1. Transcribe any eight words out of the given twelve:

people, wood, famous, able, shadow, situation, field, destiny, prophet, human, become, cycle.

2. Answer any four questions in about 30 words each:

(a) What do scriptures say about the origin of the universe?
(b) How do symbols like Ganga influence people?
(c) How can we realise the pain and sufferings of the mate? ("Wounded Plants").
(d) How can one achieve excellence in life? ("Great Books: Born Out of Great Minds").
(e) "Language and National Identity".

Note: Attempt all questions.

Exam Code: FD-101
Maximum Marks: 80

Time: Three Hours

Total Pages: 5
An honest person always tells the truth.

I believe in the power of dreams.

The earth is round, not flat.

Round the sun (move)

6. (a) Fill in the blanks with suitable forms of verbs given in the brackets (any tense).

(b) Decide (iii) Knowledge

(c) Make sentences with the following words (any two):

7. (a) Write synonyms of the following (any two):

(b) Write antonyms of the following (any two):

8. (a) Make a sentence of your own.

(b) How do cities influence their citizens?

(c) Individual identity:

(d) Why is the first element that makes up the identity an essential part?

9. (a) Name the lesson from which the passage has been taken.

(b) Explain the term inclusion. Why is it necessary?

10. Answer any five questions in about 100 words each:

11. What are the principal elements that go to make up the character he was developing all through childhood?

There are three principal elements that go to make up the character.
1. Do as directed (any twelve) :
   (i) I ran fast, I was late.
   (ii) She remained at home.
   (iii) We shall go for a walk when it rains.
   (iv) The basketball match will start at 2 p.m.
   (v) The baby (waken) last night.
   (vi) The sound of their conversation (changeable).
   (vii) The town (became) a busy place.

2. Fill in the blanks with suitable conjunctions :
   (a) I saw the movie before my father returned.
   (b) He left the house and went for a walk.
   (c) She remained at home because she was ill.

3. Use suitable prepositions :
   (a) I bought a book yesterday.
   (b) He worked at the factory.
   (c) She went to the library.

4. Write the following nouns in sentences :
   (a) Air Pollution
   (b) Knowledge is Power
   (c) Impact of Social Media on Youth

5. Fill up the blanks with suitable pronouns :
   (a) I cannot bring this.
   (b) You are welcome.
   (c) She must do this.

6. Fill up the blanks with suitable adjectives :
   (a) cool
   (b) good
   (c) dry
জিপাইনিনের (GPI) ত্বকের সার্বিক বিদ্যমান এবং ত্বকের মধ্যে প্রবেশ করতে পারে, যা ত্বকের পৃষ্ঠ স্বল্পমিত্র পরিবর্তন করে।

2. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স
3. জিপাইনিনের (GPI) ত্বকের সার্বিক বিদ্যমান এবং ত্বকের মধ্যে প্রবেশ করতে পারে, যা ত্বকের পৃষ্ঠ স্বল্পমিত্র পরিবর্তন করে।

4. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স

5. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স

6. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স

7. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স

8. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স

9. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স

10. মানসিক আহ্বান ও মানসিক উদরাময় সংখ্যার একত্রিত প্রথম এক্স এক্স
PUNJABI (ELECTIVE)

GSED-22

Maximum Marks: 80

Time: 3 Hours

1. (a) ...

(b) ...

(c) ...

2. ...

3. ...

4. ...

5. ...
2.
(1) 
(11)

3.
(1) 
(11)

4.
(1) 
(11)

5.
(1) 
(11)

6.
(1) 
(11)

7.
(1) 
(11)

8.
(1) 
(11)
1. Choose the correct answer from the given options. Each 
Comprehension Question 

2. On the outline map of India, show the location of 
Happiness and Cultural Area. Also write an explanatory note.

3. On the outline map of India, show the important sites of 

4. How far is correct to read the Gupta Period as the
(ii) The People of Harappa Civilization were not familiar to which animal?

(a) Bull (b) Cow (c) Horse (d) Elephant (e) Monkey

(iii) How many Shlokas are there in Ramayana?

(a) 2000 (b) 3000 (c) 10000 (d) 24000 (e) 30000

(iv) First Teerthankara of Jainism was

(a) Rishabh Dev (b) Mahavira (c) Parshwanath (d) Shantinath (e) Chandraprabha
UNIT II (1-10)

3. Give a brief account of Ancient Indian History.

2. Give a brief account of Holy and archaeological sources of Ancient Indian History.

1. What do you mean by the concept of Neolithic Age? Describe the main features of this Age.

6. Why do you understand by Aghora's Drumming? Also describe the meaning of propagation of Drums.

UNIT III (11-16)

5. Describe the Life and techniques of Gautam Buddha (16)

4. Give an account of Political, Social and Religious life of the Maurya empire was

(vii) capital of the Maurya empire was

Who was the founder of Shivalaya dynasty?

(a) Daksha (b) Kishan (c) Shikha (d) Hira

(a) Daksha (b) Kishan (c) Shikha (d) Hira

(a) Daksha (b) Kishan (c) Shikha (d) Hira
GSEB-22

INDIAN CONSTITUTION

Time : Three Hours

Opt. (i)

Maximum Marks : 80

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

1. Discuss the main features of the Preamble to the Indian Constitution.

2. Critically discuss the Fundamental Rights as given in the Indian Constitution.

3. Explain the appointment, Powers and Position of the Prime Minister of India.

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721/4850/KD/197

P.T.O.
1. Who said, "Indian Constitution is a lawyers' paradise?"

2. Discuss the election and powers of the Speaker of Lok Sabha.

3. Discuss the power of appointment, powers and position of the Governor of a State in India.

4. Critically discuss the powers of Judicial Review of Indian Supreme Court.

5. Discuss the composition and jurisdiction of the High Court.

6. Explain the main provisions of the 73rd Amendment of the Indian Constitution.

7. How many Union Territories are there in India?

8. (a) M.K. Narayanan
   (b) Arvind Kejriwal
   (c) N. Chandrababu Naidu
   (d) A.K. Antony
   (e) Ravi Shankar Prasad
   (f) Ajit Doval
   (g) Vineet Tankha
   (h) Dr. R.R. Abhijit
   (i) I.P. Patnaik
   (j) K.T. Ramaiah
   (k) K.M. Mani
   (l) P.C. Chacko
   (m) J.D. Shettar
   (n) J.R. Free
   (o) K.G. Pandit
   (p) K.M. Mani
   (q) K.T. Ramaiah
   (r) K.G. Pandit
   (s) J.R. Free
   (t) K.M. Mani
   (u) K.T. Ramaiah
   (v) K.G. Pandit
   (w) J.R. Free
   (x) K.M. Mani
   (y) K.T. Ramaiah
   (z) K.G. Pandit

9. Discuss the following who is the Deputy Chairman of (a) 10, (b) 6, (c) 8, (d) 7, (e) 10, (f) 6, (g) 8, (h) 7, (i) 10, (j) 6, (k) 8, (l) 7, (m) 10, (n) 6, (o) 8, (p) 7, (q) 10, (r) 6, (s) 8, (t) 7, (u) 10, (v) 6, (w) 8, (x) 7, (y) 10, (z) 6.

10. Discuss the following who is the Deputy Chairman of (a) 10, (b) 6, (c) 8, (d) 7, (e) 10, (f) 6, (g) 8, (h) 7, (i) 10, (j) 6, (k) 8, (l) 7, (m) 10, (n) 6, (o) 8, (p) 7, (q) 10, (r) 6, (s) 8, (t) 7, (u) 10, (v) 6, (w) 8, (x) 7, (y) 10, (z) 6.
(v) Who can remove the Judge of Supreme Court?

(a) None of the above.

(b) Prime Minister

(c) Chief Justice of India

(d) Parliament

(b) Vice President

(c) Lok Sabha Speaker

(d) home Minister

(c) President

(d) None of the above.

(c) Lok Sabha

(d) Prime Minister

(vi) Who is the Chief Justice of India at present?

(a) Deepak Mishra

(b) Sharad Arvind Bobde

(c) N.V. Ramana

(d) Ranjan Gogoi

(vii) Central Council of Ministers is responsible towards?

(a) President

(b) Prime Minister

(c) Home Minister

(d) None of the above.

(c) Date

(d) Lok Sabha
714/4350/KD/467/Tans.

1. Compulsory Question (Answer any 2)

I. Draw a supply schedule and estimate elasticity when price changes from Rs. 40 to 50 per kg.

II. Explain the law of demand.

III. Which law of economics determines apple producers ignore the following questions:

- Price is Rs. 30/kg or below.
- Price is Rs. 60/kg.
- He is not ready to supply any quantity at the Rs. 60/kg price.
- Willing to supply 200 kilograms apple at Rs. 40/kg.
- An apple producer is ready to supply 100 kilograms of apple at Rs. 40/kg.

Note: Attempt the questions in all Question No. one and two.

Maximum Marks: 80

Time: Three Hours

Paper I:

Micro Economics

CGP/D-22

714

Roli No.: 7

Total Pages: 7
2. (A) Choose the correct one:

(i) The term economics is derived from .......... Language.

(ii) French

(iii) Latin

(iv) Greek

(v) None of these

(B) Explain increase in supply. What is its cause?

(C) Distinguish between contraction of supply and decrease in supply.

(i) Explain the effect of a decrease in supply by 30 units on the equilibrium price and quantity.

(ii) In case of substitutes, the cross elasticity of demand is:

(a) Positive

(b) Negative

(c) Both (a) and (b)

(d) None of these

(iii) Price is determined by:

(a) Demand

(b) Supply

(c) Both (a) and (b)

(d) None of these

(iv) Due to decrease in price of a commodity, consumer's

(a)需求

(b) Demand

(c) Remains the same

(d) None of these

(v) Demand is equal to Mr when:

(a) TR is equal to MR

(b) TR is maximum

(c) TR is minimum

(d) None of these

(vi) Change in the price of a commodity on a 1% increase in demand

(a) TR increases

(b) TR remains the same

(c) TR decreases

(d) None of these
1. Household spending or demand
2. (a) Consumers surplus
3. (b) Socialist Economy
4. (c) Income Elasticity of Demand
5. (d) Define the following:

(a) Price
(b) Real Income
(c) Total Revenue
(d) Supply
(e) Demand
(f) Equilibrium

1. Goods (1x5)
2. Complementary
3. Substitute
4. Increase in Tax
5. Economic Limits of
Consumers surplus
6. Mrs. Mrs. Mrs.
7. Mrs. Mrs. Mrs.
8. Mrs. Mrs. Mrs.
9. Mrs. Mrs. Mrs.
10. Mrs. Mrs. Mrs.

(b) Match the following:

1. Income Consumption Curve: AR > MR
2. Pen and Ink: Decrease in
3. Increase in Tax: 1. Decrease in
4. Increase in Tax: 2. Increase in Tax
5. Economic Limits of: 3. Economic Limits of
7. Supply: 5. Supply
10. (a) Consumers surplus: 8. (a) Consumers surplus

(c) "Economic Limits of" and "Consumers surplus".
1. Explain the concept of Break-Even in profit planning.

2. Explain the Law of Diminishing Utility. Why do we assume it?

3. What do you understand by the term Consumer's Equilibrium?

4. Explain the Law of Demand. Why does the demand curve slope downwards? Are there any exceptions to it?

5. What are the causes of application of Law of Variable Proportions?


8. Write notes on the following:

   (i) Properties of Iso-cost
   (ii) Properties of Iso-quant
   (iii) Dis-economies of Scale

9. In the traditional theory of cost why is the long run average cost (LAC) curve also called envelope curve and why it is U-shaped?

10. Explain the law of equal marginal utility. Give its importance and limitations.

11. What do you understand by the term Consumer's Equilibrium?

UNIT-II (कड़क-II)

12. Discuss the problems of demand. Why does the demand curve slope downwards? Are there any exceptions to it?

13. Security and problems of choice are the basis of all economic thinking.

UNIT-I (कड़क-III)

14. Explain the concept of Break-Even in profit planning.

15. Explain the Law of Diminishing Utility. Why do we assume it?

16. Explain the Law of Diminishing Utility. Why do we assume it?
UNIT II (3 marks - I)

2. Describe the leadership and qualities of a good leader in detail.

3. What do you mean by Health? Discuss the importance of health education.

UNIT I (3 marks - II)

I. Discuss the relationship of physical education with recreation.

II. What is the significance of health education in the curriculum? From each unit I, II and IV, unit L is compulsory.

Note: Attempt five questions in all, selecting one question from each unit.

Time: Three Hours

Maximum Marks: 60
UNIT III (Physical Education)

5. Discuss the history of development of Physical Education in India before

4. Describe the concept of Yoga and its types. Write the types and functions of muscles.

3. Elaborate the effect of exercise on skeletal and muscular systems.

2. Define Physical Education.

1. Write the types of muscles.

(i) Write the function of digestive system.

(ii) Write the types of muscles.

(iii) Emphasize your yoga sense.

(iv) What is a Joint?

(v) What are synovial joints?

(vi) What is Personal hygiene?
UNIT-II (Section-II)


UNIT-I (Section-I)

2. Explain the various misconceptions regarding Physical education.


Note: Attempt any five questions, selecting one question from each unit. (Question No. 9) Unit-V is compulsory.

