Total Pages: 5
UNIT-I (1-5)


3. Define inflation. Discuss the cost-push theory of inflation.

2. Explain the classical theory of inflation.

8. Critically examine the Comparative costs theory of international trade.

9. Discuss Classical and Modern approaches of gains from trade.

16. Good taxation system.

2. What is Tax? Explain the objectives and characteristics of a taxation system.

6. Critically examine the principle of maximum social advantage.
UNIT-1 (ogra-1)

I. What do you understand by Warming-up? Explain the importance of Warming-up in detail.

2. What do you mean by Cooling down? Write in detail the importance of Cooling down in the field of sports.

Note: All questions carry equal marks.
From Unit-I to Unit-IV, Question No. 9 (Unit-I-V) is compulsory. All questions in all select one question each.

Maximum Marks: 60

Time: Three Hours

(For Regular Students)
(Health and Physical Education)

PHYSICAL EDUCATION

CSMMA-16
EXPLAIN THE STRUCTURE OF VARIOUS ORGANS OF RESPIRATORY SYSTEM.

OR

8. WHAT DO YOU UNDERSTAND BY RESPIRATORY SYSTEM?

OR

9. WHO WAS THE FATHER OF MODERN OLYMPIC GAMES?

UNIT-III (5%-

6. EXPLAIN ANATOMY CAVES IN DETAIL.

OR

5. EXPLAIN THE ANATOMY OF OLYMPIC GAMES IN DETAIL.

UNIT-II (5%-

4. WHAT DO YOU UNDERSTAND BY LEARNING CURVE? EXPLAIN THE TYPES OF LEARNING CURVE IN DETAIL.

OR

3. WHAT DO YOU MEAN BY SPORTS PSYCHOLOGY? WRITE THE NEED AND IMPORTANCE OF SPORT PSYCHOLOGY IN THE FIELD OF SPORTS AND SPORES.

UNIT-I (5%-

2. WHAT DO YOU MEAN BY PHYSIOLOGICAL ASPECTS OF COOKING DOWN?

UNIT-IV (5%-

1. WHAT DO YOU MEAN BY REPRODUCTIVE VOLUME?

UNIT-V (5%-

9. COMPOUNDS QUESTION (40%-

UNIT-V (8%-

8. EXPLAIN THE PHYSIOLOGICAL ASPECTS OF COOKING DOWN.
SECTION-B (FIVE-4)

5. Give in detail the process of Swastha and Swastha Kalyan Granth.

6. What do you mean by Tugra and Sylphair and its brief description.

7. Write about the location of Swastha Kalyan Granth.

8. Give contribution towards music by Lledes Khan and Allauddin Khan.

SECTION-C (FIVE-4)


10. Write in detail on Sangeet Patra and Sangeet Kalyan Granth.

SECTION-A (FIVE-3)

I. Write the notion of Vimala Kalyan in any two of your choice.

II. Write the notion of BRH in your own words.

III. Describe in detail the evolution of BRH with details.

SECTION-A (FIVE-3)

IV. BRH and BHRM (Group-I)

V. Paper-I (Theory)

VI. MUSIC (Vocal)

1612

GSWM-16

ROLL NO.

TOTAL PAGES : 2
3. Write the notion of Channel and Ado Channel Tall in Ekan

2. Write in detail the description of Râg Kêlim and Khândâ with

1. Write the notion of a Drum Bell with two Toms in any Râga

SECTION-I (20 marks)

Note: Attempt all questions in all sections. All questions carry equal marks.

Time: Three Hours

Paper-II

(Theory)

MUSIC (Instrumental)

1613

616/W/M-16

Total Pages: 3
7. Write about any two of the following instruments in detail:

- (a) Violin
- (b) Tambourine
- (c) Sitar
- (d) Harmonium
- (e) Tabla
- (f) Tabla-Tezab

SECTION III (20-25)

8. Write short notes on any two of the following:

- (a) Aryavartay-Tribhuvan
- (b) Sandhi Pakshia Ka
- (c) Anil Khamis Guri
- (d) Munchhara

SECTION II (15-20)


10. Write the contribution of Sri Annapurna Devi in the field of Music. Explain in detail.
1. What are various types of meetings? What are the duties of Company Secretary regarding Agenda of Meetings?

2. Explain secretarial practices regarding Agenda in Meetings.

3. What are the duties of Company Secretary regarding Minutes of Meetings?

4. What is Minute Book? Explain the procedure of recording Minutes.

5. What is the role of Secretary in Govt. offices?

6. What qualifies a Personal Secretary is supposed to possess?

7. What is the organization of Govt. Secretariat of a State?

8. What are the resolutions of the company with regard to Secretary?

9. Write notes on the following:
   (a) Official Language Act
   (b) Types of Govt. Secretaries.

10. What is the formation of Govt. Secretariat of a State?

Note: Attempt any five questions. All questions carry equal marks.
Maximum Marks: 80
Time: Three Hours

OFFICE MANAGEMENT
CSW/M-16

ROLL NO. 2

TOTAL PAGES 2
1. Answer the following:

Complimentary Question ( Any 1 of the 3 )

(a) Write a paragraph stating the importance of science in daily life.
(b) Design a simple experiment to prove the law of conservation of mass.
(c) Explain the concept of nuclear fusion and its applications.

Note: Attempt any two questions in all. Question No. 1 is compulsory.
(a) Acidic Reagents.
(b) Alkaline Reagents.

8. Describe the following:

- Wetting and Water-proof finish
- Resins, Glues, Tannins
- Texturing and Water-proof finish
- Viscose, Rayon, Silk, Wool, Cotton
- Pigments, Mordants, Auxiliaries

7. When are the objectives of finishing the clothes? Explain in detail.

6. Classify different types of laundry reagents. Explain any one.

5. Describe various advantages and uses of detergents. What is

4. How are detergents manufactured? Describe the suitability of

3. Define Fibre. Explain the qualities and importance of

2. Unit-1 (Fibre-1)

(а) Types of fibres, natural fibres and artificial fibres
(б) Different parameters for comparing fibres
(в) Description of natural fibres: cotton, wool, silk, mohair, linen, etc.
(г) Man-made fibres: rayon, nylon, polyester, acrylic, etc.
(д) Uses of different types of fibres
SECTION I

\[
\frac{5}{4} \sum \frac{1}{n} = \frac{5}{4} \sum \frac{1}{1} + \frac{5}{4} \sum \frac{1}{2} + \frac{5}{4} \sum \frac{1}{3} + \frac{5}{4} \sum \frac{1}{4}
\]

Section

Show that

\[ S = \frac{5}{4} \sum \frac{1}{n} - \frac{5}{4} \sum \frac{1}{n} - \frac{5}{4} \sum \frac{1}{n} - \frac{5}{4} \sum \frac{1}{n} = 0 \]

Section

Prove that if a finite set has no limit point,

Show that the series converges

Section

Give an example of an unbounded set which has no limit point.

Compulsory Question

Select one question from each section.

Note: Attempt any three questions in all the sections. No. 1 is compulsory.

Maximum Marks: 27

Time: Three Hours

Paper: BM-241

(Sequence and Series)

MATHMATICS

1637

GSN/M-16

For all real \( x \),

\[ u_{x} = \left( \frac{1}{x} + 1 \right) \sum_{n=0}^{\infty} \frac{x^n}{n!} \]

Prove that \( u_{x} \) is absolutely convergent.

(Section)

24/4

Show that the Cauchy product of the convergent series

\[ \sum_{n=0}^{\infty} \frac{1}{n!} \cdot \sum_{n=0}^{\infty} \frac{1}{n!} \]

is convergent.
is convergent.
\[
\left( \frac{u}{1 + i} \right) \frac{u}{1 - (1 - u)} = u
\]
(b) Show that the series convergent for \( |x| < 1 \) but conditionally convergent if \( |x| > 1 \). If \( |x| = 1 \) is absolutely convergent.

**SECTION-I**

3

\[ 0 < d = \frac{d}{\sum_{n=0}^{\infty}} \]

(a) Using integral test, test the behaviour of the series

(b) Test the convergence of the series

(c) Prove that the logarithmic test

(d) Test the convergence of the series

**SECTION-II**

3

For any two arbitrary subsets \( A \) and \( B \) of \( R \),
\[ A \cap B = \emptyset \]

(a) Define closure of a set and prove that closure of any set is a closed set.
(2) a. Find the series solution of the diff. eq.

\[ y'' - \frac{x}{a} y' (x^2 - 1) + \frac{\lambda}{a^2} y = 0 \]

SECTION 1

(4.1) b. Find the finite sine transform of \( f(x) = 2x \) where \( 0 < x < a \).

(1) c. Find Legendre polynomials \( (x) \) using Rodrigues' formula.

(2) d. Evaluate \( H_m^2 + f(0) \).

(3) e. Write the formula for \( L(x) \) in the integral form for all \( m \).

(4.1) f. Determine the radius of cover of the power series.

Complexity: Question

Select one question from each section.

Note: Attempt the questions in all sections. No. 1 is compulsory.

Maximum Marks: 26

Time: Three Hours

Paper: BM-242

Special Functions and Integral Transforms

MATHEMATICS

CGN/M-16

1638/4, 900/CD/244

1638/4, 900/CD/244
SECTION I

\( (\%2) \)

Find the Fourier transform of the function

\[
\mathcal{F}\{ f(x) \} = \int_{-\infty}^{\infty} f(x) e^{-2\pi i \xi x} dx
\]

\( (\%2) \)

Hence deduce the value of

\[
\int_{-\infty}^{\infty} f(x) e^{-2\pi i \xi x} dx
\]

\( (\%2) \)

prove that

\[
\int_{-\infty}^{\infty} f(x) e^{-2\pi i \xi x} dx
\]

SECTION II

\( (\%2) \)

Show that

\[
\mathcal{F}\{ f(x) \} = \int_{-\infty}^{\infty} f(x) e^{-2\pi i \xi x} dx
\]

SECTION III

\( (\%2) \)

Prove that

\[
\mathcal{F}\{ f(x) \} = \int_{-\infty}^{\infty} f(x) e^{-2\pi i \xi x} dx
\]

\( (\%2) \)

where

\[
\mathcal{F}\{ f(x) \} = \int_{-\infty}^{\infty} f(x) e^{-2\pi i \xi x} dx
\]

\( (\%2) \)

Find the power series solution of

\[
0 = \frac{\partial}{\partial x} + \frac{\partial}{\partial \xi} (\xi x - 1) + (x)^{\nu} \cdot \mathcal{H}
\]

\( (\%2) \)

Show that

\[
0 = \frac{\partial}{\partial x} + \frac{\partial}{\partial \xi} (\xi x - 1) + (x)^{\nu} \cdot \mathcal{H}
\]
3. What are operators? Chart various types of operators offered

2. Draw a flow chart to find whether a number is prime or not.

UNIT I

(1) Define an arithmetic variable. How is it initialized?
(2) What type in C corresponds to string?
(1) C language.
(2) Write down the names of any four operators offered by
(1) C language.
(2) What is meant by a C program being portable?
(1) Name any two data types used in C language.

Complementary question

Equal marks.
Select one question from each unit. All questions carry
Note: Attempt four questions in all. Question No. 1 is compulsory.
Maximum Marks: 20

Time: Three Hours

Paper: BM-243
Programming in C and Numerical Methods

MATHMATICS

1639/GSM/I-16

Total Pages: 3
UNIT-I

(a) Derive the inverse of a number by using Newton-Raphson

(b) Find the real root of the equation \( x^2 - 4 - x \) by 0 = 4 - x - \( x^2 \)

UNIT-III

(a) Define the concept of one-dimensional array, how are multi-dimensional arrays defined?

(b) Local and Global variables.

(c) Difference between the following:

UNIT-II

(a) Solve the following equations by Jacobi's iteration method:

\[
\begin{align*}
3x + 4y + 2z &= 61, \\
2x + 3y + z &= 51, \\
10x + 2y &= 41.
\end{align*}
\]
Prove that a necessary condition for convergence of an infinite product \( \prod_{n=1}^{\infty} \left( 1 + \frac{1}{n} \right) \) is that \( a_n \geq 0 \) as \( n \to \infty \).

