COMMERCE STREAM

SUBJECT: ENGLISH

ATTEMPT ALL QUESTIONS :

1. What is the significance of escapism in The Third Level? Discuss how Charley uses the Third Level to escape from his problems and what this symbolizes.

2. In the Third Level, Finney explores the theme of nostalgia. How does the Third Level represent a romanticized version of the past, and what emotional connection do the characters have with it?

3. The concept of control over one's destiny is also an important theme in The Third Level. Discuss Charley's decision to stay in the Third Level and what it reveals about his desire for control.

4. The Third Level can be interpreted in different ways. Some readers see it as a utopian world, while others see it as a symbol of mental illness. Discuss the different interpretations of the story and which one you find most convincing.

5. The Third Level can be read as a critique of modern life. Discuss how the story portrays modern life as complex and overwhelming, and how the Third Level offers a way out of this complexity.

6. The Third Level is often seen as a story about the power of imagination. Discuss how Finney portrays the imagination as a tool for escaping reality and creating new worlds.

7. The Third Level can be seen as a story about the loss of innocence. Discuss how the Third Level represents a world that is simpler, more innocent, and more meaningful than the reality that the characters inhabit.

8. The Third Level ends on an ambiguous note, with the reader uncertain about the fate of the characters. Discuss the different interpretations of the ending and what it reveals about the themes of the story.

9. The Third Level raises important questions about the nature of reality and the power of the mind. Discuss how the story challenges our assumptions about what is real and what is possible, and what this reveals about the human experience.

10. The Third Level can be read as a cautionary tale about the dangers of escapism and the need to confront reality. Discuss how the story balances the lure of the Third Level with the recognition that we must ultimately face our problems in the real world.

II Read the given extracts and answer the questions that follow:

 Extract A

Therefore, on every morrow, are we wreathing
A flowery band to bind us to the earth,
Spite of despondence, of the inhuman dearth
Of noble natures, of the gloomy days,
Of all the unhealthy and o'er darkened ways
Made for our searching: yes, in spite of all,
Some shape of beauty moves away the pall
From our dark spirits.

1. In which of the following options can the underlined words be replaced with 'despondence'?

a) The man paced about the room showing
b) A chat with a close friend can take away our
c) I was in jitters, seeing the boy trapped in the trench.
d) Being dogged is what led him to negotiate the challenges.

2. Pick the option that is NOT an example of 'unhealthy and o'er darkened ways.'

A) A person who is egoistic and looks down upon others.
B) A person who seeks God's help for all his problems.
C) A person who uses evil ways to deceive others.
D) A person who is corrupt and manipulative.

3.Pick the option that enumerates what 'noble natures' would include.

1. Selflessness
2. Insensitivity
3. enthusiasm
4. aggression
5. meticulousness
6. judiciousness

A) 1, 4 and 5
B) 2, 3 and 6
C) 2, 4 and 5
D) 1, 3 and 6

4. Based on the poem, choose the correct option with reference to the two statements given below.
Statement 1: The earth without the beautiful things is a place full of despair and unpleasantness.
Statement 2: The ornate band created by human beings; ushers hope in their lives.

A) Statement 1 is true but Statement 2 is false.
B) Statement 1 is false but Statement 2 is true.
C) Both Statement 1 and Statement 2 can be inferred.
D) Both Statement 1 and Statement 2 cannot be inferred.

Extract B

 Rich with a sprinkling of fair musk-rose blooms; And such too is the grandeur of the dooms We have imagined for the mighty dead; All lovely tales that we have heard or read; An endless fountain of immortal drink, Pouring unto us from the heaven's brink.

 I. Pick the quote that matches best with— 'And such too is the grandeur of the dooms we have imagined for the mighty dead.'

a) In the night of death, hope sees a star, and listening love can hear the rustle of a wing.
b) When a great man dies, for years the light he leaves behind him, lies on the paths of men.
c) Endings are not always bad; most times they're just beginnings in disguise. d) Cowards die many times before their death; the valiant never taste of death but once.

 ii. Pick the option that refers to what 'an endless fountain of immortal drink' suggests.