Maximum Marks: 60

Time: Three Hours
UNIT-III (A19-A20)

5. What do you mean by yoga? Explain the historical development of yoga in India.

6. Write the types of yoga. Write about hath yoga in brief.

7. Draw a neat and clean diagram of cell with labelling.

8. Explain the importance of anatomy and physiology in the field of physical education.

9. Write the two types of physical education.

10. Write the name of organs of respiratory system.

11. Define skeletal system.

12. What is health?

13. How can you maintain the personal hygiene of elders?

14. Write three stages of pregnancy.

15. Write the action of word 'yoga'.

16. Write the difference between anatomy and physiology.

9. (A) What is illness?

Composiary Question

UNIT-A (A1-A7)
UNIT I (काल-1)

1. Write notation of Dru Khyaal of any Raga of your syllabus.
2. Give full description of Raga Yaman and Bhupali (4+4=8)
3. Give short notes on the following:
   (a) Saptak
   (b) Thaat

4. Write short notes on the following:
   (a) Swar
   (b) Karma

Note: Attempt five questions in all, selecting at least one question from each unit. All questions carry equal marks.
UNIT III (काल्पनिक कला)

7. Write the Teentaal with ekgun and dugun Laykantes.

8. Write the life sketch and contribution towards music of Pt. V.N. Bharkhande.

6. What do you know about Swar and Nad. Write in detail.

5. Relationship between folk and classical music.

9. Write introduction and ekgun of the following Tala.

(a) Bharatl
(b) Toonat
(c) Patna
(d) Vadi.

(4-4-8)
10. Write down the full description of one of the following Talas
with Ekgun and Dugun Laykantes:

(a) Tentional.
(b) Etunial.

8

SECTION-I (विभाग-1)

1. Write down the notation of Ragahari Gati of any Raga along with two Tona.

Note: Attempt five questions in all, selecting at least one question from each Section. All questions carry equal marks.

2. Give full description of any two Ragas of the following:

(a) Althiya Biharia.
(b) Yaman.

Maximum Marks: 40

Time: Three Hours

Paper-I

721
SECTION-II (खंड-II)

3. Define any four of the following:
(a) Raga
(b) Swar
(c) Saptak
(d) Gat
(e) Naad
(f) Tora

SECTION-III (खंड-III)

4. What is Music? What do you know about the Classical, Music and Light Music?

5. What is the difference between folk music and the music of the court?

6. Write down the development of Indian Music from Vedic period to 12th century.

7. Describe the relationship between Folk music and Classical music.

8. Write the biography of Ustad Vilayat Khan emphasizing his contributions in the field of music.

9. What is the contribution of Bharat Ram, award-winner of the Master Musician?
1. What are the types of office layout? State the underlying principles for a good office layout.

2. Describe the important departments of an office.

3. What do you mean by office management? Explain the functions of an office manager.

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

Time: Three Hours

Maximum Marks: 80
Write note on the following:

4. Written Communication:
   (a) Decentralization and Centralization.

5. State the importance of office layout.

6. Difference between verbal and non-verbal communication.

7. Explain in detail the role of office manager in the organization.

8. Define Planning of office work. Explain the various types of planning of office work.

9. Explain various factors affecting selection of office site.

10. Write short note on any two:
    (a) Use of Internet in Office.
    (b) Office Memo.

2) If $A$ is a skew-symmetric matrix of order $n$, then show that its only eigenvalue is $0$. Show that $2x^n - 5x^4 + 3x^2 - 1 = 0$ has at least four roots if $A$ has only one root of the equation.

If $A$, $B$, and $C$ are square matrices of order $n$, then find $A(B + C)$.

If $A$ is a root of the equation $x^4 + 2x^2 + x + 1 = 0$, then find $A^2$.

If $A$ is a square matrix which is non-singular, then it is invertible. Show that the sum of two invertible matrices need not be invertible.

**Compulsory Question**

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

Maximum Marks: 27

Time: Three Hours

Paper-B: III

MATHEMATICS

ALGEBRA

CSE/D-22

Total Pages: 4
5. (a) Reduce the bilinear form \( xy + 2x^2 - 2y^2 \) to the canonical form. Find equations of transformations.

(b) If \( A \) is a real skew-symmetric matrix, such that \( A^2 + I = O \), show that \( A \) is orthogonal matrix of even order.

2\( \frac{1}{2} \)

3. (a) Prove that the constant term of the characteristic polynomial of a matrix \( A \) is \((-1)^n|A|\).

(b) Find \( B = 3A - 2A^2 - 3 \) in normal form for the matrix

\[
\begin{pmatrix}
3 & 2 & -1 \\
1 & 4 & 11 \\
-2 & -3 & -10
\end{pmatrix}
\]

2\( \frac{3}{4} \)

SECTION II

4. (a) For what value of \( k \) do the system of equations

\[
\begin{bmatrix}
-1 & 2 & 1 \\
3 & -1 & 2 \\
1 & 0 & 1
\end{bmatrix}
\begin{bmatrix}
x \\
y \\
z
\end{bmatrix} = \begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix}
\]

has a unique solution.

(b) Find \( A = \begin{bmatrix} 1 & -\sqrt{2} \\ \sqrt{2} & -1 \end{bmatrix} \). Prove that \( A \) is an orthogonal matrix of even order.

2\( \frac{1}{4} \)

SECTION III

5. (a) Find non-singular matrices \( P \) and \( Q \) such that the matrix \( PAQ \) is in normal form for the matrix

\[
\begin{pmatrix}
3 & 2 & -1 \\
1 & 4 & 11 \\
-2 & -3 & -10
\end{pmatrix}
\]

2\( \frac{3}{4} \)

6. (a) Diagonalize the quadratic form \( x^2 + 2xy + y^2 - x^2 + 2x + 8 = 0 \). Find rank, index, and signature of the form. Also find equations of transformations.

2\( \frac{3}{4} \)

SECTION IV

7. (a) Show that the roots of the equation \( x^3 - 12x + 8 = 0 \) are \( 4 \cos \left( \frac{2\pi}{9} \right), \ 4 \cos \left( \frac{4\pi}{9} \right), \ 4 \cos \left( \frac{8\pi}{9} \right) \).

(b) Find the equation of squared difference of the cubic

\( x^3 + 62x^2 + 74x + 2 = 0 \).

2\( \frac{1}{4} \)

8. (a) Solve the equation of squared difference of the cubic

\( x^3 + 62x^2 + 74x + 2 = 0 \).

(b) If \( \alpha, \beta, \gamma \) are the roots of the equation

\( x^3 - 4x^2 + 11x^2 - 4x - 1 = 0 \), where \( \delta \) are real numbers, show that other two roots are real if \( \delta - 4\delta - 2\delta - 3\delta \geq 0 \).

2\( \frac{1}{4} \)

P.T.O.
SECTION-I

1. (a) Prove that \(|x|\) is not derivable.
(b) Expand \(e^x\) in power of \(x\) by Maclaurin's theorem.
(c) Find the asymptotes parallel to the co-ordinate axes for the curve \(2y^2 = xy + y^2 + x - y = 0\).
(d) Evaluate \(\int_0^\pi \cos \theta d\theta\).
(e) Find the length of the loop of the curve \(x = a(\theta^2 - 1)\).

2. (a) Prove that the function \(f(x)\) defined by
\[
f(x) = \begin{cases} 
\frac{x^2 \sin 1}{x} & \text{if } x \neq 0, \\
0 & \text{if } x = 0.
\end{cases}
\]
is continuous and derivable at \(x = 0\). But its derivative is not continuous at \(x = 0\).
SECTION II

4. (a) Find the asymptotes of the curve
\( x^2 - y^2 + 3x - 3y = 0 \) and prove that the three
points of intersection of the curve and its asymptotes
lie on \( x - 3y + 6 = 0 \).

(b) Find the radius of curvature for the curve
\( \log \left( \frac{1 + x^2}{1 + y^2} \right) = \frac{1}{2} x^2 + \frac{13}{24} x^4 - \cdots \)
\( 2 \frac{1}{2} \)

5. (a) Find the co-ordinates of the centre of curvature at any
point on the ellipse \( \frac{x^2}{a^2} + \frac{y^2}{b^2} = 1 \) or \( x = a \cos \theta \).

(b) Show that the chord of curvature through the pole of
the cardioid \( r = a(1 + \cos \theta) \) is \( 4 \).

SECTION III

3. (a) State and prove Maclaurin's theorem with Lagrange's
form of remainder after \( n \) terms.

(b) If \( y = e^{\cos^2 \theta} \), show that
\( (1 - \theta)^2, = 2(2n + 1)x^2 + 1 - (2^2 + n^2)x^5 = 0 \)
\( 2 \frac{1}{4} \)

SECTION IV

6. (a) Trace the curve \( r = a(1 + \cos \theta) \).

(b) Evaluate \( \int a e^x \, dx \), where \( n \) is a positive integer.

7. (a) Show that the length of the loop of the curve
\( 3y^2 = x^4 - 6 \) is
\( 4 \)
\( 2 \frac{1}{4} \)

8. (a) Find the intrinsic equation of the parabola \( x^2 = 4ay \).

(b) Find the area included between the cycloid
\( x = a(\theta - \sin \theta), y = a(1 - \cos \theta) \) and its base.
\( 2 \frac{1}{4} \)

9. (a) Find the centroid of the semi-circular region of radius
\( r \), by Pappus theorem.

(b) Find the area of the loop of the curve \( y^2 = x(a - x) \) which revolves about
the \( x \)-axis. Find the volume of the solid so generated.
9. Reduce the equation \( \frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1 \) which pass through the point \((a \cos \alpha, b \sin \alpha, 0)\).

10. Find the equations to the generators of the hyperboloid and find the equations of the axes.

4. Find the equation to the standard form and show that it represents an ellipsoid and find the equation of the axes.

(5)

3. Write the equation of the cone through the intersection of the two given conics.

(a) Find the coordinates of the points in which the line \( \frac{x+2}{2} = \frac{y+9}{5} = \frac{z-8}{5} \) meets the sphere \( \frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1 \) by the plane \( kx + my + nz = 0 \).

(b) Write the area of the section of the conoid \( x^2 + y^2 = z \) by the plane \( kx + my + nz = 0 \).

(c) Define the director sphere of the central conoid. (1)

(d) Write the equation of the circle in which the line passes through the central conoid of the given conics.

(e) Write the area of the section of the conoid \( x^2 + y^2 = z \) by the plane \( kx + my + nz = 0 \).

Compulsory Question

I. (a) What conic does the equation \( 36x^2 + 24y^2 + 29y^2 - 72x + 126y + 81 = 0 \) represent? Also find its Centre.

(b) Find the equation of the conic through the intersection of the two given conics.

(c) Find the coordinates of the points in which the line \( \frac{x+2}{2} = \frac{y+9}{5} = \frac{z-8}{5} \) meets the sphere \( \frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1 \) by the plane \( kx + my + nz = 0 \).

(d) Write the area of the section of the conoid \( x^2 + y^2 = z \) by the plane \( kx + my + nz = 0 \).

(e) Define the director sphere of the central conoid. (1)

Note: Attempt five questions in all selecting one question from each section and the compulsory question.

Maximum Marks : 27

Time : Three Hours
SECTION I

3. Find the equation of the central section of the conoid $ax^2 + by^2 + cz^2 = c$. 

4. Show that the cone $ax^2 + by^2 = c$ has one axis of symmetry, and that the cone $ax^2 + by^2 + cz^2 = c$ has two axes of symmetry.

5. Find the limiting points of the conic axial system of

$$x^2 + y^2 = 1.$$ 

SECTION II

6. Find the equation of the tangent planes at the point $P(a, b, c)$ on the conoid $ax^2 + by^2 + cz^2 = c$.

7. Find the equation of the cylinder of revolution whose generators are parallel to the line $\frac{x}{2} = \frac{y}{3} = \frac{z}{4}$.
and grows greater as that comes home.
It looms and hemstitch after it,
Yet when the other feet do roam,
And though it in the corner sit.
To move, but go, if the other do.
This soul, the fixed foot makes no show
As still with compass it is two.
If they be two, they are two so
I never will not no man ever loved
It this be error and upon me proved,
But bursts it out open to the edge of doom.

Love alone with his bitter hours and weeks
Within his burning sight; compass come:
Within his burning sight; compass come:
Loves not Time's fool, though toys his lips and cheeks.

I feel busy arrears his sharp arrows these;
What may it be that clean in beauty placed
Here shadly, and with now worn a race;
When by and so, O moon, thou chimps the shelves;

Follow:

I. Explain with reference to the context any three of the

SECTION-A

Note: Attempt questions in Section A, B and C as per direction.
[Maximum Marks: 80]

1. Paper - II

LITERATURE IN ENGLISH (1550-1660)

31702

BDE/02-22

Roll No. ..........................................

Total Pages : 2
SECTION C

4. Discuss John Donne as a metaphysical poet. (2x4=28)

SECTION B

3. Attempt an examination of William Shakespeare as a writer of sonnets.

2. Give a critical evaluation of Philip Sidney as an Elizabethan writer.

SECTION A

When in eternal time is Time that hour groweth (3x8=24)

Not shall destroy they wander in this shade,

By chance or naughts, changing course untrimmed,

And ever far from far, a sonnet's depletion.

(d) Sometimes too hot the eye of heaven shines,
UNIT-I (Page 1 of 2)


2. Critically examine the Fundamental Duties incorporated in the Constitution of India by the 42nd amendment.

Maximum Marks : 80

Total Pages : 1
UNIT-IV (गण्ड-IV)
7. Describe the composition, powers and jurisdiction of the Supreme Court of India.