Show that the series \( \sum_{n=1}^{\infty} \frac{1}{n^2} \) is not convergent.

State Cauchy's Test.

Give an example to show that \( A \cap B \neq (A \cup B) \).

Mathematics

1647

GSWM-M-16

Roll No. 

Total Pages: 1

1. Infinite product

2. Prove that a necessary condition for convergence of an infinite product \( \prod_{n=1}^{\infty} \left( 1 + \frac{1}{n} \right) \) is that \( a_n \geq 0 \) as \( n \to \infty \).

3. Show that the series \( \sum_{n=1}^{\infty} \frac{1}{n^2} \) is not convergent.

4. State Cauchy's Test.

5. Give an example to show that \( A \cap B \neq (A \cup B) \).

6. Infinite product

Page 4

1647/17.000/A/7247

Paper: BM-241

Mathematics

1647

GSWM-M-16

Total Pages: 1

Roll No. 

1. Infinite product

2. Prove that a necessary condition for convergence of an infinite product \( \prod_{n=1}^{\infty} \left( 1 + \frac{1}{n} \right) \) is that \( a_n \geq 0 \) as \( n \to \infty \).

3. Show that the series \( \sum_{n=1}^{\infty} \frac{1}{n^2} \) is not convergent.

4. State Cauchy's Test.

5. Give an example to show that \( A \cap B \neq (A \cup B) \).

6. Infinite product
1. 

\[ \lim_{n \to \infty} \frac{u_n}{n^p} = 0 \]

Find an example that the converse is not true.

2. (a) Show that if \( a_n \) converges then \( \sum_{n=1}^{\infty} a_n \) converges.

\[ \sum_{n=1}^{\infty} \frac{a_n}{n^p} = 0 \]

(b) Show that the series is convergent and \( 2 \leq p \).

3. Prove that the sequence \( \sum_{n=1}^{\infty} \frac{a_n}{n^p} \) converges.

\[ \sum_{n=1}^{\infty} \left( \frac{a_n}{n^p} \right) = 0 \]

4. (a) Prove that the sequence \( \sum_{n=1}^{\infty} \frac{a_n}{n^p} \) converges.

\[ \sum_{n=1}^{\infty} \left( \frac{a_n}{n^p} \right) = 0 \]

(b) Find the derived set of following sets:

\[ \left\{ n \in \mathbb{N} : \frac{u}{n^p} \right\} = B \]

(c) Find the derived set of \( A \).

(d) Find the derived set of \( A \) and \( B \) is the smallest.

5. (a) Prove that the sequence has a real number as its limit. If \( a_n \) is bounded below has a real number as its minimum.

\[ \sup \{ a_n \} = \inf \{ a_n \} = B \]

(b) Prove that every non-empty bounded subset of real numbers which

(c) If \( A \) and \( B \) are two non-empty bounded subsets of \( R \) and

\[ \sup \{ a_n \} = \inf \{ a_n \} = B \]

SECTION I

SECTION II

\[ \left\{ \sum_{n=1}^{\infty} \left( \frac{a_n}{n^p} \right) \right\} = 0 \]

SECTION III

\[ \sum_{n=1}^{\infty} \left( \frac{a_n}{n^p} \right) = 0 \]

Discussion the convergence of

\[ \sum_{n=1}^{\infty} \left( \frac{a_n}{n^p} \right) = 0 \]

SECTION IV

\[ \sum_{n=1}^{\infty} \left( \frac{a_n}{n^p} \right) = 0 \]
2. (a) Solve the following differential equation about $x = 0$:

$$0 = \frac{\partial^2 \varphi}{\partial x^2} + \alpha \varphi$$

(b) Find the Fourier transform of $f(x)$, where $f(x)$ is given by

$$f(x) = \left\{ \begin{array}{ll} 1 & \text{for } 0 < x < L, \\ 0 & \text{otherwise.} \end{array} \right.$$
8. Find the sine transform of
\( \mathcal{F} \{ \sin(x) \} \)

UNIT-I

4. \( \mathcal{F} \{ \delta(x) \} = \delta'(\omega) \)

5. \( \mathcal{F} \{ x \} = \frac{1}{\omega} \delta'(\omega) \)

6. \( \mathcal{F} \{ x^2 \} = \frac{2}{\omega^2} \delta''(\omega) \)

UNIT-II

7. Solve the following:
\( -\frac{\partial^2}{\partial x^2} \phi(x) + k^2 \phi(x) = 0 \)

8. Solve the following:
\( \frac{\partial^2}{\partial x^2} \phi(x) + k^2 \phi(x) = 0 \)

UNIT-III

3. Verify that the Bessel function of order 1, \( J_1(x) \), satisfies the equation:
\( x \sin \frac{x}{\xi} = (x)^1 J_1 \)
Explain increment and decrement operators. Explain why there is a difference between postfix and prefix.

3. (a) Describe the process of compilation and complementation of a source program in C.

3. (b) Describe the process of compilation and complementation of a source program in C.

3. (c) What are constants? Name and describe the four basic between a byte and a word of memory.

3. (d) What is a byte? What is a byte? What is the difference between a byte and a word of memory?

SECTION 1

1. (a) Define flow chart.

1. (b) What is a function? What is its purpose?

1. (c) What is the purpose of break statement?

1. (d) What is the syntax of scanf function?

1. (e) Define flow chart.

1. (f) Define flow chart.

2. (a) What is a byte? What is a byte? What is the difference between a byte and a word of memory?

2. (b) Define flow chart.

2. (c) Define flow chart.

2. (d) Define flow chart.

2. (e) Define flow chart.

2. (f) Define flow chart.

Compulsory Question

Note: Attempt five questions in all. Question No. 1 is compulsory.

Maximum Marks: 30

Time: Three Hours

Paper: BM.2-43

Programming in C and Numerical Methods

MATHEMATICS

GSMA1-16

1691

1691

1691

Total Pages: 3

Roll No: 3
(g)

By Trinomialization method,

\[ g = 3x + 2x - 1x \]
\[ 1 - = 3x - 2x + 1x \]
\[ 6 = 3x + 2x + 1x \]

Solve the following equations.

SECTION-IV

(3)

For finding cube root of \( N \), hence find cube root of 24.

\[
\left( \frac{\frac{2x}{3} + 2x}{N} \right) \frac{3}{1} = 1 + 1
\]

(b) Prove the recurrence formula.

(a) Regular-Repeat method.

(3) Find a real root of the equation \( x - 10 = x \) using

(a) Find addresses usually numbered

(q) What is meant by the address of a memory cell?

(a) Distinguish between Structure and Union.

SECTION-III

(6)

By Cross-Sided method.

\[ 6x = 3x + 3x \]
\[ 2x - z = 2x - 4x + x \]
\[ 6 = 2x + x + z \]

(9)

Solve the following equations.

(6)

Write a program to find trace of \( 3 \times 3 \) matrix.

(5)

What is macro and what is its use?

(3)

While loop. What is meant by Looping? Define For-loop and

(b) Explain the syntax of switch statement by an example.

SECTION-II
UNIT I

1. Probability
   (a) Distinguish between statistical probability and a function of a given temperature.
   (b) What are the conditions which are obeyed by a photon?
   (c) Distinguish between bosons and fermions.
   (d) Determine the number of ways of arranging a group of cards.
   (e) Determine the probability of drawing a king from a pack of cards.
   (f) If the rms. speed of a hydrogen molecule at N.T.P. is $2 	imes 10^5$ cm/sec, find the rms. speed of an oxygen molecule.$
   \text{Given that } \theta = 1.4 \times 10^{-27} \text{ J.K}^{-1}, \gamma = 6.6 \times 10^{-4} \text{ J.K}^{-1} \text{ sec.}$

2. \text{UNIT II}

1. (a) Calculate the residence time in a case for which

   \text{Conditional Question}

   Long tables may be asked for.

   Note: Question No. 1 is compulsory. Four more questions are to be attempted.

   Maximum Marks: 40

   Time: Three Hours

   Paper: VII
   (Standard: Physics)

   PHYSICS

   1652

   GSN/M-16

   Roll No. 2

   2
3. Discuss Hevers's theory of double refraction.

2. State and explain Malus's Law.

How is it used in Polariser and Analyser?

UNIT-1

1. Describe the construction and working of a Michelson Interferometer.

2. Write the expression for linear and angular

3. Write the equation of a matrix.

4. Write the power interfered in complex form.

5. How does polarised light differ from ordinary light?

6. What is the difference between Positive and Negative

Compassory Question

Calculate (Non-programmable is allowed)

until Question No. 1 is Compassory. Use of Scientific

Note: Attempt all questions in all. Select one question from each

Paper-III

Maximum Marks: 40

Time: Three Hours

PHYSICS

1653

ROLL NO.

TOTAL PAGES: 2

(1) Discuss the numerical aperture of an optical fibre. (2)

(2) Describe the numerical aperture in optical fibre. (3)

(3) Describe the numerical aperture in optical fibre. (4)

(4) What is a Guided Index fibre? (5) Give various

(5) Give various

(6) The dispersive power of the material of lens is 0.336

8. What is Chromatic Aberration of Lens? Explain how an

UNIT-1

The system

of the central points and the equivalent focal length of

placed in air a separation of 5 cm. Calculate the position

(2) Two convex lenses of focal lengths 10 cm and 20 cm are

(3) Two convex lenses of focal lengths 10 cm and 20 cm are

(4) A = Translation matrix? Explain.

(5) Find the power transformation of \( f(x) = e^{-x^2} \).

(6) Define Inverse Power sine and Cosine Transformation.

(7) Find the value of Power sine and Cosine Integral.

(8) Explain Parseval's theorem.
SELECTED RESPONSE

SECTION-I

2. (a) Lanthana (La) is a rare earth metal. Explain its rareness.

2. (b) Why Eu (Europium) and Yb (Ytterbium) show anomalous behaviour of lanthanides and actinides.

2. (c) Why are the chemical properties of lanthanides and actinides similar?

Select two questions from each section.

Note: Attempt the questions in all Sections. No. 1 is compulsory.

Time: Three Hours

Maximum Marks: 30

PAPER-I (CH-207)

CHEMISTRY

GSN/AL-16
1. Which of the following is an intermediate radical:
   (a) O
   (b) Cl⁻
   (c) NO₂⁻

2. Give the details of Nessels' test for Ammonia:

3. Remove Phosphorus when present as an intermediate radical.

4. Which is intermediate radical? Give any one method to
   (a) CN⁻ (b) NO₂⁻ (c) PO₄³⁻

5. Give the details of following two methods used for the
   a. Oxides of Ammonia, Why?
   b. Oxides of Phosphorus, Why?
   c. Oxides of Nitrogen, Why?

6. Give the details of the following tests:
   a. Ammonium Nitrate test for Phosphate.
   b. Blue test for Nitrate.
   c. Chromatography test for Chloride.