1. Inspirational deeds of great men
2. A ceaseless series of dreams
3. An infinite source of strength
4. An elixir of life for upliftment of the soul.
5. An eternal source of delight
6. A boundless gift of love

a) 1, 4 and 5
b) 2, 3 and 5
c) 1, 2 and 6
d) 2, 4 and 6

iii Pick the option that pairs the TRUE statements based on the extract, from the list below.

1. The bushes with fragrant flowers lift the human spirit and bring joy.
2. Death is inevitable and everyone faces it no matter how powerful.
3. Immortality is achieved by man when he drinks the nectar of joy.

4. Legendary heroes and their heroic deeds instil inspiration in us.

a) 1 and 2
2 and 4
c) 1 and 4
d) 2 and 3

iv Pick the option that uses the same literary device as the 'mighty dead'.

a) Sleepless nights
b) Deafening silence
c) Glaring lights
d) Time is a thief

SUBJECT: ECONOMICS

1.   Differentiate between and microeconomics and macroeconomics
What do you mean by CIRCULAR FLOW OF INCOME? Explain its different phases in details.
2.   Differentiate between stock and flow on the basis meaning, time dimension, nature of concepts and atleast 6 examples.
3.   Write about types of circular flow? As real flow and money flow.
4.   Describe four sectors of an economy
5.   Introduce the following terms:-
i)   Domestic Territory
ii)   Normal residents
iii)   Factor income and transfer income
iv)   Final goods and intermediate goods
v)   Consumption goods and capital goods
vi)   Net investment and gross investment
vii)   NIT
viii)   Subsidies
ix)   Factor cost and market price
x)   Tell about NFIA and its components
xi)   Define various aggregates of national income?
7.   Differentiate between National income and Domestic income?
8.   Write the steps of value added method and its precautions.
9.   What do you understand by problem of double counting? How can you avoid it?
10.   What is income method to calculate national income? Write about components of factor income.
11.   Explain the steps of income method and its precautions?
12.   What do you mean by expenditure method? Explain the components of final expenditure.
13.   Practice items about treatment of the different items in the national income.
14.   Solve 10-10 Numerical Questions of value added method, Income method and Expenditure method?
15.   Define the following:-
1)   Nominal GDP and real GDP
2)   National income at current price and constant price
16.   Write about GDP Deflator (or price index) with formulae?
17.   Write short notes on GDP and welfare?

18*PROJECT WORK FOR Class: XIIth

All the students are requested to complete the Final Project work for ECONOMICS in Summervacations only

The *topics* for the Project already given

Guidelines for the Project:

Introduction of the Topic

  1. Details of the Topic

2. Pros and Cons of the related Topic

3. Effect, relation or criticism of the topics

4. Conclusion

5. Bibliography
 Note:

a. Pages should be within 25 to 30

b. Diagrams and Pictures on the left side of the page (ie PLAIN SIDE)

c. Material should be handwritten and on the right side of the Page (ie LINED SIDE)

d. Headings can be written by using any other coloured pen except Red pen

e. Starting pages and Index already discussed in class.

f. Material should be written by using blue pen and highlight can be given by colour pen

g. Complete the project in this vacation only so that your 20 marks will be covered.

SUBJECT: BUSINESS STUDIES

1. You are required to make only one project carrying 20 marks from the following topics

(a)   Principles of Management
(b)   Elements of Business Environment
(c)   Marketing Management
(d)   Stock Exchange
2.   Do previous year's Board questions from Chapter 11.
3.   Revise Chapter 1, 2 and 11.

SUBJECT: ACCOUNTANCY

(1)   PREPARE YOUR PROJECT FILE. ONLY ONE SPECIFIC PROJECT BY USING THE ANY TWO ANALYTICAL TOOLS.
        TOPIC ANANLYSIS OF CASH FLOW STATEMENT AND SEGMENT ANALYSIS OF A LTD COMPANY.
REQUIRED COLLECT ORIGINAL CASH FLOW STAEMENT AND SEGMENT REPORT OF ANY LTD. CO. FOR THE YEAR ENDED 31ST MARCH 2022 OR 2023.