UNIT-III (गण्ड-III)
6. Describe the composition, powers and functions of the State Legislature.

UNIT-II (गण्ड-II)
5. Describe the procedure of Law-making in Indian Parliament.

UNIT-I (गण्ड-I)
4. How is the Chief Minister of state appointed? Discuss his powers, functions and position.

UNIT-V (गण्ड-V)
9. (i) What do you mean by Judicial Activism? Describe its need and justification.

Compulsory Question (3 printed lines)
(ii) Who is the author of the book ‘Parliamentary Democracy in India’?

(d) K.T. Shah
(b) D.D. Basu
(c) K.Y. Rao
(a) V.N. Shukla

(a) Sixth part.
(b) Second part
(c) Third part
(d) First part

(v) Fundamental rights have been explained in which part
(a) 200
(b) 250
(c) 390

(b) 200
(c) 250
(b) 390

(b) 305
(c) 305
(b) 305

How many articles are there in the Constitution of India?
(a) 395
(b) 395
(c) 395

If I do not want to be a slave, I should not agree to be
(a) Woodrow Wilson
(b) Abraham Lincoln
(c) Mahatma Gandhi

Whose statement is this?
(a) Jayprakash Narayan
(b) Mahatma Gandhi
(c) Jayprakash Narayan

(5) Parliamentary Democracy in India.
(vi) For how long can a person who is not a member of Parliament remain a minister?

(a) Up to 4 months
(b) Up to 6 months
(c) Up to 8 months
(d) Up to 1 year

(vii) Lok Sabha is presided by

(a) Vice President
(b) Prime Minister
(c) Speaker
(d) President

(xii) How many members does the President of India nominate in the Rajya Sabha?

(a) 1
(b) 10
(c) 15
(d) 18
(e) 20

(xv) Lok Sabha is presided by

(a) Vice President
(b) Prime Minister
(c) Speaker
(d) President
UNIT-II (Question-11)

2. Discuss the relationship between political science and history.

UNIT-I (Question-1)

1. What do you mean by political science? Discuss its nature.

Note: Attempt any five questions by selecting one question from each unit.

Maximum Marks: 80

Time: Three Hours

Paper-II

PRINCIPLES OF POLITICAL SCIENCE

31723

BPE-D-22

ROLL NO. ——–

TOTAL PAGES: 6

(16)

[Multiple Choice Questions]

(a) Relations
(b) History
(c) India
(d) India
(e) India
(f) India
(g) China
(h) China

[Short Answer Questions]

(16)

(8x2=16)

[Long Answer Questions]

(1) Name the country which is the largest producer of tea.

(2) Write a short note on the principle of separation of powers.

(3) The principle of separation of powers is associated with the principle of ________.
UNIT-IV (पांक्ति-IV)
7. What do you mean by Judiciary? Describe the main functions of Judiciary.
8. What do you mean by Pressure Groups? Discuss the methods of working of Pressure Groups.

UNIT-III (पांक्ति-III)
6. What do you mean by Social Justice? How it can be secured?

UNIT-V (पांक्ति-V)
9. Multiple Choice Questions (अंदौन विचारसंगति)
(4) Who is the author of 'Modern Political Analysis'?
(a) Aristotle (b) Socrates (c) Machiavelli (d) Plato

(i) विश्वासी क्या था?
(a) सोफिया (b) सैफुल्लाह (c) हसन (d) अजय
(iii) What is the maximum Population of the State by Plato?

(a) 20000
(b) 11000
(c) 5040
(d) 1040.

(1) ने राज्य की अधिक से अधिक जनसंख्या कितनी बढ़ाई है?

(a) 20000
(b) 11000
(c) 5040
(d) 1040.

(iv) To whom is the Principle of Legal Sovereignty Associated?

(a) Austin
(b) Machiavelli
(c) Rousseau
(d) Plato.

(न) प्राथमिकता का नित्यत निम्नलिखित किसके नाम से संबंधित है?

(a) ओस्टिन
(b) एकत्यावली
(c) रूसो
(d) प्लटो।

(v) Who among the following was the main supporter of natural rights?

(a) Locke
(b) T.H. Green
(c) Laski
(d) Easton.

(न) निम्नलिखित में से कोन-सा प्राकृतिक अधिकारों का प्रमुख समर्थक था?

(a) लॉक
(b) जी.एच. ग्रीन
(c) लास्की
(d) इस्टना।

(vi) Who is the author of the book "A Theory of Justice".

(a) John Rawls
(b) Locke
(c) Austin
(d) Hobbes.

(न) "ए थीोरी ऑफ जस्टिस" नामक पुस्तक का लेखक कौन है?

(a) जॉन रॉल्स
(b) लॉक
(c) ओस्टिन
(d) होब्स।
1. Explain the given extract with reference to the context.

2. (a) Write an essay on any one of the following topics in about 300 words:

(i) Life during Pandemic

(ii) Mobile Phones for Students: A Boon or a Bane?

(iii) The Problem of Unemployment

(iv) Crime against Women.

Note: All questions are compulsory.

Maximum Marks: 80

Total Pages: 6

Roll No. 6
3. Trace the development of the theme of transience and permanence in "Ode on a Grecian Urn.
   
   Answer the following questions in about 200 words:
   (i) Explain Alexander Pope's concept of man.
   (ii) According to the poem, 'Elegy Written in a Country Churchyard', what are the ways to pay tribute and respect to the dead?
   (iii) Answer any two of the following questions in about 100 words each:
       (a) What type of strength does the poet pray for in 'My Last Duchess'?
       (b) What are the 'Shining Lamps' in 'The Bangle Sellers'?
       (c) Why does the poet refer to the urn as 'Cold pastoral' in 'Ode on a Grecian Urn'?
   (iv) What do you think happened to the Duchess in My Last Duchess?
   (v) What are we 'out to tune' with in 'The World is Too Much with Us'?

4. Write a critical appreciation of the poem, 'When You are Old' as directed.
   (a) Attempt any fifteen items out of given twenty.
   (b) Fill in the blanks using appropriate infinitives or gerund forms of the verbs given in brackets:
   (i) Do you remember......(meet) Ramond in my office last year?
   (ii) Gagan is fond of......(travel)......(buy) the newly built house.
   (iii) She refused......(explain) the reasons behind her failure.
   (iv) They proposed......(lock) the door when you go out.
   (v) Don't forget......(punishment) if you do not wear masks.
   (vi) She went out......(the dozen)......(you)
   (vii) Eggs are sold......(the room)
   (viii) I am not happy......(your superiors)
   (ix) You will be liable......(punishment) if you don't wear masks.
2. (i) Reward.
   (ii) Uter
   (iii) Thrill
   (iv) Ly
   (v) Four

   (d) Supply synonyms for the following words (do any of any):
   (i) Finish
   (ii) Porter
   (iii) Show
   (iv) Well
   (v) Peace

   (g) Give antonyms of the following words. Do any five words:
   (i) Cheer
   (ii) Seal
   (iii) Lion
   (iv) Best

   (e) Give phonetic transcription of any five words:
   (i) Honey
   (ii) Hydropole

   (d) Define any one of the following with examples:

   (b) Identify and underline the main clause and subordinating clause in the sentences given below:
1. I. \[ \text{Time Allowed: 3 Hours} \]

Maximum Marks: 80

Hindi Complimentary

CSW/D.22

Total Pages: 4

ROLL NO. 021005 23345

1. \[ \text{6} 	imes \text{2} = \text{12} \]
I. Reading:

- (a)
- (b)
- (c)
- (d)
- (e)
- (f)
- (g)
- (h)
- (i)
- (j)

Note: All questions are related to the same topic. 
Maximum Marks: 80

Time Allowed: 3 Hours

836

68/M/D-22

ROLL NO. 1
1. दो अपने आप की तानियों को अंक दिया जाएगा।
2. पूर्णांक: 80
3. पार्श्व-पार्श्वन---
4. पूर्णांक: 80
5. पार्श्व-पार्श्वन---
6. पूर्णांक: 80
7. पार्श्व-पार्श्वन---
8. पूर्णांक: 80
9. पार्श्व-पार्श्वन---
10. पूर्णांक: 80
11. पार्श्व-पार्श्वन---
12. पूर्णांक: 80
13. पार्श्व-पार्श्वन---
14. पूर्णांक: 80
15. पार्श्व-पार्श्वन---
16. पूर्णांक: 80
17. पार्श्व-पार्श्वन---
18. पूर्णांक: 80
19. पार्श्व-पार्श्वन---
20. पूर्णांक: 80
21. पार्श्व-पार्श्वन---
22. पूर्णांक: 80
23. पार्श्व-पार्श्वन---
24. पूर्णांक: 80
25. पार्श्व-पार्श्वन---
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27. पार्श्व-पार्श्वन---
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93. पार्श्व-पार्श्वन---
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95. पार्श्व-पार्श्वन---
96. पूर्णांक: 80
97. पार्श्व-पार्श्वन---
98. पूर्णांक: 80
99. पार्श्व-पार्श्वन---
100. पूर्णांक: 80
3. ਜੋ ਦੋਵੇਂ ਕਈ ਪ੍ਰਾਪਤੀਆਂ ਲਈ ਪ੍ਰਕਾਸ਼ਣ ਲਈ ਲਗਨਾ ਮੁਸ਼ਕਲ ਹੁੰਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਹਨਾਂ ਦੀਆਂ ਪ੍ਰਤੀ ਪ੍ਰਭਾਵਕਾਰੀ ਹੋਵਨਾ ਵਾਲੇ ਕਾਰਨ ਦੇ ਨਾਲ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਨਾ ਹੋਵੇਗਾ।

4. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।

5. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।

6. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।

7. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।

8. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।

9. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।

10. ਜਦੋਂ ਕੋਈ ਦੀਪ ਲਗਤਾ ਪੰਛੀ ਦੀਪ ਦੇ ਤੌਰ ਤੇ ਨਾਲ ਨਾਲ ਵੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ, ਤਾਂ ਉਸ ਦੇ ਨਾਲ ਸਾਫ ਮਿਲਨਾ ਵਿੱਚ ਕਾਫ਼ੀ ਸਾਫ ਮਿਲਦਾ ਹੋਵੇਗਾ।
9. Write a short note on "Abortion".

10. Discuss the concept of "Humanism".

Answer:

(i) Adoption
(ii) Idealism
(iii) Brochure
(iv) Concept
(v) Humanism
(vi) Figure of Speech
(vii) Director
(viii) Climax

8. Write a short note on "Atheism".

Answer:

(i) Figure of Speech
(ii) Director
(iii) Climax
(iv) Biography
(v) Concept
(vi) Essay
(vii) Humanism
(viii) Idealism
(iii) विज्ञापन गैर अतिरिक्त मूल्य में न होंगे।

(iv) अंतर्गत दिया गया है।

(v) अन्तर्गत दिया गया है।

(vi) अन्तर्गत दिया गया है।

(vii) अन्तर्गत दिया गया है।

(viii) अन्तर्गत दिया गया है।

(ix) अन्तर्गत दिया गया है।

(x) अन्तर्गत दिया गया है।

(xi) अन्तर्गत दिया गया है।

(xii) अन्तर्गत दिया गया है।

(xiii) अन्तर्गत दिया गया है।

(xiv) अन्तर्गत दिया गया है।

(xv) अन्तर्गत दिया गया है।

(xvi) अन्तर्गत दिया गया है।

(xvii) अन्तर्गत दिया गया है।

(xviii) अन्तर्गत दिया गया है।

(xix) अन्तर्गत दिया गया है।

(xx) अन्तर्गत दिया गया है।

(XXI) अन्तर्गत दिया गया है।

(XXII) अन्तर्गत दिया गया है।

(XXIII) अन्तर्गत दिया गया है।

(XXIV) अन्तर्गत दिया गया है।

(XXV) अन्तर्गत दिया गया है।

(XXVI) अन्तर्गत दिया गया है।

(XXVII) अन्तर्गत दिया गया है।

(XXVIII) अन्तर्गत दिया गया है।

(XXIX) अन्तर्गत दिया गया है।

(XXX) अन्तर्गत दिया गया है।

(XXXI) अन्तर्गत दिया गया है।

(XXXII) अन्तर्गत दिया गया है।

(XXXIII) अन्तर्गत दिया गया है।

(XXXIV) अन्तर्गत दिया गया है।

(XXXV) अन्तर्गत दिया गया है।

(XXXVI) अन्तर्गत दिया गया है।

(XXXVII) अन्तर्गत दिया गया है।

(XXXVIII) अन्तर्गत दिया गया है।

(XXXIX) अन्तर्गत दिया गया है।

(XXXX) अन्तर्गत दिया गया है।

(XXXXI) अन्तर्गत दिया गया है।

(XXXXII) अन्तर्गत दिया गया है।

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(XXXXVI) अन्तर्गत दिया गया है।

(XXXXVII) अन्तर्गत दिया गया है।

(XXXXVIII) अन्तर्गत दिया गया है।

(XXXXIX) अन्तर्गत दिया गया है।

(XXXXX) अन्तर्गत दिया गया है।
8=2×4
1. (a)
2. (b)
3. (c)
4. (d)
5. (e)
6. (f)
7. (g)
8. (h)
9. (i)
10. (j)
11. (k)
12. (l)
13. (m)
14. (n)
15. (o)
16. (p)
17. (q)
18. (r)
19. (s)
20. (t)
21. (u)
22. (v)
23. (w)
24. (x)
25. (y)
26. (z)
Compulsory Question (5 marks)

Choose the correct answer from the given options.