SECTION II

1. Which of the following gives Flame test:
   a. Presence of NO
   b. Presence of NO₂
   c. Presence of NO₃

2. Give any one method to detect NO₂ (Nitric) in

3. Can be detected when present together:
   a. How Chloride (Cl⁻) Bromide (Br⁻) and Iodide (I⁻) ions are not

4. In 1st stage of basic radicals, P₂⁺ (Lead) ions are not

5. What is Lanthanide contraction? Give his three

6. What is H₂SO₄ in presence of NH₃OH. Explain why so.

7. The group reaction for 1st stage of basic radicals is H₂SO₄.

2. The change in entropy of 2 moles of air at a temperature of 35°C. Calculate the change in entropy from a volume of 8 dm³ to 10 dm³ at a constant pressure of 35°C. Calculate the work done on the gas.
The mean activity coefficient of the electrolyte may be
in 25°C. If the two solutions are separated by a salt bridge,
(a) Calculate the EMF of the concentration cell consisting
(b) Determine Nernst Equation for measuring EMF of a cell.
(c) Hydrogen Electrode.
5. What are irreversible electrodes? Explain the following.
(a) Concentration cell.
2. Difference between Electrochemical cell and

SECTON B

1. Can it be calculated?
(c) What is residual entropy? What is its origin and how
2. 30°C. Calculate the change in entropy (AH) for the process at
process is 85.77 J/mol at 25°C and 83.68 J/mol at 35°C.
(b) The free energy change (DG) at Nernst Heat Theorem.
5. (a) State and explain the Third Law of Thermodynamics.
(b) The entropy of surroundings.
3. (a) Explain the law of thermodynamics. Briefly explain its
function.
4. (a) Explain the term entropy. Show that entropy is a state
function.
(b) Prove that in a reversible process net entropy change for
(c) Nernst Equation.
2. Account for this order in terms of steric and electronic factors.

\[
\begin{align*}
\text{R} & \text{C} = \text{O} < \text{O} - \text{C} = \text{O} < \text{H}
\end{align*}
\]

(c) The order of reactivity in nucleophile addition is

(d) Explain why excess of mineral acid is added during the synthesis of \( \text{C}_2\text{H}_5\text{N}^+ \).

(e) Write the structural formulas, common names, and IUPAC names of all the isomeric amines resulting from

(f) Deduce what might be the compound in the boiled and

(g) molten mixture. You take an IR spectrum of the compound and find that you find a single peak on the shelf only labelled \( \text{C}_2\text{H}_6\text{O} \).

Question 1. Select two questions from each unit.

Note: Attempt two questions in all Question No. 1 is compulsory.

[i] Maximum Marks : 32

Time : Three Hours

For Regular Students

Paper-III (CH-206)

Chemistry

16S6

6

16S6/11.900/KD/355

Problem

benzaldehyde.

2. Reaction between formaldehyde and

(i) Explain an-CHO?

(ii) Why the reaction cannot be used with aldehydes

(iii) For benzaldehyde reaction indicates

(iv) \( \text{C}_6\text{H}_5\text{OH} = \text{CHO} \)

(v) Give structure of the product of \( \text{C}_6\text{H}_5\text{CHO} \) and carbonyl compounds

(vi) Why is \( \text{CHO} \) aldehydes.

(vii) Why is not a good method to oxidize

(viii) Jones oxidation is not a good method to oxidize

(ix) Jones reaction is not a good method to oxidize

(x) Jones reaction is not a good method to oxidize

9. The combination of \( \text{CHO} \) and sulfuric acid is often

\[
\begin{align*}
\text{CH}_3\text{OH} + \text{H}_2\text{SO}_4 \rightarrow \text{CH}_3\text{SO}_3\text{H} + \text{H}_2\text{O}
\end{align*}
\]

(c) Identity A, B and C in the following reaction sequence
2. Explain the reaction involved.

2. Explain the difference in the energy of vibrations in the following compounds, and explain the reasons for the difference in the energy of vibrations.

(c) Give the approximate range of C–C stretching vibrations.

IR spectrum with explanation.

IR spectrum in order of increasing wave number in an explanation of the following carbonyl groups:

H–C=–H –C=–CH3 –CH=–CH3 –CH2=–CH3

IR spectroscopy features and why?

(a) Which of the carbon–carbon triple bonds in the compounds shown below are expected to have lower wavenumbers than the carbon–carbon single bonds in the following compounds?

(b) Explain the following concepts with examples.

(c) Explain why the following compounds cannot be observed by using chemical synthesis.

(d) Explain why the following compounds cannot be prepared by using chemical synthesis.

(e) The carbon–carbon stretching vibration of ketones is in a

(f) The carbon–carbon stretching vibration of ketones is in a

(g) The carbon–carbon stretching vibration of ketones is in a

(h) The carbon–carbon stretching vibration of ketones is in a

(i) The carbon–carbon stretching vibration of ketones is in a

(j) The carbon–carbon stretching vibration of ketones is in a

(k) The carbon–carbon stretching vibration of ketones is in a

(l) The carbon–carbon stretching vibration of ketones is in a

(m) The carbon–carbon stretching vibration of ketones is in a

(n) The carbon–carbon stretching vibration of ketones is in a

(o) The carbon–carbon stretching vibration of ketones is in a

(p) The carbon–carbon stretching vibration of ketones is in a

(q) The carbon–carbon stretching vibration of ketones is in a

(r) The carbon–carbon stretching vibration of ketones is in a

(s) The carbon–carbon stretching vibration of ketones is in a

(t) The carbon–carbon stretching vibration of ketones is in a

(u) The carbon–carbon stretching vibration of ketones is in a

(v) The carbon–carbon stretching vibration of ketones is in a

(w) The carbon–carbon stretching vibration of ketones is in a

(x) The carbon–carbon stretching vibration of ketones is in a

(y) The carbon–carbon stretching vibration of ketones is in a

(z) The carbon–carbon stretching vibration of ketones is in a
2. (a) Phenyldiazonium chloride, and their formation with

Phenyldiazonium chloride. 
Benzenediazonium chloride, and
Fluorobenzene.
Iodo-benzene.

Prepare the following from benzene diazonium chloride:

(b) Phenol.

Give a mechanism of formation of diazonium salts with


5. (a) With the steps involved in the following reaction:

\[
R-NH_2 + H_2O \xrightarrow{\text{Br}_2/N_2O_5} R-N=O
\]

and ammonia.

UNIT II

6. (a) N,N-Dimethyl-phenylamine.

(b) Benzylamine.

Show how you could prepare each of the following

examples.

(c) Explain the different reactions exhibited by dinitrobenzene

and the reason for these reactions in such a transformation.
UNIT I

1. Write notes on the following:

Define Experimental Taxonomy.

2. What are the fundamental components of Taxonomy? Discuss.

(a) Role of Taxonomists in Taxonomy.
(b) Botanical Nomenclature.

UNIT II

3. What are Diagnoses or Family Labiatures?

(a) Diagnostic features of Family Lamiaceae.

4. Write notes on the following:

(b) Delphinium (Lark spout).
(c) Chrysanthemum.

5. Write notes on the following:

(c) Economic Importance of Family Malvaceae.
(d) Formal description of Convolvulus.

6. Give a brief outline of the classification of Angiosperms proposed by Bentham and Hooker.

7. Write notes on the following:

(b) Taxonomic ranks.
(c) Cyathium Inflorescence.
(d) Petals.

8. Write notes on the following:

(c) Families of the Angiosperms.
SECTION-A

1. Explain the following in about 20 words each:

Composutory Question

With suitable diagram(s) wherever necessary.

Note: Attempt five Questions in all. Question No. 1 is compulsory.

Maximum Marks: 40

[Time: Three Hours]

ZOOLOGY

1661

SECTION-B

3. Describe the digestive system of Rat.

4. (a) Write a note on Túngiasis atrocious of float.

5. (a) Describe evolutionary use of repellents.

6. Describe in detail the female reproductive system of human.

7. Draw a well labeled diagram of the internal structure of heart of frog.

8. (a) Draw a well labeled diagram of the internal structure of gills.

9. (a) Describe the structure and working of eye of pigeon.

Roll No. ____________
1. Define the following:

- Complementary Question

**Questions: Each from Section A and B.

(i) For the remaining four questions, attempt two.

Note: Answer all four questions in all.

Maximum Marks: 40

Time: Three Hours

Paper-II

(Mammalian Physiology-II)

Zoology

1662

GSY/M-16
7% By Pharynx glands, name the various hormones and their functions secreted.

3% Give the difference between pre-synaptic and post-synaptic impulse.

6% Give an account of saliency condition of nerve.

SECTION-A

3

Describe the role of loop of Henle in urine formation.

3

Describe various phases of oxygen dissociation curve of haemoglobin.

4.

(a) Describe Cocking cycle.

5.

(a) Describe the origin and condition of Heart beat.

SECTION-B

3

(a) Give a brief account of Insinuation Reserve Volume (ERV).

3

(a) Give a brief account of Insinuation Reserve Volume.
amplifier are 400 kΩ and 100 kΩ respectively. When

2. (a) the input and output resistances of an operational

feedback topologies.

UNIT-1

(b) Draw the block diagrams of four different types of

without being damaged.

value of the load resistance that can be connected.

(c) A power supply is rated at 20 V rms. A. Calculate the

other circuits?

(e) How a Monostable Multivibrator can be used to Gate

C. Classical oscillators are highly stable. Comment.

feedback.

I. (a) Calculate gain of an amplifier with positive

Compulsory Question

Select one question from each unit.

Note: Attempt all the questions in all questions No. 1 is compulsory.

Maximum Marks : 40

Time : Three Hours

Paper-1

OP-amp and Linear Integrated Circuits-II

ELECTRONICS

1665

CSWM-16

Total Pages : 3

Roll No. :
UNIT-II

4. Discuss the circuit of an amplifier.
(a) Define the term "gain" and explain its significance in an amplifier circuit.
(b) Calculate the gain of a common-emitter amplifier with a given R1 and R2.
(c) Explain the role of a feedback network in amplifiers.

UNIT-III

5. Draw and explain the circuit of a non-inverting amplifier. Explain its
function and characteristics.

6. Draw and explain the circuit of an inverting amplifier. Explain its
operation and properties.

7. How to generate a triangular waveform using an oscillator?

8. Frequency of oscillation: Draw the waveform and calculate the
frequency of oscillation for the given circuit.

UNIT-IV

9. How to obtain a square waveform using an operational amplifier?
(a) How to obtain a square waveform using a non-inverting amplifier?
(b) How to obtain a square waveform using an inverting amplifier?

10. How to obtain a triangular waveform using a non-inverting amplifier?
UNIT I

Question 1:

(a) What are volatile and non-volatile memories?
(b) When clock = 0, why the output state of flip-flop is not changing?
(c) Why the output state of flip-flop is 1 if clock = 1?
(d) What do you understand by sequential circuits?
(e) What is the difference between Latched I/O and Memory-mapped I/O?

UNIT II

Question 1:

Discuss the various specifications of Analog to Digital converter.

UNIT III

Question 1:

From D type matrix ROM, is it possible to generate the same word? Why or why not?
Example program in C++
(b) Explain the concept of static member function with
does a class implement data hiding?
2. (a) Explain class and object in C++ with example. How

UNIT-1

5(8)
(b) Which is inline function? Mention its advantages.
(d) State the rules of scope.
(c) What is this pointer? What is your reaction to the
difference between Constructor and Destructor.

(a) Define Encapsulation Related to Object-Oriented

Concept Question

Equal marks.
Select one question from each unit. All questions carry
Note: Attempt the questions in all Question No. 1 is compulsory.

\[ \text{Time: Three Hours} \]
\[ \text{Max. Marks: 40} \]

Paper-1

(Object-Oriented Programming with C++)

COMPUTER SCIENCE

1667

GSW/16

Roll No. ........................
Total Pages: 3
8. Write down a C++ program to overload operator + to add
   two lines in hours, minutes and seconds.

UNIT-I

7. Write two complex numbers using friend function. 5(8)

2(4)

C++ ? Explain their uses and syntax with example.

UNIT-III

5. Draw console stream class hierarchy and explain its
   members.

Example.

5(8)

from Normal member function ? Explain its usage with

UNIT-II

4. Discuss the need of constructor in C++ ? How is it different

2(4)

3. (a) Discuss the benefits of Object-oriented Programming.

2(4)

5(8)

2(4)

If | ! = 1, | ! = 4 and ! = 0 when is the effect of the

Statement Polymorphism.

9. (a) Define Polymorphism. What are the merits/demerits of

Polymorphism.

8. Write down a C++ program to overload operator + to add
   two lines in hours, minutes and seconds.

UNIT-I

7. Write two complex numbers using friend function. 5(8)

2(4)

C++ ? Explain their uses and syntax with example.