 WRITE THE BASIC OF PROJECT.

        1. MEANING OF PROJECT.
        2. ADVANTAGES OF PROJECT.
        3. SCOPE OF PROJECT.
        4. AKNOWLEGMENT ECT.

(2) Do the given assignments in home holiday's homework note book.

(3) Do following questions in your homework note book.

Ch. 4 CASH FLOW STATEMENT
QUESTION NO: 40, 42, 43, 44, 45.46,47,48,49 And 50.

(4)Practice the previous year Board Question Papers (only part – B)

SUBJECT: INFORMATICS PRACTICES

Do all queries in IP Notebook

1. Write an SQL Query to create a database Employee.
2. Write an SQL Query to open database Employee.
3. Write an SQL Query to create table empl.
4. Write an SQL Query to show the structure of the table.
5. Write an SQL Query to Insert 7 records as shown below:

Empno	Ename	Job	Salary	Age	DOB
501	Raj	Software Engineer	85000	29	14-02-1994
502	Sam	Sales Executive	35000	26	29-06-1997
503	Aarti	Sales Executive	40000	31	30-01-1992
504	Karan	Accountant	45000	30	01-07-1993
505	Sameer	Accountant	40000	28	19-04-1995
506	Luv	HR Manager	50000	32	24-05-1991
507	Sarah	SEO	75000	31	04-05-1992

6. Write an SQL Query to display all records from table empl.
7. Write an SQL Query to display EmpNo and Ename of all employees from the tableempl.
8. Write an SQL Query to display Employees who earn more than 40000.
9. Write an SQL Query to display Employees who work as Accountant.
10. Write an SQL Query to add a column Commission to Table Empl.
11. Write an SQL Query to increase the Salary of all employees by 10% in the table empl.
12. Write an SQL Query to set commission as 5% of salary of Sales Executive.
13. Write SQL query to display Ename, Salary, and Salary added with comm from tableempl.
14. Write an SQL Query to display the details of employees whose name have only fiveletters.
15. Write an SQL Query to display Empno, Ename, Salary, and Sal*12 as Annual Salary.

16. Write an SQL Query to display the name of employee whose name contains "r" as thirdletter.
17. Write an SQL Query to display the name and salary of those employees whose salary isbetween 35000 and 40000.
18. Write an SQL Query to change Ename 'Sam' by 'Samuel'.
19. Write an SQL Query to display table data according to descending order of salary.
20. Display job wise total salary of employees using GROUP BY clause.
21. Write an SQL Query to delete entire table IF EXISTING.

Questions on Functions for data analysis

Q22. Aggregate Function

a) AVG
b) SUM
c) MIN
d) COUNT
e) MAX

Q23.Math Function

a) MOD

b) POWER
c) ROUND
d) SQUAREROOT

Q24.Text Function

a) Lower case / Upper case
b) Trim Function
c) Position of String in database column
d) SUBSTR
e) Length
f) Left
g) Right
h) Mid

Q25. Date/Time Function

a) Current date
b) Day name
c) Week of current date
d) Month name
e) Day of week

SUBJECT: PHYSICAL AND HEALTH EDUCATION

Record File Work/ Lab Manual Health and Physical Eucation of any writer
Record file shall include :-
I)   Complete details (since beginning till date) of *any one game* of your choice out of the given list:
   (Approved by Indian Olympic Association)

Basketball, Football, Kabaddi, Kho-Kho, Badminton, Taekwondo, Volleyball, Handball etc.