1. Political History of India (1526-1857 AD)

Option (1)

Outline Map of India
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Lord Comwallis</td>
<td>(d)</td>
</tr>
<tr>
<td>(b) Lord Dalhousie</td>
<td>(c)</td>
</tr>
<tr>
<td>(c) Lord Dalhousie</td>
<td>(b)</td>
</tr>
<tr>
<td>Which Governor General introduced &quot;The Doctrine of Lapse&quot;?</td>
<td>(a) Lord Wellesly</td>
</tr>
<tr>
<td>Who introduced the Subsidiary Allience System in India?</td>
<td>(a) Lord Lyton</td>
</tr>
<tr>
<td>(b) Lord Lyton</td>
<td>(c)</td>
</tr>
<tr>
<td>Which was the battle of Plasat Fort?</td>
<td>(a) July 1764</td>
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<tr>
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<tr>
<td>When was the battle of Plasat Fort?</td>
<td>(a) July 1764</td>
</tr>
<tr>
<td>Which was the childhood name of Sher Shah</td>
<td>(a) Sup</td>
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<tr>
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<td>(a) Sup</td>
</tr>
</tbody>
</table>
84/1/10/1050

UNIT-IV (MAP) (खूब-IV) (खूब-IV)

(b) What do you mean by subsidiary alliance? Explain its role in the expansion of British Rule in India.

UNIT-III (खूब-III)

(c) When was the Partition Annexation with the British

UNIT-II (खूब-II)

(d) Why was the Partition Annexation with the British
84

INDIAN POLITICAL THINKERS

GSW/D-2

Total Pages: 4

ROLL NO.
5. Critically examine Gokhale's liberalism.

6. Describe the Anubandh Gosek Views on Nationalism.

7. Describe the Social views of Lala Lajpat Rai.

8. Discuss the main contribution of Tilak to the Political thoughts.

9. Objective type questions:

(i) Who is called Martin Luther of India?
(a) OP (b) DAV (c) Dr. B.R. Ambedkar (d) Dayanand Saraswati

(ii) When was Brahmo Samaj founded on?
(a) 1823 (b) 1827 (c) 1828 (d) 1829

(iii) When was Gokhale become the head of Indian National Congress?
(a) 1905 A.D. (b) 1907 A.D. (c) 1916 A.D. (d) 1929 A.D.

(iv) What was the name of mother of Swami Vivekananda?
(a) Smt. Durga Devi (b) Smt. Kasarba Bai Devi (c) Smt. Bhurumshwari Devi (d) Smt. Amnie Basami.

(v) When was 16th December: 1833 A.D.?
(a) 31st December: 1833 A.D. (b) 4th September: 1833 A.D. (c) 1st September: 1833 A.D. (d) 3rd September: 1833 A.D.
the above example.
(ii) Define Intermediate goods. Find out these goods in

(i) How would you calculate Gross value added?

Following questions:
On the basis of the above case study, answer the

1. A farmer produces cotton worth Rs 1,500 and sells it to

Compulsory Question (40 marks)

Note: Attempt five questions in all. Question Nos. 1 and

Maximum Marks: 80

Time Allowed: 3 Hours

MACRO ECONOMICS-I

GSW/D-22
2. (a) Choose the Correct alternative:

(i) As per the classical theory, production is a function of:
(a) Level of employment
(b) Price
(c) Labour
(d) Both (a) and (c).

(ii) The shape of Consumption function may be:
(a) Linear
(b) Non-linear
(c) Linear Starting with peak of origin
(d) All of these.

(iii) Induced investment and level of income is:
(a) Indirectly related
(b) Directly related
(c) Neither
(d) None of these.

(iv) How is the problem in question? (iii) be avoided?
(a) By imposing different tax rates on different types of income.
(b) By imposing a uniform tax rate on all types of income.
(c) By imposing a progressive tax rate on higher incomes.
(d) By adjusting the tax rates according to the economic conditions.

(v) Do we consider intermediate goods while calculating gross value added? Why?
(a) No, as intermediate goods are not produced for final consumption.
(b) Yes, as intermediate goods are a part of the production process.
(c) No, as they are only considered for calculation of intermediate goods.
(d) Yes, as they are considered for calculation of gross value added.

2. (b) (c) (d) (c) (d)
A line of reference

Investment function + Consumption and savings

A short period curve shifts forward

Fiscal policy

Excess demand

Keynesian model

Match the following with their correct answer:

(a) X-axis
(b) Y-axis
(c) 45° line
(d) Horizontal straight line

Answers:

(a) (b) (d)
(b) (a) (d)
(c) (a) (c)
(d) (d) (b)
3. Distinguish between Microeconomics and Macroeconomics. Explain the importance and limitations of Macroeconomics.

4. Explain the income method of measurement of National Income.

5. Bring out the main implications of Say’s law of market equilibrium.

6. Explain the salient features of Keynesian theory of Employment.

7. State and explain the Psychological law of consumption.

8. What is meant by Consumption function? Discuss the technical attributes of Consumption function.

9. Write short notes on the following:
   (A) Components of Investment.
   (B) Components of Saving.

(c) Answer the following questions:

(i) Define Gross Investment.

(ii) Define Circular Flow of Income?

(iii) What is meant by injections in circular flow of income?
What do you mean by Asthma?

Enlist the injuries of Bones.

What do you mean by Viral Hepatitis?

What do you mean by Circulatory system?

What do you mean by Systematic circulation?

What do you mean by Food & Nutrition?

Explain one mineral.

What do you mean by AIDS?
UNIT-III

6. What do you mean by junk food? Explain the harmful effects of junk food among children.

9. Attempt all question in short.

7. UNIT-I

(a) What do you mean by junk food? Explain the harmful effects of junk food among children.

(b) Type of nutrition.

(c) Pulmonary nutrition.

6. Write down the note of following:

7. Write down the function of heart & also explain the effect of exercise on circulatory system.

8. Write down the note of following:

9. Explain the main components of balance diet?

10. UNIT-II

(a) What do you mean by communicable diseases?

(b) the modes of transmission & prevention of control of communicable diseases.

10. Write down the following:

(a) What do you mean by communicable diseases?
UNIT I (1)

1. Write the notation of a Vlamsh-Khajrao in any Raag from your syllabus.

2. Give full description of Raag Katajwanti or Raag Gaud Sarang.

Note: Attempt five questions in all, selecting at least one question from each unit. All questions carry equal marks.

Maximum Marks: 40

Time allowed: 3 Hours

GSMD-22

MUSIC (VOCAL) THEORY

Paper: 1

851

Total Pages: 3
3. Write the notation of a Drut-Khayal or any Raag from your syllabus.

4. Write Aala Chautal with Ekgun, Degun and Chaugun Lavakaris with its description.

5. Write about the Drupad and Thumi-Gajan Shadkies.

6. Explain the following:
   (a) Arshav-Tosshav
   (b) Jabes of Ragas

7. Write the placement of Swaras on Shrut by Bharat Mahakumar Manser.

8. Describe the role of Science in promoting educational and cultural aspects of music during Modern Period.

9. Write the contribution towards music by Ustad Bade Gulam Ali Khan.

10. Write the contribution towards music by Pandit Malhar Parmar.
3. Write one Madhyalaya Gat in any Raag of your syllabus with two toras.

2. Historical study and detailed description of the Raagas.

(a) Chayyaat.

(b) Jajawanti.

UNIT-1 (गद्भ-1)

1. Write down the Raja Khani and Maseet Khani Gat of Raga Jajjwanti with two toras.

Note: Attempt five questions in all selecting at least one question from each Unit. All questions carry equal marks.
UNIT III (Chapter III)

8. Write down any one incredible contribution towards music by the following:

UNIT II (Chapter II)

6. Write down the method of playing of your instrument and describe the instrument of the instrument.

5. Write short notes on the following:

UNIT II (Chapter II)

4. Write down the detailed description of Tail Twine with:

4. (a) Girdle-Bandura
(b) Gram

3. Detailed Description of the following instruments:

3. (b) Panel or Chaus
Company?

A public company can be transformed into a private company. How
difference between public and private company. How
execute the proceedings of governing body meeting?

3. As a Secretary of Educational Society, how you will
explain the power and duties of Company Secretary.

2. Explain different types of Companies

**Note:** Attempt all questions. All questions carry
Maximum Marks: 80
Time Allowed: 3 Hours

OFFICE MANAGEMENT

GSM/D-22

Total Pages: 3

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

860
Write short notes on the following:

(a) Share Certificate.
(b) Blank Transfers.

10. Explain the role of Company Secretary as regards to transfer of Shares.

5. How Company Secretary is appointed? Explain the essential qualification for becoming Company Secretary.

6. Difference between Equity share and Preference share. Explain the essential conditions for issue of shares at Premium and at discount.

7. Discuss the doctrine of "Lifting the Corporate veil" and give exceptions to it.

8. What is the difference between Transfer of Shares and Transmission of shares? Describe the procedure of Transmission of shares.
Examine the validity of the limits, [1, 2]

\[ f(x) = \frac{1}{x^2 + 1} \]

If a function is continuous at \( x = a \) then \( \int_a^b f(x) \, dx \) is continuous at \( x = a \). Is the converse true? [2, 3]

\[
\lim_{x \to a} \frac{f(x) - f(a)}{x - a}
\]

If \( f(x) = \frac{x^2 + 2}{3x^2} \), then verify: [2, 3]

\[
\lim_{x \to 0} \frac{f(x) - f(0)}{x - 0}
\]

The derivative of the secant plane.

The derivative of a polynomial normal and b. normal.

\[
\lim_{x \to 0} \frac{\frac{q - x}{q - x}}{x - 0}
\]

Evaluate:

\[ \text{State immediate value theorem.} \]

\[ \text{Examine the function } f(x) = x^2 + 1 \text{.} \]

\[ \text{Examine the function } f(x) = \frac{1}{x^2 + 1} \text{.} \]

\[ \text{Examine the function } f(x) = \frac{1}{2x^2} - 1 \text{.} \]

\[ \text{Examine the function } f(x) = \frac{x^2 - 1}{x - 1} \text{.} \]

\[ \text{Examine the function } f(x) = \frac{1}{x^2 + 1} \text{.} \]

\[ \text{Examine the function } f(x) = \frac{1}{x^2 + 1} \text{.} \]
2. The necessary and sufficient condition for the curve in the plane is
\[ \left( \frac{1}{x - 1}, \frac{1}{y + 1} \right) = \lambda \]

Show that the curve

UNIT I

1. A laterne's method of multipliers. Find the extreme values of the function
\[ f = \frac{x^2 + y^2 + z^2}{x^2 + y^2} \]

subject to the condition
\[ x^2 + y^2 + z^2 = \alpha \]

3. Prove that the volume of the largest rectangular parallelepiped that can be inscribed in the parallelepiped is \( \alpha \cdot \beta \cdot \gamma \).

7. If \( f(0,0) = 0 \), prove that
\[ \nabla f = 0 \]

8. If \( f(x,y,z) \) is a homogeneous function of degree \( \alpha \), then
\[ f(x,y,z) = \alpha \cdot f(x \lambda, y \lambda, z \lambda) \]

UNIT II

1. If \( f(x,y,z) \) is differentiable at a point \((a,b,c)\) of the domain, then \( f(x,y,z) \) is a function such that the partials \( \frac{\partial f}{\partial x}, \frac{\partial f}{\partial y}, \frac{\partial f}{\partial z} \) are

6. (a) \( \frac{\partial f}{\partial x} \) and \( \frac{\partial f}{\partial y} \) are

UNIT III

UNIT-I

2. (a) Obtain a partial differential equation by eliminating the arbitrary functions from $z = e^{x+y}(ax+by)$.

(c) Write one dimensional and two dimensional heat equations.

2. (c) Solve the Partial differential equation $rac{\partial^2 z}{\partial x^2} + 5\frac{\partial^2 z}{\partial x\partial y} + 2\frac{\partial^2 z}{\partial y^2} = 2xy$.

(b) Examine whether the partial differential equations are compatible or not $p=6x+3y, q=3x-4y$.

1. (a) Find the differential equations of all spheres of fixed radius having centre in $xy$ plane.

Compulsory Questions

Note: Attempt five questions in all, selecting one question from each unit. Question No. 1 is compulsory.

Maximum Marks: 25

Time Allowed: 3 Hours
UNIT-III

4. (a) Solve (D^2 - DD' - 2D^2 - 2D)z = \sin(2x + 3y)
   (b) Solve (D^2 - 3D^2 - 2D^2)z = \cos(x + 2y) - \sin(x + y)

5. (a) Solve \( \left( x^2 - 2y \right) f(x, y) + g(x, y) = 0 \)
   (b) Find the complete integral of \( P(x, y) + Q(x, y) = 0 \) using Charpit's method

6. (a) Classify and reduce the equation \( \frac{\partial^2 z}{\partial x^2} + 2 \frac{\partial^2 z}{\partial x \partial y} + \frac{\partial^2 z}{\partial y^2} = 0 \) to the canonical form.
   (b) Classify and reduce the equation \( \frac{\partial^2 z}{\partial x^2} + \frac{\partial^2 z}{\partial y^2} = 0 \) to the canonical form.