UNIT-III

5. Draw console stream class hierarchy and explain its
   members.

Example.

5(8)

from Normal member function ? Explain its usage with

UNIT-II

4. Discuss the need of constructor in C++ ? How is it different

2(4)

3. (a) Discuss the benefits of Object-oriented Programming.
UNIT I

3. What are the various components of Operating System?

UNIT II

2. Explain the evolution of Operating System.

Compulsory Question

Select one question from each unit.

Note: Attempt the questions in all 5. No. I is compulsory.

B.Sc. : 40
Maximum Marks : 25
Time : Three Hours

UNIT IV

6. Explain various disk scheduling techniques.

7. Explain the concept of virtual memory.

8. Explain various file organization techniques.

UNIT III


4. Explain various deadlock detection techniques.

3. What is deadlock avoidance and its methods?

ROLL NO. : 2

TOTAL PAGES : 2

1268/4/800/KD/256

1268/4/800/KD/256
UNIT-I

1. What are some applications of web page design?

2. What are the common links that are associated with CSS?

UNIT-II

3. Explain the use of XHTML.


UNIT-III

5. Discuss the difference in XML and XHTML.

6. Explain the structure of XML.

7. Discuss the use of XML and its support.

8. Which is XML? Discuss its features. Explain XML support.

Note: Answer the questions in all 3 compartments.

Time: Three Hours

Maximum Marks: 40
UNIT I

2. How can you select a particular one?
2. How many types of combo boxes are there in VB?
2. Why VB is called as Event driven Programming
2. Define the purpose and use of Exit statement
2. What are the modes in which VB application

Compassory Question

Compassory. All questions carry equal marks.

Note: Attempt three questions in all. Attempt one question from each unit.

[Maximum Marks: 40]

Time: 3 Hours

Paper II

(PROGRAMMING IN VISUAL BASIC)

COMPUTER APPLICATION

1670

GSWM-16

Roll No.:

Total Pages: 3
UNIT III

1. Write an application in VB to find the largest of three numbers.

2. Describe the purpose of Select-Case statement.

3. Where it should be used? Explain all forms of Select-Case statement.

4. When are the various Input-Output functions available in VB? Explain each with their syntax and examples.

5. Define Variable, how Variables are declared in VB? What is the scope and lifetime of a variable? Explain by giving suitable examples.

6. Define Function, what are the various types of functions?
UNIT-II

5. Discuss the different factors affecting Recombinant Protein production. How the protein yield can be increased?

6. Write short notes on the following:
   (a) PCR technology.
   (b) The direct methods.
   (c) Amplification DNA sequencing.

7. What is PCR? Discuss the principles and applications of PCR technology.

8. 

UNIT-I

I. Describe briefly:

(a) Shuttle vector.
(b) Doi blot.
(c) RAPD.
(d) Tissue specific promoter.
(e) (4x2=8)

II. Composoany.Guestion

from each unit

Note: Attempt Q. No. 1 and four others selecting two questions

Maximum Marks: 40

Time: Three Hours

PAPER-III
(Recombinant DNA Technology)
BIOTECHNOLOGY

CGVM-A16

1673

ROLL NO. 

TOTAL PAGES: 2
UNIT-I

I. Give full forms of the following:

Compulsory Question

Equal marks. Select two questions from each unit. All questions carry equal marks.

Note: Attempt five questions in all. Question No. 1 is compulsory.

[Maximun Marks: 40]

Paper-IX

BIOINFORMATICS

BIOLOGY

UNIT-II

5. Name any two database searching tools.

2. Write detailed accounts on one of the searching tool.

6. Write a note on PDB.

4. Name methods of predicting Protein sequence.

8. Differentiate between Local and Global sequence alignment.

10. Write notes on the following:

2. Define Genome and Proteome.

3. Define Gene and Protein.

4. Define CDS and ORF.

5. Define NCBI Model.

6. Define PDB Model.

7. Define PSSM Model.
प्रथम (10)

यदि कोई भी दो आक्षेप ओर दो खंभे में लिखा हुआ हो, तो उन्हें ध्यान दें।

समस्या (10)

इसमें दो विकल्प होंगे। आपकी जवाबली के लिए विकल्पों में कोई भी विकल्प चुनें।

हिंदी (10)

इसमें दो सवाल होंगे। आपकी जवाबली के लिए सवालों में कोई भी सवाल उत्तर दें।

कुल नंबर (10)

इसमें कुल तीन नंबर होंगे। आपकी जवाबली के लिए नंबरों में कोई भी नंबर लिखें।

कुल तंत्र (10)

इसमें कुल तीन तंत्र होंगे। आपकी जवाबली के लिए तंत्रों में कोई भी तंत्र लिखें।
5. Reflection, Speculum, Immunization, Membrane, Residues, Photocell, Radiation, Remanent Throat, Virus, Sublimation,

6. Phyton, Physic, Physiological, Physical, Photographic, Pharmacology, Physical, Photographic, Pharmacology, Photochemical
UNIT-I

3. Explain Huffman’s algorithm along with its implementation.

(b) (ii) Define the various file operations.

(b) (iii) Define the purpose of different algorithms.

(b) (iv) What is a binary search tree?

(b) (v) What are the various sorting algorithms?

(b) (vi) What are the various tree traversal algorithms?

1. (i) Define Complete Binary Tree.

2. Write short notes on the following:

COMPUSORY QUESTION

Select one question from each unit.

Note: Attempt five questions in all. Question No. 1 is compulsory.

Maximum Marks: 80

Time: Three Hours

Paper: BCA-241

ADVANCE DATA STRUCTURES

1998

BCA/M-16

1998/2/800/KD/2283
UNIT-I

2. (a) Explain the concept of pure virtual function with example.
(b) What is the difference between pure virtual function and pure virtual function with example?

UNIT-II

1. (i) Define abstract base class.
(ii) Explain the concept of function overloading.
(iii) Explain the concept of function overloading with examples.

UNIT-III

6. (a) What do you mean by multiple inheritance.
(b) Write a program in C++ to implement the concept of multiple inheritance.

7. (a) Write a program in C++ to implement the concept of function overloading.
(b) Explain the role of constructor in inheritance.
(c) Discuss the role of destructor in inheritance.
(d) Explain the concept of function overloading using example.

UNIT-IV

8. (a) Explain the concept of function overloading.
(b) Write a program of your choice to overload a template function.

9. (a) Define a class template.
(b) Write a program to swap two class templates and functions.

10. (a) What do you mean by polymorphism?
(b) What are the rules of overriding different classes of a class? Write a program in C++ that answers these rules.

Note: Attempt all questions in all Questions. 1 is compulsory.

Time: Three Hours

Maximum Marks: 80

Paper: BCA-232

ADVANCED PROGRAMMING USING C++

1699

BCA/M-16

ROLL NO.
UNIT-I

(6 marks)

1. Discuss the differences between e-commerce and traditional commerce.

2. Describe the various payment models and practices.

UNIT-II

(6 marks)

(a) Public Key Cryptography
(b) Online Advertising
(c) Internet Banking
(d) EDI vs. Paper Based System
(e) Types of Online Trains
(f) What is Immediate Payment Service (IMPS)
(g) Distinguish between C2C and C2B

Compulsory Question

Note: Attempt all questions in all the units. No. 1 is compulsory. Select 1 question from each unit. All questions carry equal marks.

Time: Three Hours

Paper: BCA-243
B.Commerce
BCA/M-16

ROLL NO.

TOTAL PAGES: 3
UNIT-II

3. (a) What are Smart Cards? Explain the various categories of Smart Cards.

4. (a) Describe the various Key Technologies for B2B E-Commerce in detail.

5. (a) How will Private Sector Influence in E-Governance be

6. (a) What is the role of E-Broker in business? Explain Broker

7. (a) What are the various products in B2C Model?

8. (a) Describe the various Marketing Issues in B2B.

9. Write short notes on the following:

 UNIT-III

10. What are E-Auctions? What are its benefits and implications?

11. Describe Real Estate Market and its applications.

12. Describe Online Services.

UNIT-I

13. Write comprehensive analysis model by using an

14. What are the applications of Public Sector

15. What is G2C E-Commerce? Write down the applications of G2C.

16. What is G2E E-Commerce? Write down the applications.

17. Hardware and Software Requirements for Internet.


19. E-Commerce Scenario in India.
1. Explain the various relations of SQL.

2. Explain the various relational constraints using examples.

3. Explain Domain-oriented relational calculus using suitable examples.

UNIT-I

I. Comprehension Question

Select one question from each unit. All questions carry equal marks. Select one question from each unit. All questions carry equal marks.

Note: Attempt the questions in all Question No. 1 is compulsory.

Maximum Marks: 80

Time: Three Hours

Paper: BCA-244

RELATIONAL DATABASE MANAGEMENT SYSTEM

BCA/M-16

1. Explain the various relational constraints using examples.

2. Explain the various relations of SQL.

3. Explain Domain-oriented relational calculus using suitable examples.

UNIT-II

4. Explain various features of these curricula.

5. Explain Implement and Explain constraints using examples. Also explain

UNIT-III

6. Write a PL SQL code to find the relational of a given number.

7. Find the maximum basic pay in ENP table.

8. Display all employees according to ascending order.

9. Find the employees working in Delhi, No. 1, 5, and 600.

10. Find the employees whose basic pay is between 6000 and 9000.

11. Write SQL queries for the following:

- EMP (ENO, ENAME, AGE, BASIC WORK-IN (ENO, DNO))
- ENO (ENO, DNO, WORK-IN)

12. Given the following relation scheme:

CREATE VIEW command

(b) Write a VIEW to Explain CREATE VIEW command

(a) Explain basic data types in SQL.
16

5 (a) Define Median.

(b) Determine Coefficient of Variation.

(c) Determine Coefficient of Linear Correlation between X and Y.

(d) Find the Linear Regression Coefficient of Y on X.

(e) Find the Correlation Coefficient between X and Y.

(f) Find the Variance of X and Y.

(g) Find the Variance between S.D.

(h) Find the Variance of Machine

6. Three different machines are used for the production. On the basis of the output, test whether the machines are equally effective or not.

7. The property on which you base your calculation is 8. In 344 hours of a day, odd numbers appeared 181 times. Would you say that the distribution is even? State exactly.

8. (i) Chi-square distribution

(ii) Parametric and Non-parametric tests.

9. Write short notes on each of the following:  

UNIT-IV

Fill a Parabola curve using method of least squares.

The point of certain company in the 6th year of its life are given by

\[
\begin{array}{cccc}
\chi & \text{1220} & \text{1440} & \text{1650} & \text{1950} \\
\text{2300} & x \times & 3 & 4 & 5 \\
\end{array}
\]

8. (a) Prove Bayes' theorem on Probability.
Regression
Write the difference between correlation and

Estimate when \( x = 3 \).

Correlation coefficient between \( x \) and \( y \).

Correlation coefficients \( p \) and \( q \).

Regression finds a line \( ax + by = c \) and \( 2x - 3y = 5 \) are two lines of regression.

UNIT III

Find the coefficient of correlation between \( x \) and \( y \).

\[ \text{Given} \quad e = 0.14 \]

(i) (no defective screw) and (ii) (one defective screw) find the probability that a packet of 100 screws contains 5. (a) It is given that 2\% of screws manufactured by a

marks between 20 and 40. S.D. = 6.25. How many students are expected to get

2000 students appeared in an examination distributed

is 15 and the sum of their squares is 117. Find the

The sum of mean and variance of binomial distribution

UNIT II

Find the correct S.D.

One observation 40 was wrongly copied down as 50.

The A.M. and S.D. of 100 items was recorded as

The A.M. and S.D. of 100 items was recorded as

flies.

No. of Students

\[ M = \text{No. of students} \times 74 \]

If \( N = 74 \) and median of the distribution is 36:

(a) Find the missing frequencies in the following distribution

(a) Find the missing frequencies in the following distribution

V.M. < G.M. < H.M.