(Labelled diagram of Field & Equipment, Rules, Terminologies & Skills)
II)   Fitness test administration. (SAI Khelo India Test) administration for all items.
1. Age groups 5 – 8 yrs/ class 1-3 : BMI, Flamingo Balance Test, Plate Taping Test.
2. Age groups 9 -18 yrs/ class 4 – 12 BMI, 50mt. Speed Test. 600mt Run/Walk, Sit and Reach flexibility test, Strength Test (Abdominal Partial Curl Up, Push Ups for boys , Modified Push ups for girls).
III)Detailed procedure for Asanas, Benefits & contradiction for any Two Asanas for each given lifestyle diseases
   :   Obesity, Diabetes, Hypertension, Asthma and Back Pain & Arthritis.
(You can take the help of your textbook/ YouTube or Google)

Note:- Students please paste/ draw relevant pictures of each topic.

SUBJECT: POLITICAL SCIENCE

PROJECT WORK
Suggested Topics

1.NAM- 1961 to present times.
2. Division of Germany with special focus on the construction and dismantling of the Berlin Wall.
3. CIS-Central Asian Republics
4. Disintegration of USSR with special focus on Gorbachev.
5. Globlisation
6. Cover the negative as well as positive aspects of relationship between India and the following countries.
Focus on any one of the following (current updates should be highlighted):
   a) Relationship between India and Russia
   b) Relationship between India and China
   c) Relationship between India and Pakistan
7. ASEAN

8. European Union and BREXIT
9. BRICS
10. SAARC
11. India's Nuclear Policy
12. United Nations with focus on India's candidature in Security Council.
13. UN Agencies – UNICEF, UNESCO, WHO
14. Pandemics: Covid 19- Its global impact (focus on worldwide cooperation and preparedness along withcontroversies (please collect newspaper

   clippings for the same)
15. Partition of India-Theory behind it and its legacy
16. Comparison between NITI AAYOG and Planning Commission and their contribution in India'sDevelopment.
17. Election 2019- Rise of BJP and Downfall of Congress (1989-2019).
18. Emergency – A blot on Indian Democracy
19.NDA III and NDA IV – Social and Economic welfare programmes.

Objectives of project work:
1. To enable learners to probe deeper, initiate action and reflect on knowledge and skills acquired duringthe course of class XII
2. To analyze and evaluate real world scenarios using social constructivism, a theory based onobservation and scientific study
3. To become independent and empowered to choose their topic and gather data from a variety of source, investigate varied viewpoints acquired during the course XII and arrive at logical deductions.
4. To enquire into, and reflect on, issues independently /in collaboration with others and identify thelimitations
5. To develop 21st century skills of communication, cooperation, coordination, critical thinking,creativity and collaboration to produce an extended and independent work.

Project overview:

1. The Project work will be implemented for 20 Marks.
2. Out of 20 marks, 10 marks are to be allotted to viva voce and 10 marks for project work.
3. The project work can be in the form of films, albums, songs, storytelling, debate, Role Play, Skit,Presentation, Model, Field Survey, Mock Drills/Mock Event etc.
4. Students can use primary sources available in city archives, Primary sources can also include newspaper cuttings, photographs, film footage and recorded written/speeches. Secondary sources mayalso be used after proper authentication.

Viva-Voce

1. At the end of the stipulated term**,** each learner will present the research work in the Project File to theexaminer.
2. The questions will be asked from the Research Work/ Project File of the learner.
3. The project work submitted by the learner is his/her original work.

The marks will be allocated under the following heads:

SL. NO.	COMPONENTS	MARKS ALLOTTED
1	**INTRODUCTION / OVERVIEW**	2
2	**VARIETY OF COMPONENTS**	3
3	**PRESENTATION**	3
4	**CONCLUSION**	1
5	**BIBLIOGRAPHY**	1
6	**VIVA-VOCE**	10
	TOTAL	**20**

*Do assignment of chapter politics of planned development

SCIENCE STREAM

SUBJECT: ENGLISH

ATTEMPT ALL QUESTIONS:

1. What is the significance of escapism in The Third Level? Discuss how Charley uses the Third Level to escape from his problems and what this symbolizes.

2. In the Third Level, Finney explores the theme of nostalgia. How does the Third Level represent a romanticized version of the past, and what emotional connection do the characters have with it?