UNIT-IV

7. (a) Classify and reduce the equation \( \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} = \frac{\partial^2 u}{\partial x \partial y} + 5 \frac{\partial u}{\partial x} = 0 \) to canonical form.
   (b) Solve the equation \( \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} + \frac{\partial^2 u}{\partial z^2} + 2 \frac{\partial u}{\partial z} = 0 \) by Monge's method

8. (a) Find the solution of the equation \( \frac{\partial^2 z}{\partial x^2} - \frac{\partial^2 z}{\partial y^2} + 5 \frac{\partial u}{\partial x} = 0 \) subject to the condition \( z(x, 0) = \sin x \) and \( \frac{\partial u}{\partial y} |_{y=0} = \cos x \).

9. Solve the wave equation \( \frac{\partial^2 u}{\partial t^2} - \frac{\partial^2 u}{\partial x^2} = \frac{\partial^2 u}{\partial x \partial t} \) with boundary conditions \( u = 0 \) when \( x = 0 \).

UNIT-IV

3. Find the complete integral of \( P(x, y) + Q(x, y) = 0 \) by using Charpit's method.

2. \( \frac{\partial^2 u}{\partial x^2} - 2 \frac{\partial^2 u}{\partial x \partial y} + 4 \frac{\partial u}{\partial x} = 0 \)

1. \( \frac{\partial^2 u}{\partial x^2} + 2 \frac{\partial^2 u}{\partial x \partial y} + 3 \frac{\partial u}{\partial y} = 0 \)
A uniform cubical box of edge 'a' is placed on the top of a fixed sphere, the centre of the face of the cube being in contact with the highest point of the sphere.

(a) A force of magnitude 24 N is inclined at an angle of 30° to the horizontal. Find its resolved parts in horizontal and vertical directions.

(b) What is the least radius of the sphere for which the equilibrium will be stable?

(c) A force P when applied along the smooth inclined plane supports a weight W and when applied horizontally balances a weight W'. On the same plane prove that $W' = W - P$.

Note: Attempt five questions in all, selecting two questions from each Unit. Question No. 1 is compulsory.
UNIT II

2. (a) Two weights resting on a rough inclined plane whose inclination \( \phi \) is greater then the angle of friction \( \alpha \).

\[
\cos \theta = \frac{q + e}{W}
\]

then

\[
T = \frac{W \cdot \cos \theta}{\sin \phi - (q + e) \cdot \sin \phi}
\]

\[
W = \frac{p - OQ}{2ab(p - O)}
\]

(b) A beam of weight \( W \) is divided by its center of gravity \( C \) into portions \( AC \) and \( BC \) of lengths \( a \) and \( b \) respectively. The beam rests in a vertical position on a smooth floor \( AD \) and a smooth plane \( E \). A string is attached to a hook at \( D \) and to the beam at a point \( P \).\( \quad P \)

2. (a) A uniform bar balances about a fulcrum placed \( " \). The resultant force \( F \) is of magnitude \( 1 \). The resistant force \( F \) is of magnitude \( 2 \). The resultant force \( F \) is at an angle of the horizontal towards the line of action of another resistant point of the fulcrum. The result of all one of the results \( 1 \) or \( 2 \) of these forces of magnitude \( 2 \) is from point \( A \) to point \( B \) and \( C \) at an horizontal distance \( 12 \) in April.

4. (a) One end of a string of length \( 21 \) is attached to one end

UNIT I
UNIT-IV

2\% When the base of a cylinder rests on the surface of the hemisphere, rests on a surface of equal radius. Show that the equilibrium is unstable.

2\% A hemisphere rests in equilibrium on a sphere of contact.

2\% Show that the locus of the line of action of the force P, which is given in position and the force of action of P is given.

2\% Two forces P and Q are such that their central axes is in the same plane.

2\% Show that it is stable.

2\% Find the position of the centre of gravity of a square lamina with its plane perpendicular to a smooth wall.

2\% And find magnitude of two forces.

\[ N + W + T = (x - r)(x + z) + (x - z)(x + r) \]

2\% Along the line given by.

2\% To two forces, one along the line x = 0 and other parallel to the wrench (X, Y, Z). W = M, N is given.

UNIT-III

2\% Find the vertical angle of the cone so that the C.G. of the volume of a solid cube and the plane base lies at the C.G. of the cube.

2\% Show that the vertical angle of a cone is equal to the angle of a cone having the same base and equal height.
I. Explain with reference to the context any three of the following:

(a) For oft, when on my couch I lie
(b) Still flutter there, the sole unquiet thing.
(c) Or is it some more humble lay,
(d) Perhaps the plaintive numbers flow
(e) And then my heart with pleasure fills,
(f) Which is the bliss of solitude:

OR

Will no one tell me what she sings?

Note: Attempt all questions.

Time: Three Hours

Total Marks: 80

LITERATURE IN ENGLISH (1750-1830)

SECTION A

(31724)
SECTION B

Attempt any two of the following questions:

1. Does Wordsworth emphasize commonplace subjects and a
   reverence of Nature?

2. And makes a joy of Thought
   And on the inner section of bliss
   By sinning moods intemperate, every where
   Whose puny hands and heeds the letter spirit
   Mailing it a companionable form
   Giveth I die sympathies with me who live.

3. What is conviction of the poet in the poem "Man"?

4. Where is a destruction of the poet in the poem about Nature?

5. What are the factors responsible for the growth and
   development of the poem during the eighteenth century?


OR

6. Write a note on the Gothic and Oriental romances of the
   eighteenth century.

OR

6. Write a detailed note on the impact of Middle-aged on the
   Romantic poetry.

SECTION C

(2×16=32)

1. Discuss in a poem of the besieged city the
   story of Autumn is one of the the most often.

2. English Literature.

3. Do poems in the poems of the poem about Nature?

4. What a does not "The" and of the section of bliss?

5. English Literature.

6. "The" and the section of bliss is where the
   story of Autumn is one of the the most often.

OR

6. Write a detailed note on the Gothic and Oriental romances of the
   eighteenth century.

OR


OR

6. Write a detailed note on the impact of Middle-aged on the
   Romantic poetry.

5. What are the factors responsible for the growth and
   development of the poem during the eighteenth century?

SECTION B

Attempt any two of the following questions:

1. And makes a joy of Thought
   And on the inner section of bliss
   By sinning moods intemperate, every where
   Whose puny hands and heeds the letter spirit
   Mailing it a companionable form
   Giveth I die sympathies with me who live.

2. What is conviction of the poet in the poem "Man"?

3. Where is a destruction of the poet in the poem about Nature?

4. Do poems in the poems of the poem about Nature?

5. English Literature.

6. English Literature.

OR

6. English Literature.

OR

6. English Literature.

OR

6. English Literature.

5. What are the factors responsible for the growth and
   development of the poem during the eighteenth century?

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4. What a does not "The" and of the section of bliss?

5. English Literature.

6. "The" and the section of bliss is where the
   story of Autumn is one of the the most often.
What are Lamb’s views on Imperfect Sympathies?

(c) Discuss the essay ‘Poor relations’.

OR

Compare and contrast the characters of Sophia and Olivia.

(b) Discuss the novel ‘The Vicar of Wakefield’.

OR

In what way is the novel ‘Emma’ an satire?

(b) Discuss the theme of marriage in Emma.

(a) Attempt three short answer type questions in about 200 words each.

Note: Attempt all questions.

Time: Three Hours

Maximum Marks: 80

[Paper: VI]
Novel
What are the major themes of the Eighteenth century
OR
In the Eighteenth century
What were the reasons for the rise of the English novel

Conclusion
Comment upon the transitional poets and their

OR
What are the main features of Romanticism?

3. Attempt any two questions:
   (2x12 = 24)

   (a) Comment on The Vicar of Wakefield as a novel of
   sensibility
   (c) Comment on The Vicar of Wakefield as a novel of
   (e) Discuss the character of Emma
   (b) Write a detailed note on Charlotte Bronte as an essayist

   (2x16 = 32)
   2. Attempt any two essay type questions
2. Read the passage and answer the questions that follow.

(a) My Favorite Childhood Memory
(b) An Incident that Changed My Life.
(c) Rule of Technology.
(d) My Favorite Author.
(e) A Step in Time Saves Nine.

I. Write an essay in about 450 words on any of the following topics:

Note: Attempt all questions.

Maximum Marks: 80
Time: 3 Hours

Paper VII

GRAMMAR AND CONTEMPORARY ENGLISH USAGE

31726
4. Complete the following sentences by adding an infinitive of

(a) I wish to learn to speak a foreign

(b) He needs to go to the library

(c) We need to clean the house.

3. Do as directed. Do any other:

(a) Give examples of personal advance.

(b) Sum up the barriers towards freedom and liberty.

1. How did the nation view themselves?

2. How did Nasser's attitude change towards

(a) The Soviet Union.

(b) The Arab world.

(c) The United States.

(d) The Western world.

(e) The Arab governments.

(f) The Arab public.

(g) The Arab resistance.

(h) The Arab world's response.

I. Letter to the Editor

Libraries may offer little instruction in the interests of the

A new light. The long chain of history and social

Legend: [a] = one answer; [b] = two answers; [c] = three answers; [d] = four answers; [e] = five answers; [f] = six answers; [g] = seven answers; [h] = eight answers.

5. Rewrite the following sentences by using the introductory word there. Do any eight:

(i) The farmer would not let us.......................
(ii) The bandit forced the travellers......................
(iii) We could........what he said (hears)
(iv) I want a book that is easy
(v) Those shoes are comfortable
(vi) Our house is very pleasant
(vii) Those were sitting at the next table to ours.
(viii) A seat happened to be vacant in the back row.

6. Do as directed. Do any eight:

(i) She received us in a...........manner.
(ii) The soldier fought..............brave
(iii) He is an early riser. He rises.............
(iv) What are you looking..............my work.
(v) I cannot think..............all the students.
(vi) He called me..............Night.
(vii) Divide this cake..............my name.
(viii) He refused..............answer me.

7. Fill in the blanks with prepositions. Do any eight:

(i) He was.....................(wrong) implicated in the case.
(ii) He played..............(beautiful) in the match.
(iii) He faced the situation..............(calm)
(iv) He spoke..............(loud)
(v) He ran..............(fast)
(vi) He was..............(regular)
(vii) I pay the rent
(viii) He is good..............English.
We walk to school (always)

In the break: Do any 같이.

Rewrite the following sentences by inserting the words given:

Do not do anything further until you read the screen.

They know.

We cannot come to a decision before we eat.

Will I shall buy the new hat that cheaper (be)

I can have.

When I explained the money, I intended to buy a work.

Work.

You will not succeed unless you harder.

I seen.

I can see.

He needs his parents (even)

I saw such a shop (never)

Rely on the courage.

If you should show respect to your elders (always)

The rain has last (just)

Our team has been broken (never)

We are some books that Every year (monite)

My annual bills (see)

There are some books that Every year (monite)

The lady was dressed (black)

If (x) I meant "Veetalia"

8. Fill in the blanks with correct form of verbs:

(x) A bully is a person of much courage (seidom)

(x) We shall work for a few weeks (stay)

(x) The train passes fast (just)

(x) Our team has been broken (never)
UNIT-III (75-100)

2. Critically review Aristides views on slavery.

OR

1. Critically examine Plato's concept of ideal State.

UNIT-I (50-100)

1. Write a note on the political views of St. Augustine.

Note: Attempt five questions in all, selecting one question from each unit. Question no. 9 is compulsory.

Maximum Marks: 80

Time: Three Hours

Paper-I

WESTERN POLITICAL THINKERS

BHM/P-D-22

TOTAL PAGES: 7
7. Critically review Bentham's Utilitarian Theory.

6. Critically examine political ideas of Locke.


4. Give reasons why Machiavelli is called the child of his time.

OR (2022)

UNIT - III (संशोधन - III)

16

UNIT - IV (संशोधन - IV)

16

3. Which scholar first gave political science the status of

(a) Socrates
(b) Aristotle
(c) Locke
(d) Hobbes

4. What is the main theme of the Republic?

(a) Communism of Wives
(b) Ideal State
(c) Education
(d) Justice

Compulsory Question (अधिकारीय प्रश्न)

16

2. Critically review Mills Ideas of Liberty.
31754/250/KD/272

4

Who wrote the book "Confessions"?

(a) Saint Augustine
(b) Aristotle
(c) Plato
(d) Socrates

(ii) In which country was Machiavelli born?

(a) France
(b) Italy
(c) England
(d) Germany

(iii) When was John Locke born?

(a) 1688
(b) 1678
(c) 1672
(d) 1652

(iv) Scientific Materialism was the basis of whose thinking?

(a) Saint Augustine
(b) Hobbes
(c) Arisototle
(d) Socrates

(v) Which is the correct answer?

(a) France
(b) Italy
(c) England
(d) Germany

5

P.T.O.
(viii) What is the most important contribution of Bentham's Political Philosophy?
(a) Theory of Freedom
(b) Theory of Utilitarianism
(c) Theory of Religion
(d) None of the above

(vi) Which of the following scholar considered property as natural?
(a) Socrates
(b) Aristotle
(c) Rousseau
(d) Hobbes.
1. Describe the political ideas of Gopal Krishna Gokhale.

2. Describe the religious and educational ideas of Swami Dayanand Saraswati.

3. Explain Dadabhai Navroji's theory.

4. Raja Ram Mohan Roy was the founder of modern India. Explain this statement.

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

Maximum Marks: 80

Time: Three Hours
6. Describe the contribution of Swami Vivekananda to Indian Thought.