If \( x \) and \( y \) are two positive numbers then prove that

the mean salary.

Rs. 900. Find the mean wages of workers working in

The mean wages of 600 workers in the Ist shift is

Rs. 1000. Find the mean wages of 600 workers in the Ist shift is Rs. 1000.

(a) The mean wages of 1000 workers in a paper mill

UNIT I
UNIT-I

1. What do you mean by Information System? Why we need it? Distinguish between TPS and DSS.
2. (a) Distinguish the concept of MIS and DSS.
(b) Briefly describe the characteristics and capabilities of DSS.
(c) Briefly describe decision making problem and feedback.
(d) Briefly describe the various types of Information Systems. Explain on their uses.
3. (a) Briefly describe components of DSS.
(b) Briefly describe components of MIS.
(c) Discuss the relevance and role of MIS in various phases.
(d) Briefly describe new applications of E-commerce.
(e) Why is MIS important? Briefly describe and distinguish between MIS and E-business.
(f) What is the importance of MIS in various phases?
(g) What do you mean by System Implementation? Briefly describe and distinguish between various types of Information Systems. Give advantages and disadvantages of each.

UNIT-II

(a) What is the purpose of Decision-making? Discuss Simulators.
(b) What is MIS? Briefly discuss its model of Decision-making.
(c) Discuss the different levels of Management in an organization.
(d) What do you mean by MIS? Briefly discuss its components.
(e) Briefly discuss the different levels of Management in an organization.
(f) What is MIS? Briefly discuss its model of Decision-making.

UNIT-III

Time: Three Hours

Maximum Marks: 80

Paper: BECA-246

MANAGEMENT INFORMATION SYSTEM

BCAM-16

UNIT-I

1. What do you mean by Information System? Why we need it? Distinguish between TPS and DSS.
2. (a) Distinguish the concept of MIS and DSS.
(b) Briefly describe the characteristics and capabilities of DSS.
(c) Briefly describe decision making problem and feedback.
(d) Briefly describe the various types of Information Systems. Explain on their uses.
3. (a) Briefly describe components of DSS.
(b) Briefly describe components of MIS.
(c) Discuss the relevance and role of MIS in various phases.
(d) Briefly describe new applications of E-commerce.
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(e) Briefly discuss the different levels of Management in an organization.
(f) What is MIS? Briefly discuss its model of Decision-making.

UNIT-III

Time: Three Hours

Maximum Marks: 80

Paper: BECA-246

MANAGEMENT INFORMATION SYSTEM

BCAM-16
UNIT I

I. (a) How is a Commonly Known in HTML?

Select one question from each unit

Note: Attempt 4 questions in all. Question No. 1 is compulsory.

Maximum Marks : 80

Time : Three Hours

PAPER : BCA-241
WEB DESIGNING - I

BCA/RM-16

ROLL NO. ........................................

TOTAL PAGES : 2
10. Frames Creation.
11. Ordered and Unordered List:
12. Write short notes on the following:

UNIT-IV

8. Explain the purpose of Radio button and Check boxes

UNIT-III

6. Explain the steps to create links in a website.

UNIT-II

5. Define Home Page, What should be the features in a well-designed home page?

4. Explain ISP Along with its features and their role in Internet.

3. Why do we need HTML Frames in a page?

2. Why are the Important Guidelines for creating a website?
2. What is the difference between Trie and Huffman encoding?

3. What is a Trie? How is it useful in search operations?

4. What is a Huffman encoding? How is it used in data compression?

5. What is a Huffman tree? How is it constructed for a given set of characters and their frequencies?

6. What is the difference between a binary tree and a Huffman tree?

7. What is a Huffman code? How is it generated for a given set of characters and their frequencies?

8. What is a compressed trie? How is it different from a regular trie?

9. What is a compressed Huffman encoding? How is it different from a regular Huffman encoding?

10. Define the following terms:

   - Weighted Path Length
   - Internal Path Length
   - External Path Length
   - General Tree

Note: (a) All questions carry equal marks.
(b) Select one question from each unit
(c) Question No. 1 is compulsory.
(d) Attempt five questions in all.

Maximum Marks: 80

Time: Three Hours

Paper: BCA-242
DATA STRUCTURES II

BCAR/M-16

1705

Roll No. 3
UNIT-III

6. Sort the following list of numbers using Quicksort algorithm:

- 42, 73, 25, 45, 55, 14, 66, 38, 75

7. Write down the Heapsort algorithm and its complexity.

8. Shortest path and apply it on the following graph:

UNIT-II

4. Define Graph with all its types. Explain the various operations performed on graphs by taking suitable examples.

5. For each of the networks, and determine their end-to-end delay.

UNIT-I

7. Explain it by taking suitable examples.

8. Write down the Quicksort algorithm and its complexity.
UNI-1

I. Define %ISOPEN and %ROWCOUNT attributes in PL/SQL.

(a) What is DML independence?
(b) Define DROP and ALTER commands in SQL.
(c) What are Transitive Functional Dependencies?
(d) Differentiate between Primary Key and Unique Key.
(e) What is Entity and Attribute?

II. Compulsory Questions

Select one question from each unit. All questions carry equal marks.

I. Universal qualifier and Existential qualifier.
II. Tuple relational calculus and Domain relational calculus.
III. Outer Join and Inner Join.
IV. Natural Join and Equi-join.

Differentiate between the following terms:

PL/SQL

1. Determine the difference in SQL and PL/SQL. What are the advantages of using PL/SQL in database management systems? What is the role of PL/SQL in database development? Explain the difference between DML (Data Manipulation Language) and DDL (Data Definition Language) in SQL. Discuss the importance of using PL/SQL for database transactions. Explain the concept of PL/SQL and its advantages over SQL. Differentiate between PL/SQL and SQL in terms of functionality and application. Explain the role of PL/SQL in database administration. Discuss the advantages of using PL/SQL in database development. Explain the concept of PL/SQL and its advantages over SQL. Differentiate between PL/SQL and SQL in terms of functionality and application. Explain the role of PL/SQL in database administration. Discuss the advantages of using PL/SQL in database development.
UNIT-I

8
9. (a) Which is Primary Key? Discuss Inference control.
8
(b) Why are the advantages of PL/SQL?
8
(c) What is Cursor? Explain different types of cursors in PL/SQL.
8
(d) Write short notes on the following SOL statements:

UNIT-II

8
9. (a) Which is PL/SQL execution environment? Explain
8
(b) Discuss statements used in PL/SQL.
8
(c) What is PL/SQL?

UNIT-III

8
9. (a) Which is Normalization? Explain First, Second, Third
8
(b) Write short notes on the following SOL statements:

4. (a) Discuss Inference, Deduction and Modus Tollendo

8
3. (a) Discuss the various relational algebra operations with

Examples.

and solve Codd’s normal forms with suitable

(examples)
(a) \[ \frac{7}{y^8} = x p x^{-2} \int_0^y \]

Prove that

(b) \[ P \]

(c) \[ G \]

(d) \[ M \]

(e) Find the Jacobian of \( \psi \) with respect to \( x, y, z \) when \( 2 = 2 + \kappa \) and \( \eta = 2 + \lambda + x \)

\[ \left( \begin{array}{c} \frac{\partial \psi}{\partial x} \\ \frac{\partial \psi}{\partial y} \\ \frac{\partial \psi}{\partial z} \end{array} \right) = \left( \begin{array}{c} \kappa \\ \lambda \\ x \end{array} \right) \]

(f) \[ \frac{\partial \psi}{\partial \theta} = (\theta^2 + \kappa + \lambda_x) \]

(g) \[ \int_0^\infty \theta e^{-\theta} d\theta = \eta \]

(h) \[ I = \int_0^\infty \theta e^{-\theta} d\theta \]

(i) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(j) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(k) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(l) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(m) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(n) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(o) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(p) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(q) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(r) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(s) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(t) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(u) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(v) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(w) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(x) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(y) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]

(z) \[ = \int_0^\infty \theta e^{-\theta} d\theta \]
\[ (8') \]

\[ \int_0^3 \left( z^2 + z + x \right)^p \frac{dz}{z} \]

\[ = (z^2 + z + x)^p + C \]

\[ (q) \]

Evaluate

\[ 1 \leq z^2 + z + x \]

\[ \int_0^3 (z^2 + z + x)^p \frac{dz}{z} \]

\[ (a) \] \[ \int_0^3 \left( 1 - x \right)^2 \frac{dx}{x} \]

Obtain a reduction formula for the value of

\[ \int_0^3 \left( 1 - x \right)^2 \frac{dx}{x} \]

and find

\[ \frac{1}{2^3} \theta P = \frac{2}{\theta} \frac{z^2}{\cos \theta} \sin \theta \int_0^3 \left( 1 - x \right)^2 \frac{dx}{x} \]

\[ (a) \] Prove that

\[ \theta P = \frac{2}{\theta} \frac{z^2}{\cos \theta} \sin \theta \int_0^3 \left( 1 - x \right)^2 \frac{dx}{x} \]

\[ (8') \]

\[ \frac{1}{e^{x} - 8 - \theta} \]

\[ (8') \]

\[ \int_0^3 \left( \frac{z}{z^2} \right) \]

\[ = \frac{z}{z^2} \frac{dz}{z} \]

\[ (a) \] \[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (8') \]

\[ \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} = \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} \]

\[ (q) \]

\[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (a) \] \[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (8') \]

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\[ (a) \] \[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (8') \]

\[ \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} = \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} \]

\[ (q) \]

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\[ (a) \] \[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (8') \]

\[ \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} = \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} \]

\[ (q) \]

\[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (a) \] \[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (8') \]

\[ \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} = \frac{\partial P}{\partial \alpha} - \frac{\partial P}{\partial \alpha} \]

\[ (q) \]

\[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]

\[ (a) \] \[ \int_0^3 \left( \frac{z}{z^2} \right) \frac{dz}{z} \]
I. Describe the following:

(a) Food Spoilage
(b) Preservation by Canning
(c) Fermentation
(d) Advantages of Dairy Survey

Compulsory Question

Select no questions from each unit. All questions carry equal marks.

Note: Attempt five questions in all. Question No. 1 is compulsory.

Maximum Marks: 40

Total Marks: 100

Roll No.

Course - 211

APPLIED AND COMMUNITY NUTRITION

CSMIN16

Total Pages: 3
UNIT-2 (Page-1)

UNIT-2 (Page-2)

antimicrobial measurements (page 3)

5. (a) Write the causes of food poisoning and symptoms of PEM.

6. Which is food spoilage? Describe the various causes of food spoilage with suitable example and the ways to prevent food spoilage.

7. What is food preservation? Describe the various principles of food preservation with suitable example.

8. Explain different heavy survey methods in detail.

9. (a) Describe the role of additives in maintaining the standards of food.

8. Explain the advantages, where their harmful effects for the Cereals, Pulse, Milk, Cheese and Spices.

8. Explain the various disadvantages and disadvantages of Antony [sn] food.
I. \( e \times 2 = 8 \)

II. Explain any four

(1) Alliteration
(2) Antonym
(3) Homophone
(4) Homonym
(5) Shape analogy
(6) Dimension of Colleen
(7) Root
(8) Homographic Equivalents

III. Comparative Question

Note: Attempt the questions in all Question No. 1 is compulsory.

Maximum Marks: 40

Time: Three Hours

Course: 212
Apparel Designing and Sectioning
Hom SCIENCE
UNIT-I (Fruits-1)

1. Explain the different types of fruits and their uses in relation to health.
2. Discuss the nutritional value of different fruits.
3. Explain the importance and benefits of including fruits in our diet.
4. Discuss the selection of fruits for consumption.
5. Which type of fruits are suitable for heavy and rainy seasons?
6. Write in detail about the various principles of design in relation to clothing.
7. Write in detail about the various principles of design in relation to clothing.

UNIT-II (Fashion-2)

8. How the use of proper shoes in dress can improve the personality of a person?
9. Write in detail about the various principles of design in relation to clothing.