3. The concept of control over one's destiny is also an important theme in The Third Level. Discuss Charley's decision to stay in the Third Level and what it reveals about his desire for control.

4. The Third Level can be interpreted in different ways. Some readers see it as a utopian world, while others see it as a symbol of mental illness. Discuss the different interpretations of the story and which one you find most convincing.

5. The Third Level can be read as a critique of modern life. Discuss how the story portrays modern life as complex and overwhelming, and how the Third Level offers a way out of this complexity.

6. The Third Level is often seen as a story about the power of imagination. Discuss how Finney portrays the imagination as a tool for escaping reality and creating new worlds.

7. The Third Level can be seen as a story about the loss of innocence. Discuss how the Third Level represents a world that is simpler, more innocent, and more meaningful than the reality that the characters inhabit.

8. The Third Level ends on an ambiguous note, with the reader uncertain about the fate of the characters. Discuss the different interpretations of the ending and what it reveals about the themes of the story.

9. The Third Level raises important questions about the nature of reality and the power of the mind. Discuss how the story challenges our assumptions about what is real and what is possible, and what this reveals about the human experience.

10. The Third Level can be read as a cautionary tale about the dangers of escapism and the need to confront reality. Discuss how the story balances the lure of the Third Level with the recognition that we must ultimately face our problems in the real world.

II Read the given extracts and answer the questions that follow:

Extract A

Therefore, on every morrow, are we wreathing
A flowery band to bind us to the earth,
Spite of despondence, of the inhuman dearth
Of noble natures, of the gloomy days,
Of all the unhealthy and o'er darkened ways
Made for our searching: yes, in spite of all,
Some shape of beauty moves away the pall
From our dark spirits.

1. In which of the following options can the underlined words be replaced with 'despondence'?

a) The man paced about the room showing
b) A chat with a close friend can take away our
c) I was in jitters, seeing the boy trapped in the trench.
d) Being dogged is what led him to negotiate the challenges.

2. Pick the option that is NOT an example of 'unhealthy and o'er darkened ways.'

A) A person who is egoistic and looks down upon others.
B) A person who seeks God's help for all his problems.

C) A person who uses evil ways to deceive others.
D) A person who is corrupt and manipulative.

3.Pick the option that enumerates what 'noble natures' would include.

1. Selflessness
2. Insensitivity
3. enthusiasm
4. aggression
5. meticulousness
6. judiciousness

A) 1, 4 and 5
B) 2, 3 and 6
C) 2, 4 and 5
D) 1, 3 and 6

4. Based on the poem, choose the correct option with reference to the two statements given below.
Statement 1: The earth without the beautiful things is a place full of despair and unpleasantness.
Statement 2: The ornate band created by human beings; ushers hope in their lives.

A) Statement 1 is true but Statement 2 is false.
B) Statement 1 is false but Statement 2 is true.
C) Both Statement 1 and Statement 2 can be inferred.
D) Both Statement 1 and Statement 2 cannot be inferred.

Extract B

Rich with a sprinkling of fair musk-rose blooms; And such too is the grandeur of the dooms We have imagined for the mighty dead; All lovely tales that we have heard or read; An endless fountain of immortal drink, Pouring unto us from the heaven's brink.

I. Pick the quote that matches best with— 'And such too is the grandeur of the dooms we have imagined for the mighty dead.'

a) In the night of death, hope sees a star, and listening love can hear the rustle of a wing.
b) When a great man dies, for years the light he leaves behind him, lies on the paths of men.
c) Endings are not always bad; most times they're just beginnings in disguise. d) Cowards die many times before their death; the valiant never taste of death but once.

ii. Pick the option that refers to what 'an endless fountain of immortal drink' suggests.

1. Inspirational deeds of great men
2. A ceaseless series of dreams
3. An infinite source of strength
4. An elixir of life for upliftment of the soul.
5. An eternal source of delight
6. A boundless gift of love

a) 1, 4 and 5
b) 2, 3 and 5
c) 1, 2 and 6
d) 2, 4 and 6

iii Pick the option that pairs the TRUE statements based on the extract, from the list below.