5. Describe Swami Vivekananda's contribution to Indian Thought.

4. (a) When was Swami Dayanand Sarasvati born?
   (b) In 1834
   (c) In 1833
   (d) In 1835

3. (iv) Who gave the title of 'Raja' to Ram Mohan Roy?
   (a) Bahadur Shah Zafar
   (b) Akbar II
   (c) Muhammad Shah Rangeela
   (d) British Emperor

2. (ii) When did Bhai Naoroji die?
   (a) 2 October 1917
   (b) 30 June, 1917
   (c) 16 April, 1916
   (d) None of the above

1. (v) When did Gokhale accept his gun?
   (a) 16 Sep, 1917
   (b) 30 Oct, 1916
   (c) Mahadev Govind Ranade
(v) When was the conference of World's Religions held in Chicago?
(a) In September, 1893
(b) In December, 1893
(c) In September, 1885
(d) In July, 1885

(vi) In which year there is a split in the Congress?
(a) 1905
(b) 1906
(c) 1907
(d) 1908

(vii) Aurobindo became a member of which institution while living in England?
(a) Free India Society
(b) Majlis
(c) Mitramela
(d) Innovative India

(viii) Which Governor General declared the practice of Sati in human? 
(a) Lord Cornwallis
(b) Lord William Bentinck
(c) Lord Dalhousie
(d) Lord Curzon
3. Describe the major domestic determinants of India's foreign policy.

2. Discuss the basic objectives of India's foreign policy.

1. How history of a nation plays role in formation of its foreign policy?

Max. Marks : 80

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

Paper III

INDIAN FOREIGN POLICY

BH/MD-2

Roll No. : 6

Total Pages : 6
8. Critically examine the areas of conflict and cooperation between India and China.

7. Analyse the problems and prospects of Confidence Building Measures in Indo-Pak relations.

6. Write a note on the role of Indian Parliament in the making of Foreign Policy.

5. Discuss the role of National Security Council in the making of India's Foreign Policy.

4. Which were the dominant external factors that influenced the formation of India's Foreign Policy at the time of Independence? Explain it.

3. Who has given Gujral Doctrine?

2. Analyse the areas of conflict and cooperation between India and China.

1. Objective type questions:

15. Who is Father of Political Science?
(a) Plato (b) Aristotle (c) I.K. Gujral (d) J.S. Mill

14. Who was the Prime Minister during the Emergency?
(a) I.K. Gujral (b) Manmohan Singh (c) Rajiv Gandhi (d) V.P. Singh

13. What is the Bhopal gas tragedy?
(a) An industrial accident (b) An environmental disaster (c) An act of terrorism (d) An act of civil disobedience

12. What is the significance of the Emergency?
(a) It strengthened the role of the Prime Minister (b) It led to a change in the Constitution (c) It brought about social reforms (d) It resulted in the formation of the National Security Council
(iv) Research and Analysis Wing was established in which year?

(a) 1967
(b) 1968
(c) 1969
(d) 1970

(v) Recently India became the president of which Organization?

(a) G-8
(b) G-7
(c) G-20
(d) All the above

(vi) Who is the author of the book "The Making of India's Foreign Policy"?

(a) M.S. Rajan
(b) H.J. Morganthau
(c) J. Bandhopadhyay
(d) George Kanit

(vii) "Operation Vijay" is related to......

(a) India-China war
(b) Kargil war
(c) All the above
Write a paragraph of about 200 words on any one of the given topics:

(i) Sportsmanship
(ii) Environmental Pollution
(iii) Road Safety
(iv) Uses and Abuses of Mobile Phones.

In the great heavens, Brahma, the self-created one was lying on his serpent, when the sage Valmiki entered to ask Brahma, "Oh learned sire, what brings you into this distant world?" asked Brahma, and offering the sage a seat beside him, fell at his feet.

"Rise up, O God of Gods! I have come to bring you sinister news. Far down on the earth you chose as your chief daughter Bharatha, the goddess of wisdom and well being. You gave her the seven surging seas to the south, and you gave her the Gangas to meditate on the Godavary to live by, and the pure Cauvery to drink in."

P.T.O.
Questions:

1. What is the law of the place?

2. What did he do when the child began to cry?

3. How did he utter Mahavanna's son?

4. How did the Sahib look?

5. Who is the Sahib referred to in these lines?

6. What will you get beaten— that is the law of the place.

Moorthy said his Gyantra three thousand and eight times, and when the sanctum lights began to flicker, he spread out his upper cloth on the floor and laid himself down. Sleep slowly came over him, and so deep was his rest that people were already moving about in the streets when he awoke. He rose quickly and hurried down to the river and hurried back again and seated by the central pillar, began once more to meditate. People came and went, they banged the bell and touched the bull and the flowers and still did Moorthy enter deeper and deeper into meditation, and it was only Waterfall Vrakamma who raised him with her loud laughter: "Ah, the eat has begun to take to asceticism, says Ali, only to commit more sins." So that when did you begin to lie to your neighbours? As though it were not enough to have polluted our village with your Paraias!
5. (a) Transcribe any five of the following words.
(b) Sithat
(c) Teacher

4. (i) Discuss 'Kantabu', an Indian novel.  
(ii) Answer any one of the following questions in about 300 words:
   (iii) Who is Path Range Gowda?
   (iv) What does Morothy say about Gandhi?
   (v) What are the main characters in the novel?
   (vi) What economics does Morothy explain in the novel?
   (vii) What is the case-based social hierarchy presented in the novel?
   (viii) Who is the narrator of the novel 'Kantabu'?

3. Mark innovation (falling and rising tones) in any five of the given sentences:
   (i) Oh, God. Listen to me, please.
   (ii) What is it raining?
   (iii) This dress is good.
   (iv) Are you looking for something?
   (v) Pass me some sugar please.

2. (i) To have an axe to grind. To beat about the bush. In cold blood.
   (ii) To break the ice. To smell a rat. Capital punishment. To nip in the bud. To be in one's good books. A rainy day. To grease

1. (i) To face the music.
   (ii) (For Blind Candidates Only)
   (iii) Or

PTO.
6. Fill in the blanks with appropriate transitional words/phrases:

(i) I was about to board the bus started moving.

(Just as) As soon as the bus started moving, I was about to board it.

(ii) The murderer saw the police and ran away.

(Converting it into a simple sentence)

(iii) He keeps washing his time preparing for examinations.

(Instead of) In spite of

(iv) She offered me cold drinks.

Host

(v) Her daughter, her mother-in-law was injured in the accident.

(Besides/Even though)

(vi) She can not walk.

(So/very/Even if)

(vii) She is old to walk.

(when/until)

(viii) The man promised to help me.

(Convert it into a simple sentence)

(vi) I don't understand this.

(Convert it into a complex sentence)

(vii) I saw a wounded dog.

(Convert it into a complex sentence)

(viii) We must eat or we cannot live.

(Convert it into a compound sentence)

(v) He went to Delhi and studied law.

(Convert it into a simple sentence)

(vi) I cannot understand the reason of her failure.

(Convert it into a complex sentence)

(vi) The sea. (Convert it into a compound sentence)

(Throwing off his shirt, he jumped into the sea.)

(vi) Plot

(Converting it into a compound sentence)

(vi) Onomatopoeia

(Converting it into a compound sentence)

(vi) Convert this novel or psychological novel.

(Convert it into a compound sentence)
7. राजनीतिक विषय-विषय ज्ञान के लेखनीय क्षेत्रों में अधिकार के स bred की संख्या:

1×10=10

HINDI (Compulsory)

Time: Three Hours

Maximum Marks: 80

Roll No.

GSO/D-22

Total Pages: 04

965

P.T.O.
1. लिखित रूप में व्याकरण का अभ्यास करें और गद्य का समाप्ति करें।

2. इन्हें अनुवाद करें: (i) ध्यान दें कि यह अर्थ अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।

3. इन्हें अनुवाद करें: (i) यह अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।

4. इन्हें अनुवाद करें: (i) यह अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।

5. इन्हें अनुवाद करें: (i) यह अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।

6. इन्हें अनुवाद करें: (i) यह अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।

7. इन्हें अनुवाद करें: (i) यह अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।

8. इन्हें अनुवाद करें: (i) यह अंतर्भुक्त नहीं है। (ii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है। (iii) उत्तर प्रदान करें कि यह अंतर्भुक्त नहीं है।
GSOS 22
Sanskrit (Elective)

Total Marks: 80
Page: 04

Time: Three Hours

1.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

(h) 

(i) 

(j) 

(k) 

(l) 

2.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

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(l) 

3.

(a) 

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(k) 

(l) 

4.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

(h) 

(i) 

(j) 

(k) 

(l) 

5.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

(h) 

(i) 

(j) 

(k) 

(l) 

6.

(a) 

(b) 

(c) 

(d) 

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7.

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(d) 

(e) 

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(g) 

(h) 

(i) 

(j) 

(k) 

(l) 

8.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

(g) 

(h) 

(i) 

(j) 

(k) 

(l)
5. Describe the effects of the Industrial Revolution on the economy and society.

6. Explain the role of railroads in the economic development of the 19th century.

7. Discuss the impact of the U.S. Civil War on the political landscape of the United States.

8. Describe the causes and effects of the Great Depression in the 1930s.

9. Explain the reasons behind the start of World War II in Europe.

10. Discuss the main outcomes of World War II on the global political map.

Compulsory Question (answer any two)

1. Choose the correct answer from Multiple Choice:

(a) Who was the author of 'Divine Comedy'? 
(b) Petrarch 
(c) Dante 
(d) Machiavelli 

2. What is the main theme of Shakespeare's 'Hamlet'?

3. Who is known as the 'Father of Modern Economics'?

Note: Attempt five questions in all. Q.No. 1 is compulsory. Attempt four more questions selecting one question from each Unit. For visually handicapped candidates, the part relating to the explanatory note of Map Question will carry full marks.
(i) Who wrote the book 'The Institute of the Christian Religion'? 
(a) John Calvin 
(b) John Wycliffe 
(c) John Huss 
(d) Jixingly 
(e) Magna Carta 

(ii) What is the significance of 1215 A.D. in England's political history? 
(a) Declaration of Bill of Rights 
(b) Charles I was hanged 
(c) Magna Carta 
(d) Glorious Revolution 
(e) Pope 

(iii) Which was called the 'New World' in ancient colonial system? 
(a) America Continent 
(b) Africa Continent 
(c) China 
(d) India 

(iv) With whom was Wittenberg related? 
(a) Martin Luther 
(b) Henry VIII 
(c) Pope 
(d) John Wycliffe 

(vi) Odd man out:

(a) James Watt
(b) Thomas Newcomen
(c) Samuel Crompton
(d) James Watt, Thomas Newcomen, Samuel Crompton.

(vii) In which country did the first industrial revolution take place?

(a) United States of America
(b) France
(c) India
(d) Belgium

2. What does Renaissance mean? Explain its effects.

3. Explain the establishment of the Protestant Church.

2. What does Renaissance mean? Explain its effects.

3. Explain the establishment of the Protestant Church.

Unit II (Part II)

4. Explain the meaning of ancient colonialism, its nature and reasons for its rise.
5. Describe the origin and effects of Mercantile Revolution.


9. Depict major places connected with industrial revolution on the Map of Europe and write an explanatory note also. 10.6

Unit IV (Chapter IV)

1. Define Comparative Politics and discuss its scope.

2. Discuss critically the modern approach to the study of Comparative Politics.

3. Examine critically the imperial approach given by David Easton.

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

Maximum Marks: 80

Time: Three Hours

Comparative Politics

Op (i)

Political Science (Thcore)

974

650/D-22

Roll No. 09
4. What is Political Culture? Discuss its various kinds.

5. Differentiate constitution and constitutionalism and discuss the concept of constitutionalism in developing countries.

6. Define Constitutionalism and discuss the various features and problems of Constitutionalism.

7. Discuss the various types and functions of Legislature.

8. Define Political Party. Discuss the functions and importance of Political Parties.

9. Objective Type Questions:

(i) Who wrote the book "The Process of Government"?
(a) Graham Wallace (b) David Easton (c) Robert A. Dahl

(ii) What is a complex system of providing for orderly change? Who said it?
(a) Aristotle (b) Plato (c) Karl Marx

(iii) "Constitutionalism is a complex system of providing for orderly change. Who said it?"
(a) J. S. Rosneck (b) Corry and Abraham (c) Prinek and Smith
(a) South Africa
(b) Switzerland
(c) United States of America
(d) Britain

(vii) Plan or execute is found in:
(a) (d) (e) (f)
(b) (c) (d) (e)
(c) (b) (c) (d)
(d) (c) (b) (e)

Political culture is:
(a) (c) (b) (d)
(b) (d) (c) (a)
(c) (b) (d) (c)
(d) (a) (b) (c)

Equal distribution of property:
(a) (d) (c) (b)
(b) (e) (d) (a)
(c) (b) (e) (d)
(d) (a) (b) (e)

Rule of law:
(a) (c) (d) (b)
(b) (a) (d) (c)
(c) (b) (a) (d)
(d) (c) (b) (a)

Which one of the following is not a feature of Western constitutionalism:
(a) (c) (b) (d)
(b) (a) (c) (d)
(c) (b) (c) (d)
(d) (c) (b) (a)

(b) (c) (d)
9. What are the causes of Green Revolution in Indian Agriculture? What are its achievements and failure?