UNIT-III (Textile-1)

10. Explain the meaning and importance of textile in detail.
11. Explain the various principles of design in relation to textile.
UNIT I (5 MARKS)

1. Define Motor development. Explain the major milestones of infancy and pre-school years.

UNIT II (10 MARKS)

2. Describe the milestones of emotional development in childhood. Discuss basic emotions of joy and anger.

UNIT III (10 MARKS)

3. Explain Kohlberg’s stages of moral development.
UNIT II (Section II)

5. Discuss language as a form of communication. How it begins in the ears of a newborn.

6. Explain the meaning, importance and benefits of play.

7. Describe the meaning, causes and remedies to solve the problem of bed-wetting and thumb sucking.

8. Whether socialization is necessary for the growth of the child and community? Discuss.

9. Explain any graph in 2 to 3 lines.

Comprehension Question

(x) Audiocent

(x) Property

(x) Values of play.

(II) Pre-speech communication

(III) Conceptual operation

(IV) Symbolic speech

(A) Interpretive speech

(B)蘭語]

(C) Intermediate

(III) Indoor games.

(D) Sanday

(E) Race

(II) Slalom

(II) Slalom
UNIT I (10 marks)

2. Explain different techniques of work simplification.

3. Explain the steps in facility management in detail.

UNIT II (20 marks)

6. Discuss the advantages of CRM.

Note: Attempt five questions in all. Select two questions each from Unit I and II. Question No. 6 (Unit-III) is compulsory. All questions carry equal marks.

Time: Three Hours

Maximum Marks: 40

COURSE NO. 144
FAMILY RESOURCE MANAGEMENT

1713

TOTAL PAGES: 4

ROLL NO. 1
Rechecking of the plans for their success is very
important.

(a) Identifies what faults are present in the plan.
(b) Identifies time of failure.

6. Write short notes on the following:

7. Who is Consumer? Explain he becomes actual consumer

8. What is Saving? Explain he operation of savings in detail.

UNIT II (20-25)

5. Explain the Commodity and its various types.

4. Different types of expenditure:

(a) Necessary expenditure
(b) Expenditure and its types

4. Characteristics of Time Plan:

(a) Time Plan

9. (a) Fill in the blanks:

Composatory Question (Fill in the blanks)

UNIT III (20-25)

4. Where short notes on the following:

a. Income received in the form of interest is called:

(b) Money income is called:

(c) Income of expenditure according to income

(d) Earned income is called:

(e) Expenditure on education is called:

(f) Expenditure on food is called:

(g) Expenditure on clothing is called:

(h) Expenditure on entertainment is called:

(i) Expenditure on transportation is called:

(j) Expenditure on purchase of goods is called:

(k) Expenditure on rent is called:

(l) Expenditure on interest is called:

(m) Expenditure on payment of tax is called:

(n) Expenditure on saving is called:

(o) Expenditure on charitable work is called:

(p) Expenditure on purchase of land is called:

(q) Expenditure on purchase of new house is called:

(r) Expenditure on purchase of new automobile is called:

(s) Expenditure on purchase of new furniture is called:

(t) Expenditure on purchase of new clothes is called:

(u) Expenditure on purchase of new books is called:

(v) Expenditure on purchase of new appliances is called:

(w) Expenditure on purchase of new medicine is called:

(x) Expenditure on purchase of new art is called:

(y) Expenditure on purchase of new travel is called:

(z) Expenditure on purchase of new education is called:

(|) Expenditure on purchase of new entertainment is called:

(]) Expenditure on purchase of new clothing is called:

(^) Expenditure on purchase of new transportation is called:

(&) Expenditure on purchase of new education is called:

(*) Expenditure on purchase of new entertainment is called:

(%) Expenditure on purchase of new clothing is called:

(\) Expenditure on purchase of new transportation is called:

(\q) Expenditure on purchase of new education is called:

(\) Expenditure on purchase of new entertainment is called:

(\q) Expenditure on purchase of new clothing is called:

(\) Expenditure on purchase of new transportation is called:

(\q) Expenditure on purchase of new education is called:

(\) Expenditure on purchase of new entertainment is called:

(\q) Expenditure on purchase of new clothing is called:

(\) Expenditure on purchase of new transportation is called:

(\q) Expenditure on purchase of new education is called:

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(\q) Expenditure on purchase of new education is called:

(\) Expenditure on purchase of new entertainment is called:

(\q) Expenditure on purchase of new clothing is called:

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(\q) Expenditure on purchase of new education is called:

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(\q) Expenditure on purchase of new education is called:

(\) Expenditure on purchase of new entertainment is called:

(\q) Expenditure on purchase of new clothing is called:
L10

(1) Meaning of Programme Planning.

(2) Evaluation of Extension work in the field.

(3) How is Organization ?

(4) Principle of learning by doing in Extension Education.

(5) In which year Community Development Programme was started in India?

(6) Any one month A. V. and

(7) Difference between Leader and Panchayat.

(8) What do you mean by Extension Education ?

I. Answer the following in brief:

Compulsory Question

Note: Attempt the questions in all Question No. I is compulsory.

Time : Three Hours

Maximum Marks : 40

Course No. 215
EXTENSION EDUCATION-II
COMMUNITY DEVELOPMENT AND
GSM.M-16

1714

Total Marks : 3
9. Explain the different steps of Program Planning.

8. How a home science can be successful in the mission of

7. What qualities an Extension Education worker should possess.

6. Discuss the meaning, concepts and principles of Extension.

5. Define Development. Describe the process of development.

4. Explain any two audio-visual aids which you think the

3. How can you prepare and use Non-Projected aids? Describe

2. What are the objectives of Community Development?

UNIT-I (Obj-1)

(UVI) (UVI) (UVI) (UVI) (UVI) (UVI) (UVI) (UVI) (UVI) (UVI)
(a) Determine force and pressure and also differentiate these.
(b) Has a mass of 400 grams. Calculate its density.
(c) A rectangular block of metal, 10 cm by 5 cm by 2 cm.
(d) A new canister por keeps water colder than the older.

Compulsory Question

Select at least one question from each unit.

Course No. 216

Maximun Marks : 40

Time: Three Hours

HOME SCIENCE

GS/M.16

TOTAL PAGES: 3
How was the Indian National Congress founded? Also draw

SECTION-I (नाम-1)

Note: Attempt the questions in all sections. Wherever in case they wish to attempt
sections. However, in case they wish to attempt the map question, they may attempt any question from
the map question. They may attempt any question from

Maximum Marks: 80
Time: Three Hours

Op. (1)

History of India (1858 to 1964 A.D.)

HISTORY

1749

CSE(12.13)/M-16

Roll No.:

Total Pages: 7
SECTION-III

6. Examine the causes of the partition of India (1947).

5. Examine the revolutionary activities of Nanduwar Bhang.

4. Give an account of the rise and growth of Non-Co-operation Movement launched by Mahatma Gandhi. Why did this movement fail?

3. Who were the Revolutionary nationalists? Discuss their aims, principles, methods and activities.

2. Discuss the factors that led to the birth and growth of Indian National Movement. Why is it important?

1. Give a brief but critical account of the re-organisation of the Princely States of India.

16. Describe the economic development of India during the period of Jawaharlal Nehru's premiership.

9. Discuss the main principles of Jawaharlal Nehru's foreign policy. What do you know about the Policy of Non-Aligned.

8. On the outline map of India, show the important centres of Civil Dispositional Movement and also add an explanation note.

10. On the outline map of India, show the important centres.

SECTION-II

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SECTION V (Q. 10 - V)

II. (a) Answer any four very short answer type questions.

(10) Land Cooee (d) Mcleod
(c) Magee
(b) Atley
(a) Chinni

(la) Who was the Prime Minister of England at the time of the Partition of India?

(b) In 1914 A.D.
(c) In 1915 A.D.
(d) In 1916 A.D.
(e) In 1917 A.D.

(lb) Which Act was passed?

(c) Anxiety
(d) Lord Webley

(lc) Who became the communal award?

(d) Lord Irwin
(e) Lord Reading

(ld) Lord Wyke

(le) Lord Jovon

(lf) Lord John Lawrence

(lg) Victor?

(lh) Where was the book, 'The Indian Struggle and the Indian National Congress' written by J.L. Nehru?

(lia) When was the Indian National Congress founded?

(lib) When was the victory of India at the time of the Partition?

(lic) Which was the first republic in the world?

(lld) How many cross cases were there?

(11) (a) Which was the first president of the Indian National Congress?

(b) Which was the first prime minister of India?

(c) Which was the first president of India?

(d) Which was the first prime minister of the Indian Republic?

(e) Which was the first president of the Indian Republic?
<table>
<thead>
<tr>
<th>Year</th>
<th>Event/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946</td>
<td>Birth of Mahatma Gandhi</td>
</tr>
<tr>
<td>1920</td>
<td>Cabinet Mission</td>
</tr>
<tr>
<td>1969</td>
<td>Chinaa-Charan</td>
</tr>
<tr>
<td>1922</td>
<td>Khilada Movement</td>
</tr>
</tbody>
</table>

(C) Make right matches between the following:
UNIT-1

(4x2=8)
(a) First In and First Out
(b) Last In First Out
(c) Swapfile
(d) Deadlock Prevention
(e) Allocation Graph Directory Structure

I. Attempt all the following:

Computers Question

All questions carry equal marks.
More questions, select anyone question from each unit.

Note: Question No. 1 is compulsory. In addition attempt four.

Paper-I

(Operating Systems)

COMPUTER SCIENCE

1756

CSM(13-14)M-16

Roll No. ..............
Total Pages: 3
UNIT III

5. Define Deadlock. Explain Banker’s Algorithm using example.

8. Discuss the following with suitable example:
   - What is Disk scheduling?
   - Explain any four disk scheduling algorithms.

UNIT IV

4. Explain the concept of virtual memory with example.

8. What is segmentation? Explain the advantages and disadvantages of segmentation.

UNIT V

8. Write its advantages and disadvantages.

6. Explain the concept of paging with suitable example.

UNIT VI

8. Consider the following set of processes that arrive at time 0, with the length of CPU burst time (in milliseconds):

<table>
<thead>
<tr>
<th>Process</th>
<th>Burst Time</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>10</td>
<td>High</td>
</tr>
<tr>
<td>P2</td>
<td>6</td>
<td>Medium</td>
</tr>
<tr>
<td>P3</td>
<td>4</td>
<td>Low</td>
</tr>
<tr>
<td>P4</td>
<td>4</td>
<td>Low</td>
</tr>
</tbody>
</table>

Given in milliseconds:

4. Consider the following single user and multi-user operating systems:

(a) Single-user and Multiuser operating system.

4. Discuss the following between the following:
UNIT-I

1. Define Array.
2. Define Control structures.
3. What is a While method?
4. What is Common statement?
5. What is the use of MessageBox in Visual Basic?
6. What is an Address control?

COMPULSORY QUESTION

All questions will carry equal marks. From each unit in addition to compulsory question No. 1, to answer the question in all, selecting one question to answer the question in all, selecting one question is required. Note: Question No. 1 is compulsory. A candidate is required to answer the question in all units.

Paper-A

COMPUTER SCIENCE

CSM13-14/M-16

Roll No. : 2

Maximum Marks : 25
Time : Three Hours

UNIT-II

1. What is the different types of Loop in Visual Basic.

UNIT-III

1. Explain the different types of expressions available in Visual Basic.
2. What are the different data types available in Visual Basic.
3. Write a program in Visual Basic to calculate the average of five numbers using functions.
4. Write a program in Visual Basic to calculate the average of five numbers using functions.
5. Write a program in Visual Basic to calculate the average of five numbers using functions.
6. Write a program in Visual Basic to calculate the average of five numbers using functions.
7. Write a program in Visual Basic to calculate the average of five numbers using functions.
8. Write a program in Visual Basic to calculate the average of five numbers using functions.
9. Write a program in Visual Basic to calculate the average of five numbers using functions.
Name the important compounds of lanthanides in which is more basic, and why?