1. The bushes with fragrant flowers lift the human spirit and bring joy.
2. Death is inevitable and everyone faces it no matter how powerful.
3. Immortality is achieved by man when he drinks the nectar of joy.
4. Legendary heroes and their heroic deeds instil inspiration in us.

a) 1 and 2

2 and 4

c) 1 and 4

d) 2 and 3

iv Pick the option that uses the same literary device as the 'mighty dead'.

a) Sleepless nights
b) Deafening silence
c) Glaring lights
d) Time is a thief

SUBJECT: PHYSICS

1. Complete activity file as per instructions given in class.
2. Complete practical file as per instructions given in class.
3. Make an investigatory project as per instructions given in class.

SUGGESTED INVESTIGATORY PROJECTS (CLASS XII)

1. To find resistance of different materials using Ohm's law.
2. To study the variation in resistance of materials by varying the temperature condition.
3. To find refractive index of different liquids using hollow prism.
4. To verify the laws of series/parallel combination of resistance using dough.
5. To study the factors on which magnetic field strength of a magnetic material depends.
6. To study the diffraction pattern by varying different factors like aperture width, distance between slit and screen etc.
7. To show the motion of charged particles in the presence of mutually perpendicular uniform magnetic and electric field.
8. To design a telescope and study the variation in magnifying power by varying different factors.
9. To find resistivity of different materials like cu, al etc by using Metre Bridge.
10. To estimate the nature of force between different charged bodies using tennis/pith balls.
11. To design gold leaf electroscope and compare the degree of charge between different charged bodies.
12. To investigate the relation between the ratio of input and output voltage based on number of turns in transformer.
13. To study various factors like temperature/concentration/area etc on which the internal resistance /EMF of a cell depends.
14. To study the factor on which the self-inductance of a coil depends.
15. To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
16. To design an appropriate logic gate combination for a given truth table.
17. To find the refractive indices of (a) water (b) oil using a plane mirror, an equi convex lens and an adjustable needle.
18. To investigate the electric field on equatorial line of electric dipole using ballons.

SUBJECT: CHEMISTRY

1. COMPLETE YOUR INVESTIGATORY PROJECT WHICH HAS BEEN DISCUSSED IN THE CLASS.
2. REVISE ENTIRE SYLLABUS WHICH HAS COMPLETED IN THE CLASS.
3. DO NCERT EXERCISE IN YOUR CLASS WORK REGISTER.

SUBJECT: BIOLOGY

1. Revise unit I of NCERT book. Write down questions given in NCERT book at the back of the chapter.
2. Complete Biology project file.
3. Complete the following experiments in the practical file. Get the details of the file from your subject teacher
   Experiments to be completed in practical notebook

(Students should write the following experiment in given sequence only)

1. Prepare a temporary mount to observe pollen germination.
2. Flowers adapted to pollination by different agencies (wind, insects, birds).
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper).
4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
5. Controlled pollination - emasculation, tagging and bagging.
6. T.S. of blastula through permanent slides (Mammalian).
7. Prepare a temporary mount of onion root tip to study mitosis.
8. Isolate DNA from available plant material (banana/papaya/strawberry).
9. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
10. Common disease causing organisms like Ascaris, Entamoeba, Plasmodium, any fungus causing ringworm through permanent slides, models or virtual images or specimens. Comment on symptoms of diseases that they cause.
11. Study the plant population density by quadrat method.
12. Study the plant population frequency by quadrat method.
13. Models specimen showing symbolic association in root modules of leguminous plants, Cuscuta on host, lichens.
14. Flash cards models showing examples of homologous and analogous organs.

Things to take care while preparing the file

1. Write Aim, Principle, Requirements, Procedure, Result and Precautions on Right Hand Page (Ruled Page) of your file.
2. Observation Table, Diagrams, Graph, should be on the Left-Hand Page (Blank Sheet) Each and every diagram should be well labeled and drawn with pencil only.