10. What do you mean by Agricultural Productivity? What are the causes of low productivity in Indian agriculture?

How do you measure it?

Discuss the main causes of poverty in India.

Unit IV (Group IV)

ECONOMICS
Indian Economy

Opt. (i)

Maximum Marks: 80

Time: Three Hours

Note: Attempt Five questions in all. Q. Nos. 1 and 2 are compulsory. Attempt remaining three questions selecting one question each from any of the three Units.

1. Feudalism and sub-feudalism were prevalent in some cases. The proportion of the total produce taken from the tenants as taxes and other rents was not on new ways and bringing new technology in agriculture. Many farmers lost their lives to famine.

P.O.
1. Choose the correct alternative:
(a) Inadequacy of capital
(b) Inflation
(c) Low rate of growth
(d) All of the above

2. Which of the following is a reason of poverty in India?

3. What is commercialization of agriculture?

4. What was the main reason for stagnation in agriculture sector during British rule?

5. Give reasons behind low level of agriculture production during British rule.

6. Define Feudalism and Sub-feudalism.

7. In the light of this case answer the following questions:
   (i) In what was the main reason for stagnation in agriculture prevalent throughout the year, food for these communities was also not always available, as agriculture were not monetary, they could be all done, all agriculture were brought about throughout the year.

8. It was found that agrarian reform in 1947 was brought about by the community at large. To arrange food for themselves throughout the year, though they were the real producers of the food, Measures to improve agriculture were not monetary, that could not be done, all agriculture were brought about throughout the year.

9. What is the commercialization of agriculture?
(iii) What proportion of India's population is engaged in agriculture?

(1) 51 Per cent
(2) 71 Per cent
(3) 61 Per cent
(4) 41 Per cent

(iv) Indian Economy is which type of Economy?

(1) Capitalist
(2) Socialistic
(3) Mixed Economy
(4) None of Above

(v) Unemployment leads to which of the following?

(1) Loss of Manpower
(2) Labour Force
(3) Decline in Capital Formation
(4) All of the above

(vi) The number of people who are able to work and willing to work at prevailing wage rate is known as:

(1) Labour Force
(2) Labour Force Participation rate
(3) Workforce
(4) Participation rate
2. Match the following:

\begin{itemize}
  \item \text{Person} \rightarrow 1. 1975
  \item \text{Unemployed} \rightarrow 2. 1982
  \item \text{Labour Force Participation} \rightarrow 3. 1965
  \item \text{NABARD} \rightarrow 4. 2006
  \item \text{RBBs} \rightarrow 5. 1975
\end{itemize}

\[5 \times 1 = 5\]

3. What do you mean by Employment? Explain the main characteristics of unemployment in developed and underdeveloped economies. Suggest a suitable employment generation policy for India.

4. What is Overpopulation? Discuss its causes and suggest a measure to solve the problem of overpopulation in India.

5. Discuss the demographic characteristics of Population in India.

6. Compare the Indian Economy with Developed Economies.

7. What are the major issues of Development in India?
I. Define Growth and Development Explain in detail the various stages of growth and development from each Unit. No. 9 is compulsory.

2. Differentiate between Growth and Development Linguistically.

Note: Attempt Five questions in all, selecting one question from each Unit.

Time: Three Hours

Maximun Marks: 60

THEORY

HEALTH AND PHYSICAL EDUCATION

GSO/D-22

RolleNO. 201655614

Total Pages: 04
Unit II (Question)


5. What do you mean by Posture? Explain the importance of Good Posture.

6. Explain the postural deformities of legs in detail.

7. Explain the types of muscles and describe the effects of exercises on muscular system in detail.

8. Elaborate the functions of Blood in human body.

9. What are the types of Round Robin Tournament or League?

10. What is the method used to find the no. of teams in Upper half and Lower half in Knockout tournament?

Complimentary Question (Extra credit)

(a) Define Development.

(b) What do you mean by Organization?

(c) What do you mean by Knockout Tournament?

(d) What do you mean by Interschool?

10. What do you mean by League tournaments? Prepare a fixture of 9 teams using league cycling method.

10. What do you mean by Exirrational?
1 Write an essay on teaching of music through Chharta
2 Write in detail about the origin and development of
   Indian Classical Music
3 Write down the full description of dams tidal with

UNIT III (GK Quiz III)

10 Write an essay on teaching of music through Chharta
9 Write in detail about the origin and development of
   Indian Classical Music
8 Write the contribution of Lalmani Misra in Indian
Unit 1 (Paper 1) Theory

MUSIC (Instrumental)

985

CGO/D-22

Total Pages: 03

Roll No. : 36105568
7. Write the Thah Duggun Tigan Changan of Paul Dhamar and Jhapali with detail description.

8. Write the detailed description of Raag Puri's Dhamashree with its comparative study.

9. Write the notation of Raag Mian Ki Malhar (Razakhami Gaj) with Aanch, Arooh Pakar and four tones.

10. Write the role music in International Cultural Exchange.
1. What is Accounting? Explain its characteristics and importance.

2. What is the need of accounting concepts? Explain any four important accounting concepts.

3. Every debit must have a corresponding credit. Discuss.

Also explain the different types of accounts.
7. Prepare a Bank Reconciliation Statement from the following particulars as on 31st July, 2020 when Pass Book shows a debit (overdraft) balance of ₹ 2,500: 
   (i) Cheques issued but not presented for payment ₹ 2,000.
   (ii) Bank charges in pass book ₹ 50.

8. On 1st July, 2020 X sold goods to Y for ₹ 5,000 and drew on him a bill of exchange for this amount due after three months. On due date Y expressed his inability to meet the bill and asked X to accept ₹ 2,000 in cash and
   (i) ₹ 2,000 in cash
   (ii) ₹ 500 in cash
   (iii) ₹ 500 in cheque
   (iv) ₹ 1,000 in cheque
   (v) ₹ 1,000 in cheque
   (vi) ₹ 2,000 in cheque

5. What are the different types of errors in trial balance? Explain with suitable examples the errors not disclosed by trial balance.

6. Write short notes on the following:
   (a) Capital Expenditure
   (b) Revenue Expenditure
   (c) Revenue Receipts
   (d) Bank Charges

4. Explain the need and advantages of ledger. What are the rules of posting in the ledger?
(1) Closing Stock on 31st March, 2021 was valued at

Adjustments:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,72,400</td>
<td>Bank Loan</td>
</tr>
<tr>
<td>80,000</td>
<td>Cash in Hand</td>
</tr>
<tr>
<td>13,000</td>
<td>Sales</td>
</tr>
<tr>
<td>77,000</td>
<td>Insurance and Taxes</td>
</tr>
<tr>
<td>20,000</td>
<td>Commission</td>
</tr>
<tr>
<td>3,000</td>
<td>Interest on Bank Loan</td>
</tr>
<tr>
<td>60,000</td>
<td>Bank Loan</td>
</tr>
<tr>
<td>7,000</td>
<td>Bad Debts Provision</td>
</tr>
<tr>
<td>12,000</td>
<td>General Expenses</td>
</tr>
<tr>
<td>7,000</td>
<td>Carriage inward</td>
</tr>
<tr>
<td>6,000</td>
<td>Bad Debts</td>
</tr>
</tbody>
</table>
10. What is the importance of Computer in Accounting?

(a) $5,000
(b) $1,000
(c) $2,000
(d) $3,000
(e) $4,000
24. The group $G$ is a subgroup of $H$ if $HK = KH$.

24. If $H$ and $K$ are two subgroups of a group $G$, then $H \cup K$ is also a subgroup if $H \cap K = \{e\}$, where $e$ is the identity element.

24. Prove that the group $(\mathbb{Z}, +)$ is abelian if and only if for all $a, b \in \mathbb{Z}$, $a + b = b + a$.

24. (a) Define an equivalence relation.
   (b) Define the relation $a \sim b$ if $a$ and $b$ are both even or both odd.
   (c) Draw the Hasse diagram of the partially ordered set $(\mathbb{Z}, \leq)$.
   (d) Find the inverse of $3$.
   (e) State Lagrange's theorem.

24. I. Show that $G = \{1, -1\}$ is a group with respect to multiplication.

24. ( bombed question )

From each Section $G$, one is compulsory.

Note: Attempt five questions in all selecting one question from each Section.

Maximum Marks: 26

Time: Three Hours

FOR B.A. CANDIDATES

Mathematics

BM-332

GROUPS AND RINGS

1006

GSQ/D-22

Total Papers: 03
UNIT II

1. (a) In a group G, prove that the identity element e is unique.
2. (b) In a group G, prove that if H is a subgroup of G, then H is a normal subgroup of G.
3. (c) Every finite group of prime order is cyclic. Prove.

UNIT III

4. (a) decompose the following permutations into product of transpositions:
   (i) 7 6 5 1 2 3 4
   (ii) 4 3 5 1 2 6 7 8

5. (a) Let G be the group of a group of all functions f : Z → Z such that f(x) = x^n for some integer n. Find all the units of G.
(b) Let G be the group of all functions f : Z → Z such that f(x) = x^n for some integer n. Find all the units of G.

6. (a) Prove that the function f(x) = x^2 is a homomorphism from R to R.
(b) Prove that the function f(x) = x^2 is a homomorphism from R to R.

7. (a) Prove that if R is a commutative ring and a ∈ R be an element, then show that: a R = {x ∈ R | x a ∈ R} is an ideal of R.
(b) Prove that if R is a commutative ring and a ∈ R be an element, then show that: a R = {x ∈ R | x a ∈ R} is an ideal of R.

8. (a) Prove that every principal ideal domain is a unique factorization domain.
(b) Prove that every principal ideal domain is a unique factorization domain.

9. (a) Show that the polynomial x^2 + 1 is irreducible over Q.
(b) Show that the polynomial x^2 + 1 is irreducible over Q.
Section I

1. (a) Given the following:

<table>
<thead>
<tr>
<th>x</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>f(x)</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

(b) Prove that $\Delta = AE$. 

(c) Define Simpson's Rule of Interpolation.

2. Find the eigenvalues of matrix $A = \begin{bmatrix} 2 & 4 & 6 \\ 4 & 7 & 2 \\ 8 & 6 & 2 \end{bmatrix}$


Note: Attempt all questions in the selection.

Maximum Marks: 20

Time: Three Hours

PAPER: 333

MATHEMATICS

1007

GS0/D-22

Roll No. 04
3. (a) By means of Lagrange's formula, prove that:
\[ f(x) = \sum_{i=0}^{n} y_i \prod_{j \neq i} \frac{x - x_j}{x_i - x_j} \]
which fits the following:

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f(x) )</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3. (b) Given the following data, find \( f(x) \) as a polynomial in power of \( (x-5) \):

\[ f(x) = a_0 + a_1(x-5) + a_2(x-5)^2 + a_3(x-5)^3 + a_4(x-5)^4 \]

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>112</td>
<td>68</td>
<td>26</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

3. (c) Find the value of \( f(7.5) \).

4. (a) Using Stirling's formula find \( \gamma_n \), given:
\[ \gamma_n = 49225, \ y_n = 3102, \ y_{n-1} = 3992.2 \]

4. (b) Find the probability distribution of a number of successes in two tosses of a die, where a success is defined as a number greater than 4.
\[ \begin{array}{c}
\text{Number of successes} \\
\text{Probability} \\
\end{array} \]

5. (a) Given \( \lambda = 2854, \ y_n = 3102, \ y_{n-1} = 3992.2 \)

5. (b) Apply Bessel's formula to obtain \( \gamma_n \), given:
\[ \gamma_n = 49225, \ y_n = 43216, \ y_{n-1} = 47226 \]

6. Given the values of an empirical function \( f(x) \) for certain values of \( x \), find \( f'(9) \):

<table>
<thead>
<tr>
<th>( x )</th>
<th>60</th>
<th>75</th>
<th>90</th>
<th>105</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f(x) )</td>
<td>282</td>
<td>382</td>
<td>432</td>
<td>40.9</td>
<td>37.7</td>
</tr>
</tbody>
</table>

7. Using Power method, find the largest eigen value and the corresponding eigen vector of the matrix
\[ A = \begin{bmatrix} 1 & 6 & 1 \\ 0 & 1 & 2 \\ 0 & 0 & 3 \end{bmatrix} \]
Show that \( f(x) = x \) is integrable on \([a, b]\) and is a differentiable function.

Show that every bounded monotone function is integrable.

Section I

1. Define complete metric space and give an example.
2. Define semi-metric space and give an example.
3. Examine the convergence of \( \int^b_a x^p dx \)

(10 marks)

Part B (Sec. C. Candidates)

Real Analysis (For B.Sc. Candidates)

BM-31

Mathematics

GS/D-22

1037

Roll No. 03

Total Pages: 03
6. (a) Let \( (X, d) \) be a metric space and let \( d^* \) be such that 
\[
d^*(x, y) = \min \left\{ d(x, y), \frac{1}{2} \right\}.
\]
Show that \( d^* \) is a metric on \( X \).

Section III

(b) Using Frullani's integral, evaluate:
\[
\int_0^1 \frac{x \tan^{-1} x}{x} \, dx = \frac{\pi}{4}.
\]

Section II

5. (a) Evaluate \( \int \frac{e^{-2x}}{x} \, dx \), where \( a > 0 \).

(b) Test the convergence of \( \int \sin x \, dx \).