Give any three applications of lanthanides.

Write the number of unpaired electrons in ground state for each of the following ions: Ce³⁺, Dy⁺⁺, Yb⁺⁺.

Calculate the number of unpaired electrons in ground state for each of the following ions: Ce³⁺, Dy⁺⁺, Yb⁺⁺.

Explain.

Lanthanides have poor tendency to form complexes.

SECTION A

I. (a) Lanthanides have poor tendency to form complexes.

Note: Attempt five questions in all, selecting at least two questions from each section.

Maximum Marks: 22

Time: Three Hours

OPR (1)

Paper-XI (CH-204)

Inorganic Chemistry

CHEMISTRY

1763

68/M/11-15/W-16

Total Pages: 3

Roll No. : ..........................
1/8
Precipitates?
What are the precautions required during washing of precipitate?
(4) What do you mean by fractional precipitation?
(5) Explain the theory of fractional precipitation.

4/1
Reactions
Addition of $\text{NH}_4\text{CO}_3$ in the detection of $\text{Ag}^+$ group
(4) Why do we add $\text{NH}_4\text{Cl}$ and $\text{NH}_3\text{OH}$ before the phosphate solution containing $\text{HNO}_3$?
(5) Ammonium molybdate is added to solution.
(6) Ammonium molybdate reacts with $\text{K}_2\text{Fe(CN)}_6$.
(7) What happens when
(8) Substitue $\text{SO}_4^2-$?
(9) How will you test carbonate $\text{CO}_3^2-$ in presence of

2 7. (a) How will you test carbonate $\text{CO}_3^2-$ in presence of

2 6. (a) How will you detect the following ions when present

2 5. (a) Discuss the theory of Double Bond Test.

SECTION-B
Lab hazards
(c) Why do activities show higher oxidation states than
(4) When are Nucleus ends give preparation of Phosphorus.
(2) Transition elements differ from
(4) In which aspects do f-block elements differ from
(5) Forming complexes with $\text{C}_2\text{H}_2$-bonding headlines.
(6) Explain the reasons why activities are capable of
(7) Discuss the magnetic properties of activities ion.
(8) The atomic elements are converted.

3. (a) The electronic configuration and position of most of
(b) Justify that $T = 0$ for Carnot cycle.

2.5 compounds at any desired temperature.

2.5 determination of absolute entropies of chemical

2. (a) How Third Law of Thermodynamics helps in the

2 efficiency 30%.

(b) What percent $T$ is of $T^*$ for a heat engine having

3

3. (a) Show that for an irreversible process

SECTION 1

Note: Attempt five questions in all, selecting at least two questions

Maximum Marks: 26
Time: Three Hours

THEORY

Paper XII (CH-205)
Physical Chemistry

CHEMISTRY

1764

GSM (11-15) M-16

Total Pages: 3
3 Explain reasons on which it depends. Potential? What is hydrogen over voltage? Briefly what do you understand by over voltage of over

\[ E_{\text{cell}} = E_{\text{cell}^+} - E_{\text{cell}^-} \]

Given that \[ E_{\text{cell}^+} = 0.25 \text{V} \]

made of Nickel metal?

6. (a) Can a solution of \( \text{IM-CuSO}_4 \) be stored in a vessel

(b) Describe Nernst equation for measuring E.M.F. of a cell.

(c) Electrocatalytic cell

2. (a) Give difference between the Electrochemical cell and

SECTION II

2

and "Work Function" Why do you understand by the term "Free Energy?"

3. (a) Process in terms of various state functions.

"Fourier's criterion of feasibility or spontaneity of a

\[ \frac{V^2}{nRT} = \ln \frac{\varphi^+}{\varphi^-} \]

5. Where \( V \) and \( AH \) have usual meanings.

\[ \Delta G = \frac{\Delta F}{(\Delta G) \varphi} + \Delta V = \Delta G \]

Gibbs-Helmholtz equation

3. Describe the following relationships:
1. (d) How does hydrogen bonding influence the IR spectrum of some organic compounds?

1. (e) How many vibrational modes are there in ammonia molecule? Calculate.

1. (f) Given $\nu = 6.2 \times 10^3$ cm$^{-1}$ of $\text{H}_2\text{C} = \text{H}_2$ single bond. Calculate the wave number for the stretching vibration.

1. (g) Calculate the type of vibrations present in nitrogen and higher molecules.

UNIT I

from each unit. All questions carry equal marks.

Note: Attempt five questions in all. Select at least two questions.

Maximum Marks : 27

Time : Three Hours

Paper-III (CH-206)
Organic Chemistry (Theory)

CHEMISTRY

GMN(11-15)/M-16

Total Pages : 4
UNIT II

1. Reaction of Aldehyde/Ketone to Ammonia derivatives:
   (d) Write the reaction and mechanism of the following:
   \[ \text{CHO} + \text{NH}_3 \rightarrow \text{CH}_2 = \text{NH} \text{(urea)} \]
1. The maximum marks are 40.

Time: Three Hours

Paper II
Punjabi (Comprehensive)
CSMU-15/M-16

1768

Roll No............................
Total Pages: 5
(01=01×1)

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+ (١)
+ (٢)
+ (١)
+ (١)
+ (٢)
+ (٢)
+ (١)
+ (١)
+ (١)
+ (١)

(٠)
1. (a) Calculate the median from the data:

<table>
<thead>
<tr>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
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<td>4</td>
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<td>4</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

No. of Students

<table>
<thead>
<tr>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
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<tr>
<td>2</td>
</tr>
</tbody>
</table>

Note: Attempt five questions in all, selecting at least one from each Unit.

Units

Unit I

1. Calculate the median from the data.

2. Define Kurosins.

3. Define Probability.

4. Define Simple Graph and Planar Graph.

5. Find $n$ and $d$.

6. The Mean and SD of a binomial distribution are $a$.

7. The Mean and Variance of a Poisson distribution are $b$.

8. Fill in the following data:

<table>
<thead>
<tr>
<th>$X$</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$f$</td>
<td>28</td>
<td>62</td>
<td>46</td>
<td>10</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

(a) The Mean and Variance of a Poisson distribution are $a$.

(b) The Mean and SD of a binomial distribution are $b$.

(c) The Value of $a$ and $d$.

(d) The Value of $a$ and $b$.

(e) The Value of $a$ and $c$.

(f) The Value of $a$ and $d$.

(g) The Value of $a$ and $e$.

(h) The Value of $a$ and $f$.

(i) The Value of $a$ and $g$.

(j) The Value of $a$ and $h$.

(k) The Value of $a$ and $i$.

(l) The Value of $a$ and $j$.
(b) Prove that a tree with $n$ vertices has $n-1$ edges.

Let $X$ be a continuous random variable with

\[ f(x) = \begin{cases} \frac{1}{2}x & 0 < x < 1 \\ 0 & \text{otherwise} \end{cases} \]

where $f(x)$ is the density function.

Find the value of $\lambda$ and use it to find the integral of $f(x)$. Then, find the variance of $X$.

Show that the distribution is symmetric and play.
Unit I

2. Write the uses of Transformer.

1. (d) Why do we need three R-C networks for a phase?

1. (e) Why do we need any feedback?

1. (f) Write the advantages of negative feedback.

1. (g) Define input offset voltage and input offset current.

By selecting only one question from each unit, No. 1 is compulsory. Attempt remaining three questions. Carry equal marks. Attempt five questions in all. 0.

Note: There are nine questions in this paper. All questions carry equal marks. Maximum Marks: 40.

B.E.B.T. 402
APPLICATIONS
ELECTRONIC CIRCUITS AND
B.E.B.T. M-16
1236
Roll No. 3
Total Pages: 03
8. Explain the expression for oscillations and the condition for sustained oscillations. Also find the expression for the frequency of oscillation. Discuss its operation. Also find the expression for the frequency of oscillation of a practical circuit. Also explain its operation.

Unit II

4. Design an amplifier using IC 555 and controlled emitter follower. Explain the construction and working of silicon.

Unit I

8. Explain the expression for the frequency of oscillation of a practical oscillator and explain its working. Also find the expression for the frequency of oscillation.

Unit III

4. Explain the effect of negative feedback on input resistance of an amplifier. Describe feedback topologies. Find the expression of transfer function of voltage feedback topologies.

5. Draw and explain a practical circuit for voltage feedback topologies.

4. Draw and explain a practical circuit for voltage feedback topologies.
8. Explain the various methods in which Hyper-Optic cable can be used.

9. How is a microwave signal transmitted over a Hyper-Optic cable?

10. Discuss the various patterns of electric and magnetic fields which are seen when a microwave signal is launched into a wave guide.

Note: Attempt Five questions in all. Select at least one from each Unit.

Maximum Marks: 40

Time: Three Hours

B.S.T.-403

TELECOMMUNICATION II

B.S.T./M-16

12137

ROLL NO. 07

TOTAL PAGES: 02

UNIT I

Discuss the various methods in which Hyper-Optic cable can be used.

Discuss the various patterns of electric and magnetic fields which are seen when a microwave signal is launched into a wave guide.

Discuss the various methods in which Hyper-Optic cable can be used.

Discuss the various patterns of electric and magnetic fields which are seen when a microwave signal is launched into a wave guide.

UNIT II

Discuss the various methods in which Hyper-Optic cable can be used.

Discuss the various patterns of electric and magnetic fields which are seen when a microwave signal is launched into a wave guide.

Discuss the various methods in which Hyper-Optic cable can be used.

Discuss the various patterns of electric and magnetic fields which are seen when a microwave signal is launched into a wave guide.
PTO

8086 to access directly:

1. How many memory does this address lines allow
2. How many address lines does 8086 have and how
3. Obtain the Command word in 808R mode to set PC

(a) HRO and HLD
(b) Explain the following Control Signal:

Top address of Stack
Stack Pointer contains 843H, what is the Physical
If the Stack Segment Register contains 3000H and
Port where Port C
Port-B as Output port and Port-C
and Port-A as Input port

Note: Attempt 5 questions in all. Q. No. 1 is compulsory.

Maximum Marks: 40

[Time: Three Hours]

BIST 404

PROGRAMMING-II

MICROPROCESSOR ARCHITECTURE AND

BIST/M-16

12138

Roll No. 03

Total Pages: 03
IV.

(b) Explain Program development tools of assembly Directiva in 8086. 

(c) Explain the purpose of Ends Directiva and Assume with examples. 

V. 

(d) Explain Conditional and Unconditional Jumps in 8086 with examples. 

VI.

(a) Describe the difference between instruction MOV AX,1234H and MOVE AX,1234H. 

(c) Describe the function of 8086 GPR. How does the processor use them? 

VI. 

(b) Describe the function of 8086 GPR. How does the processor use them? 

VII.

(a) Explain the Interfacing of 8-Bit ADC with 8085. 

(c) Explain BSR mode in detail. 

VIII.

(a) Draw and explain block diagram of 8255 in detail. 

(b) Draw and explain the internal Architecture of 8086 in detail. 

(c) Function of its blocks in detail.
Section A

What are the various file manipulation?

What is the goal of protection?

What is the purpose of segmentation?

Explain Hardware Support for segmentation.

Explain Random Page Replacement Strategy.

Complementary Questions

Note: Attempt five questions in all selecting one question.

Reappear: 45
Maximum Marks: 75
Time: Three Hours
Regular: 40

B.S.T.T. 405
OPERATING SYSTEM II
B.S.T.T.M. 16
12139
Roll No. ____________________________
Total Pages: 03
methods for processing data.

Section D

7. (a) Explain the concept of cryptography and its various

Section C

6. (a) Explain the difference between Linear and Non-linear

Section B

5. (a) Explain the concept of Virtual Memory

Section A

4. (a) Explain the concept of Virtual Memory

3. Write notes on the following: authentication

Example:

Which are system threads? Explain with suitable

Which is a cyclic directory structure?

Which are the different types of the file?