3. (a) Using definition, evaluate \( \int f(x) \, dx = \frac{1}{3}x^3 - \frac{1}{3}x \).

(b) If \( f \) is integrable on \([a, b] \) and \( F \) is the primitive of \( f \) on \([a, b] \), then prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Show that \( \int_1^e (1 + x)^{-1} \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

7. State and prove Baire's Category Theorem.

(b) Prove that in a metric space, every open sphere is an open set.

8. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

9. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

4. (a) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).

(b) Prove that \( f \int_a^x f(x) \, dx \, dx \) exists if \( m, n > 0 \).
4. Discuss Yeats's transition from romantic poetry to that of modern with particular reference to the prescribed poems.

OR

Examine critically the character of Joan in Saint Joan.

5. Evaluate Yeats's use of symbolism with special reference to the prescribed poems.

OR

Examine critically the title of the play Saint Joan.

OR

Discuss Yeats's symbolism in The Lake Isle of Innisfree.

4. Attempt short notes on any two of the following selections at least one from each text:

(i) Explain Yeats's symbolism in The Lake Isle of Innisfree.

(ii) Explain your acquaintance with Shavian wit. (2\times1=4)

(iii) Show your acquaintance with Stavrian wit. (2\times1=4)

(iv) Comment on the importance of the opening scene in Saint Joan.

Note: All questions are compulsory.

Time: Three Hours

[Maximum Marks: 80]

I know as few can know,

Whether they take the upper road

Or, stay content on the low,

Or weaver bent at his loom,

Rover bent in his row-boat

Oft, child tiding in the womb.

All men live in suffering,

Daybreak and a candle-end.

Horsenant erect upon horseback

But a coarse old man am I,

Upon a woman's breast.

Daybreak and a candle-end.

I forget it all a while

I choose the second-best:

Can burn out that suffering

From the old man in the skies

No right-taught man dares.

(a) Explain with reference to the context:

3. Attempt short notes on any two of the following selections at least one from each text:

(i) Explain Yeats's symbolism in The Lake Isle of Innisfree.

(ii) Explain your acquaintance with Stavrian wit. (2\times1=4)

(iii) Show your acquaintance with Stavrian wit. (2\times1=4)

(iv) Comment on the importance of the opening scene in Saint Joan.

Note: All questions are compulsory.

Time: Three Hours

[Maximum Marks: 80]
2. Write any six questions of the following -

(i) How does W.B. Yeats capture the sights and sounds of Dublin?

(ii) On the use of supernatural elements in the poem "The Wise Old Witched"

(iii) Why is the poet so much worried about the future of his nephew daughter in "A Prayer for My Daughter"

(iv) On the relevance of prophecy in "Juno"

(v) How does Yeats write "The Lake Like the Hemisphere"

(vi) Discuss John as a prophetic commander

(vii) Describe John as a prophet of negroes

(viii) Draw a short character-sketch of Caanion.

(viia) Comment on the relevance of prophecy in "Juno"

(viib) "What is the theme of the poem, "The Wise Old Witched"?

(viic) In what way can the poem "A Prayer for My Daughter" be read as a prophetic poem?

(viid) Comment on the relevance of supernatural elements in the poem "The Lake Like the Hemisphere"

(viie) How does W.B. Yeats capture the sights and sounds of Dublin?

2. Write any six questions of the following -

(i) How does Yeats capture the sights and sounds of Dublin?

(ii) On the use of supernatural elements in the poem "The Wise Old Witched"

(iii) Why is the poet so much worried about the future of his nephew daughter in "A Prayer for My Daughter"

(iv) On the relevance of prophecy in "Juno"

(v) How does Yeats write "The Lake Like the Hemisphere"

(vi) Discuss John as a prophetic commander

(vii) Describe John as a prophet of negroes

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(iiia) "What is the theme of the poem, "The Wise Old Witched"?

(iiib) In what way can the poem "A Prayer for My Daughter" be read as a prophetic poem?

(iiic) Comment on the relevance of supernatural elements in the poem "The Lake Like the Hemisphere"

(iiid) How does W.B. Yeats capture the sights and sounds of Dublin?

(iiie) Write any six questions of the following -
(b) Home. And what shall I say when I get there? What shall I say happened?

And who'll believe me? They'll all say the two fought and died for this whore.

And there the women slowly turn around.

Not only flesh and bone but myths of light

With darkness at the core, and sense is found

Away from all existence, to a cold

Lackluster, whose will is uncontrolled.

Here, the mills of God are never slow.
2. Write short notes on any two of the following:

(a) How does goddess Kali enter through Prakrita
(b) Analyse briefly the role of Prafulla in Haryadana
(c) Why is the imperious lord Ganastra worshipped at the
beginning in Haryadana?
(d) How does English Karna end Karna's life in Haryadana
(e) Comment on Beas's procession with elephants
(f) Attempt a brief note on the poem "Philosophy"

(i) Trace the central idea of "Poem of the Separation"

3. Attempt short notes on any two or the following:

(a) Interaction between the poem "Philosophy"
(b) Comment on the ending of the poem "Philosopher"

> Trace the central idea of "Poem of the Separation"

Or

Chish Karna's Haryadana undertaking search for

OR

How far is Haryadana a suitable title for Karna's play?

5. How far is Haryadana a suitable title for Karna's play?

(15)

Concerned with the process of writing poetry, Bhawadher
In which way is the poem "Poet, Lover, Bhawadher"

Or

Poetry,

Discuss in detail the Indian elements in Russian Exiles
Discuss "The End of the Beginnings" as a poem. OR

Do you think Macauley's remarks on Indian culture to be

OR

Values does he uphold?

Do you think feminism has made any change to the status

and post-modernism

which are common between modernism

(a) According to Eliot, how does the wise land represent "high modernism"

on the basis of your reading of the essay.

(c) How the voice of women has been suppressed? Answer

UNIT-II

Comment on the idea of "A Cry from Afar".

(d) Lines

(e) Comment on reputation in "Tumult I Can Write the Saddest

UNIT-III

Modern World Literature (I)

ENGLISH

Paper-XXI

Maximum Marks: 80

Time: Three Hours

Roll No. 4

Total Pages: 4
UNIT I

2. Attempt any four questions by selecting at least one question (3 x 10 = 30)

(a) What does multiethnicity mean to the Tamil and Sri Lankan people?
(b) Why does multiculturalism clash in the East and West?
(c) How are relations in Macau, Hong Kong and Russia developed?
(d) Now that the Tamil Commonwealth Literature has finally fallen into academic disfavor, one can see that its support the foundations of our accepted models of literature and the world.
(e) Name the essay and the writer.

The relations and constitutions of powers in commonwealth discourse are manifestations of ideology or of cultural discourse as manifested in discourses or in the power relations of the world order to show that it is a relationship of ideology in which the power relations are subject to the power of the world order. The foundation is resistible post-colonialism in literature and ideology. Post-colonialism is the movement known as post-colonialism which employs cultural studies to examine the ways in which the world order has shaped the world. An imperialist's idea of the world order is resistible post-colonialism. It is seen as part of the English, which is the base of the colonial model. From America, Britain and the rest to the modern country literature, post-colonialism is the foundation.

(f) Name the essay and the writer.

(g) Why does multiculturalism clash with the indigenous?
(h) Explain the phrase "wedded together".

(i) Name the essay, the writer and the title.

(j) Use conflict in a sentence of your own.

(k) How does multiculturalism do with the indigenous?
Discuss the importance and features of David Pascoe's sytem and problems of the comparative method.

Describe the comparative method and discuss its features.

Describe the features and importance of comparative policies.

Maximum Marks: 80

Time: Three Hours
4. Evaluate Lucian Pye's approach to political development.

5. What do you mean by Constitution? Describe the fundamental characteristics of a good Constitution.

6. Discuss the features and elements of constitutionalism.

7. Describe the function of Legislature in a Modern State.

8. What do you mean by political party? What are the functions of a political party?

9. Objective Types Questions:
   (a) Who is the father of Comparative Politics?
   (b) Aristotle
   (c) Plato
   (d) Machiavelli

10. What is the capital of India?
    (a) Delhi
    (b) Kolkata
    (c) Chennai
    (d) Mumbai

11. What language is commonly spoken in India?
    (a) English
    (b) Hindi
    (c) Bengali
    (d) Tamil

12. What is the currency of India?
    (a) Dollar
    (b) Rupee
    (c) Euro
    (d) Yen

13. Which of the following is a democratic country?
    (a) India
    (b) Italy
    (c) France
    (d) All the above

14. Who is the author of the book 'The Political System'? (a) Plato (b) Aristotle (c) Hobbes (d) Rousseau

15. The Political System in which country?
    (a) India
    (b) Italy
    (c) France
    (d) All the above
Which country does not have a unicameral legislature?

(a) USA
(b) Iran
(c) China
(d) New Zealand

Which one is not the organ of the Government?

(a) Federal
(b) Legislature
(c) Political Parties
(d) Executive

In which of the following countries is the executive head also a member of the legislature?

(a) (p)
(b) (q)
(c) (r)
(d) (s)
3. Clearly examine the "Idealistic Approach" of International Relations.

2. Describe the history of International Relations as an academic discipline.

1. Define International Relations. Examine its scope and utility.

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

Maximum Marks: 80

Time: Three Hours

Paper-II

INTERNATIONAL RELATIONS (THEORY)

31789

B.H.O.-22

Total Pages: 6
9. Objective type questions: (Choose the right option)

(i) "International Politics is a struggle for power." Who said this?
   (a) Woodrow Wilson
   (b) Realism
   (c) System Approach
   (d) All the above.

(ii) Which approach of International Relations emphasizes on study of "What should be?"
   (a) Realism
   (b) Idealism
   (c) System Approach
   (d) All the above.

8. Evaluate the various efforts of world community to protect the environment.

7. Define Balance of Power. Describe various methods to maintain it.

6. Define International Law. Discuss its nature and sources.

5. What is National Power? Discuss its various elements.

4. Discuss Morton Kaplan's "System Approach" in international Relations.

Name the first chair of International Politics established at Wales University.

(a) Woodrow Wilson Chair
(b) Peace Studies Chair
(c) None of the above.

(a) Which was the first country to gain independence after World War II?
(b) Which country has the largest coastline?
(c) Which country is known as the "land of the free, home of the brave?"
(v) Which element of National Power is losing its Importance in Modern times?

(a) Military Preparedness
(b) Geography
(c) Military Power
(d) None of the Above

(vi) When the "Uniting for Peace" resolution was passed by General Assembly?

(a) 1945
(b) 1950
(c) 1951
(d) 1952

(vii) Which Period of Balance of Power is called the Golden Period?

(a) 1815-1914
(b) 1915-1939
(c) 1939-1945
(d) All the above

(viii) The principle of "one for all and all for one" is associated with

(a) Collective Security
(b) Balance of Power
(c) International Law
Discuss the relations between Public Administration and New Public Administration.

Write an essay on New Public Administration.

Discuss the growth and evolution of Public Administration as an independent discipline.

Explain the meaning, nature and scope of Public Administration.

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

Maximum Marks: 80

Time: Three Hours
5. Critically examine the Scientific-Management theory of organization.

6. Define Organization. Explain the classical theory of organization.

7. Critically examine the principle of Hierarchy.

8. Discuss merits and demerits of decentralization.

9. Objective Types Questions:
   (i) "Public Administration consists of all those operations having for their purpose fulfillment or enforcement of what?
      (a) H.L. Woodrow Wilson
      (b) Simon
      (c) None of the above.

(ii) "When two men start rolling a stone in an organized way, we have the beginning of administration," who said?
      (a) H.L. Woodrow Wilson
      (b) Simon
      (c) None of the above.

Who said?
      (a) H.L. Woodrow Wilson
      (b) Simon
      (c) None of the above.
(i) Who is known as founding father of Public Administration as a Discipline?
(a) Adam Smith  
(b) L.D. White  
(c) Woodrow Wilson  
(d) Kautilya

(ii) What is "Arthashastra"?
(a) Jyotishya  
(b) Kautilya  
(c) Drona  
(d) None of the above

(iii) Modern state is called as:
(a) Parliamentary State  
(b) Authoritarian State  
(c) Dictatorial State  
(d) Administrative State

(iv) Who wrote the Book 'Arthashastra'?
(a) Adam Smith  
(b) Simon Kaniya  
(c) Luther Gallick  
(d) Woodrow Wilson  
(e) None of the above

(v) "Administration like most of things is a human problem to deal with the human beings and not with statics data," who said?
(a) Jawaharlal Nehru  
(b) Elton Mayo  
(c) Max Weber  
(d) Munro

(vi) "John Stuart Mill described the state as an instrument of the selfish ambition of so called rulers to increase their own advantage at the expense of their fellow beings" who said?
(a) John Stuart Mill  
(b) Jean-Jacques Rousseau  
(c) Montesquieu  
(d) None of the above

(vii) "A state is a necessary evil" who said?
(a) John Stuart Mill  
(b) Jean-Jacques Rousseau  
(c) Montesquieu  
(d) None of the above
(d) Johnson.

(viii) The process of transfer of administrative authority from a lower to a higher level of government is called
centralization, who said?

2 x 8 = 16

(a) L.D. White
(b) Henry Rayol
(c) Charles Worth

(a) Ramsay Muir
(b) Woodrow Wilson
(c) M.P. Shamma

“Government may come and go, ministers may rise and
fall, the administration of a country goes on forever.”