Which is the control block? Also write access control

used (LRU) page replacement strategy.

Which is First in First out (FIFO) and Least recently

What is demand paging? Explain in

What is thrashing and its causes?

What is the concept of data security and

What is the concept of cryptography and its various
Pu. O. 3.05-12140

Q. 4.4 Explain MACRO expansion. Explain how a macro directive can be written.

Q. 4.5 Write different ways in which a source file

UNIT 1

1. (a) Write a program segment to transfer an entire 1000 elements of an integer array to a function

(b) Write a program segment to transfer an entire one-dimensional array of integer type data to a function

(c) Write a program segment to transfer an entire one-dimensional array of integer type data to a function

(d) Write a program segment to transfer an entire one-dimensional array of integer type data to a function

(e) Explain automatic storage scope and the lifetime

1. Compulsory Questions

2. carry equal marks

Note: Attempt five questions in all. Selecting one question from each unit. No. 1 is compulsory. All questions

Maximum Marks: 40

B.E./B.Tech.

COMPUTER PROGRAMMING IN C-II

B.E./B.Tech.

Total Pages: 03
<table>
<thead>
<tr>
<th>Q.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4</td>
<td>Differentiate between union and array.</td>
</tr>
<tr>
<td>4.4</td>
<td>Write a program in C-language to create a file, open it, read some records from it, in text mode, and add some records to it.</td>
</tr>
</tbody>
</table>
| 4.4 | What is an external, static, and local variable? Explain each.
| 4.4 | When are compound data structures used? Why are they used? |
| 4.4 | What is a character string literal constant? How is it written and stored in memory?
| 2.3.3 | Write notes on the following:

**Unit III**

<table>
<thead>
<tr>
<th>Q.</th>
<th>Question</th>
</tr>
</thead>
</table>
| 5.4 | Integer variables x and y using call by reference and return.
| 5.4 | Write a program in C-language to interchange the significance of integer variables x and y.
| 5.4 | Local variable and global variable.
| 5.4 | Call by value and call by reference. |

**Unit II**

<table>
<thead>
<tr>
<th>Q.</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4</td>
<td>What is a given string word in a given string.</td>
</tr>
<tr>
<td>4.4</td>
<td>Write a program in C-language to find the largest number written and stored in memory.</td>
</tr>
</tbody>
</table>
| 4.4 | When a program in C-language has been compiled, how is the variable stored?
OR

Then all smiles stopped together.

Which is the same smile? This geese, I have commands;
When I passed her, but who passed without

Oh, she smiled no doubt.

As she to breathe were life;
To rust unhurtful, not to shine in use;
How dull it is to pause, to make an end.

OR

No certainty, nor peace, nor help for pain:
Hail real not, neither joy, nor love, nor light;
So various, so beautiful, so new;
To live before us like a land of dreams,
To one another, for the world's which seems

Ah, love, let us be true

I. Explain with reference to the context:

PART A

Note: Attempt all questions as directed.

Maximum Marks: 80

Time: Three Hours

PAPER-VIII

Literature in English: 1830-1900

ENGLISH
PART-A

2. Discuss in an incisive manner "Why is a European poet of the Victorian era?

3. How far is it justified to describe Tennyson as the


Note: Attempt any two of the given three questions: (2x4=8)

PART-B

Still from one sorrow to another known
And make personal man.

We only tell what is the last of things.
All things have rest: why should we tell above,
While all things else have rest from weariness?
And utterly consumed with sharp distress.
Why are we weighed down with heaviness?

OR

Dish-walk on earth unheeded as before so!
Self-scorched, self-scammed, self-honoured, self-scourge,
And thou, who dish the stars and sunbeams know,
Ty these and turn them with sufficiently impressed
To give thy soul its bear.

This prescience, thou, forsooth, wouldst pain all that

5. Whence are the main themes and elements of the Victorian poetry?

6. Describe the aims and achievements of the Pre-Raphaelites

 movement.

OR

Write a note on pessimism in Victorian Poetry.

Note: Select any one out of (2x4=8)

OR

What are the main trends and features of the Victorian poetry?
What is the central theme of "The Mayor of Casterbridge" and how is it developed?

Discuss "The Mayor of Casterbridge" as a novel.

Discuss Dickens' attitude towards the French Revolution with special reference to "A Tale of Two Cities".

Write a critical note on the plot construction of "A Tale of Two Cities".

What role does Dr. Manette play in "A Tale of Two Cities"?

Character-sketch of Charles Darnay in "A Tale of Two Cities".

The theme of "The Mayor of Casterbridge".

Character-sketch of Donald Farfrae in "The Mayor of Casterbridge".

Write short notes in about 200 words each on any three of the following literary works prescribed for non-detached study:

1. Henry James: The Portrait of a Lady
2. Oscar Wilde: The Picture of Dorian Gray
3. Emily Bronte: Wuthering Heights
4. W. H. Auden: Anthem for Doomed Youth
5. Robert Browning:

Note: All questions are compulsory.

Maximum Marks: 80

Roll No.

Total Pages: 2
2. Fill in the blanks with suitable words. Do any nine.

  (a) Come by.
  (b) Let in.
  (c) Keep on.
  (d) Do without.
  (e) Bring forth.
  (f) Make up for.
  (g) Let down.
  (h) Keep in.
  (i) Come up with.

3. (a) Get a weight.
   (b) Get a corporate.
   (c) Get a manager.
   (d) Get a president.
   (e) Get a national.
   (f) Get a president.

4. (a) Get a weight.
   (b) Get a corporate.
   (c) Get a manager.
   (d) Get a president.
   (e) Get a national.
   (f) Get a president.

5. (a) Get a weight.
   (b) Get a corporate.
   (c) Get a manager.
   (d) Get a president.
   (e) Get a national.
   (f) Get a president.


7. Get a corporate.

8. Get a manager.

9. Get a president.

10. Get a national.

11. Get a president.

Note: All questions are compulsory.

Maximum Marks: 80

Time: Three Hours

Paper-X

(English and Corresponding English Literature)

ENGLISH

BHM/M-16

H.P.

ROLL NO. 6

TOTAL PAGES: 6
UNIT-I

1. Discuss Hegel's Idealism. 

UNIT-II

2. Critically examine Marx's theory of historical materialism. 

UNIT-III

3. Examine Lenin's views on imperialism.
(c) Who led the Russian Revolution?

- Lenin
- Stalin
- Trotsky
- (stall)

(4) Hegel was born in

- England
- Germany
- Russia
- India

2x3=16

8. Discuss critically the idea of Libertarianism of Robert Nozick.

2x3=16


2x3=16

6. Examine Laski's views on State.

2x3=16


2x3=16

4. Discuss the main ideas of Mao-Tse-Tung.

2x3=16
When did Robert Nozick born?

Who advocated "Communism System?"

The book "A Theory of Justice"

Chinese Movement begin in

When did Greater Leap Forward Movement begin in
6. Highlight the DR. B.R. Ambedkar's contribution to Indian

5. Discuss Nenur's views about Democratic Socialism.

4. Describe the political views of M.N. Roy.

3. What is meant by Sarvepalli? Discuss Chandhu's views

2. Examine the contribution of Dr. Rabindranath Tagore to

1. Discuss the important ideas of J.P. Narayan.

Note: Attempt any five questions. All questions carry equal marks.

Time: Three hours

Maximum Marks: 80

Paper-II
(Indian Political Thinkers-II)

POLITICAL SCIENCE

16118

Total Pages: 5

ROLL No. ..................................
7. What do you know about ‘Azad Hind Fauj’? Discuss.

8. Examine the role of Bhagat Singh in Indian Freedom Movement.

9. Objective type questions.

(i) J.P. Narayan is also known as
(a) Baba
(b) Lokmanya
(c) Loknayak
(d) Deshbandhu.

(ii) ‘Wheel of History’ is written by
(a) Nehru
(b) Lohia
(c) Gandhi
(d) None of these.

(iii) Who was the Political Mentor of Gandhiji?
(a) Naoroji
(b) Gokhale
(c) Tilak
(d) None of these.

(iv) Which city was the main centre of M.N. Ray’s Political Activities?
(a) Paris
(b) Mexico City
(c) Berlin
(d) London.
(a) Ambedkar
(b) Nehru
(c) T. T. Krishnamacharya
(d) Ram Manohar Lohia

Who was the Chairman of the Planning Commission of India?

(a) Ram Manohar Lohia
(b) T. T. Krishnamacharya
(c) V. P. Singh
(d) None of these

The concept of Praneshch, is associated with:

(a) Jinnah
(b) Nehru
(c) T. T. Krishnamacharya
(d) Ram Manohar Lohia

Who is the author of the book "The Unfinished novel of Indian Independence"?

(a) Dhritiman Chatterjee
(b) Chandidas Mitra
(c) Bhopal Chandra Dutt
(d) None of these
UNIT-I (Part-I)

1. What is Indo-US Nuclear Agreement? How it has affected Indo-Russia Economic Relations.
   2. Critically examine Indo-Russia Economic Relations.
   3. What is India's role in Non-Aggression Movement in Post Cold War Period?
   4. Describe India's bilateral relations with South Asian countries.

UNIT-II (Part-II)

   2. Critically examine Indo-Russia Economic Relations.
   3. What is India's role in Non-Aggression Movement in Post Cold War Period?
   4. Describe India's bilateral relations with South Asian countries.

Note: Attempt five questions in all. Select one question each from all parts.
UNIT-IA (1971-1973)

2. How many members are in Nuclear Suppliers Groups?

3. When SFIA was constituted?

4. Objective type questions.

5. With whom the security dialogue or the dialogue on security matters?

6. What is the contribution of India in process of disarmament?

7. Why is change of India's foreign policy towards his neighborhood in Post Cold war period?

8. What are the economic challenges for India's foreign policy?

9. What is the change of India's foreign policy towards his neighborhood in Post Cold war period?
(5) All the above.
(6) End of Cold War
(7) To establish a new zone
(8) Peaceful co-existence
(9) The basis of UN Charter is

(10) A
(11) B
(12) C
(13) D
(14) E
(15) F

(16) A
(17) B
(18) C
(19) D
(20) E

(21) F
(22) G
(23) H
(24) I
(25) J

(26) K
(27) L
(28) M
(29) N
(30) O

(31) P
(32) Q
(33) R
(34) S
(35) T

(36) U
(37) V
(38) W
(39) X
(40) Y
(41) Z

(42) A
(43) B
(44) C
(45) D
(46) E

(47) F
(48) G
(49) H
(50) I
(51) J

(52) K
(53) L
(54) M
(55) N
(56) O

(57) P
(58) Q
(59) R
(60) S
(61) T

(62) U
(63) V
(64) W
(65) X
(66) Y
(67) Z

(68) A
(69) B
(70) C
(71) D
(72) E

(73) F
(74) G
(75) H
(76) I
(77) J

(78) K
(79) L
(80) M
(81) N
(82) O

(83) P
(84) Q
(85) R
(86) S
(87) T

(88) U
(89) V
(90) W
(91) X
(92) Y
(93) Z

(94) A
(95) B
(96) C
(97) D
(98) E

(99) F
(100) G
(101) H
(102) I
(103) J

(104) K
(105) L
(106) M
(107) N
(108) O

(109) P
(110) Q
(111) R
(112) S
(113) T

(114) U
(115) V
(116) W
(117) X
(118) Y
(119) Z

Which of the following is the reason of Non-Agreement?
Basic Computer Education

Paper - Level I

COMPUTER AWARENESS

B.A.E / A-16

Page 16
10. Write more on:

- Discuss how to send e-mail to multiple users.
- Explain any two browsers.

9. Explain Internet and its applications in education.

8. Discuss use of labels in Word.

7. Explain Microsoft Word:
   - Spelling Checker
   - Text Re placements
   - Clip art
   - Use of table

6. Explain using MS-Word:
   - Insert Table
   - Insert Picture
   - Insert Hyperlink
   - Insert Chart

(a) Macros in Word
(b) Storage Devices.