SUBJECT: COMPUTER SCIENCE

Do all programs in CS Notebook.

Program 1: Program to enter two numbers and print the result of arithmetic operations like +,-,*,/, // and %.

Program 2: Write a program to find whether an inputted number is perfect or not.

Program 3: Write a Program to check if the entered number is Armstrong or not.

Program 4: Write a Program to find factorial of the entered number.

Program 5: Write a Program to enter the number of terms and to print the Fibonacci Series.

Program 6: Input any number from user and check is it Prime no. or not

Program 7: Write a program to find the occurrence of any word in a string

Program 8: Write a menu driven program to check that the entered string is a palindrome or not, to reverse the original string and to print each word of the original string in reverse order.

Program 9: Program to implement all user defined functions of a list

Program 10: Program to perform following logical operation on List.
1. Linear search
2. Find highest element in a list
3. Exchange first half with second half of a list
4. Sort List using bubble sort

SUBJECT: PHYSICAL AND HEALTH EDUCATION

Record File Work/ Lab Manual Health and Physical Eucation of any writer

Record file shall include :-
i)   Complete details (since beginning till date) of *any one game* of your choice out of the given list: (Approved by Indian Olympic Association)

Basketball, Football, Kabaddi, Kho-Kho, Badminton, Taekwondo, Volleyball, Handball etc.

(Labelled diagram of Field & Equipment, Rules, Terminologies & Skills)
   ii) Fitness test administration. (SAI Khelo India Test) administration for all items.
      1. Age groups 5 – 8 yrs/ class 1-3 : BMI, Flamingo Balance Test, Plate Taping Test.
      2. Age groups 9 -18 yrs/ class 4 – 12 BMI, 50mt. Speed Test. 600mt Run/Walk, Sit and Reach flexibility test, Strength Test (Abdominal Partial Curl Up, Push Ups for boys , Modified Push ups for girls).
   iii) Detailed procedure for Asanas, Benefits & contradiction for any Two Asanas for each given lifestyle diseases :   Obesity, Diabetes, Hypertension, Asthma and Back Pain & Arthritis.
(You can take the help of your textbook/ YouTube or Google)

Note:- Students please paste/ draw relevant pictures of each topic.

Mathematics – XII

1. Using matrices, solve the following system of equations :

   (i) $x - y + 2z = 7$
   $3x + 4y - 5z = -5$
   $2x - y + 3z = 12.$

   (ii) $x + y - z = 3$
   $2x + 3y + z = 10$
   $3x - y - 7z = 1$

   (iii) $4x + 3y + 2z = 60$
   $x + 2y + 3z = 45$
   $6x + 2y + 3z = 70$

   (iv) $x + 2y + z = 7$
   $x + 3z = 11$
   $2x - 3y = 1$

   (v) $\frac{2}{x} + \frac{3}{y} + \frac{10}{z} = 4$
   $\frac{4}{x} - \frac{6}{y} + \frac{5}{z} = 1$
   $\frac{6}{x} + \frac{9}{y} - \frac{20}{z} = 2$

   (vi) $\frac{2}{x} - \frac{3}{y} + \frac{3}{z} = 10$
   $\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = 10$
   $\frac{3}{x} - \frac{1}{y} + \frac{2}{z} = 13$

   (vii) $x - y + 2z = 1$;
   $2y - 3z = 1$
   $3x - 2y + 4z = 2$

   (viii) $3x - 2y + 3z = 8$
   $2x + y - z = 1$
   $4x - 3y + 2z = 4$

   (ix) $3x + 4y + 7z = 4$
   $2x - y + 3z = -3$
   $x + 2y - 3z = 8$

   (x) $2x - 3y + 5z = 11$
   $3x + 2y - 4z = -5$
   $x + y - 2z = -3$

   (xi) $4x - 5y - 11z = 12$
   $x - 3y + z = 1$
   $2x + 3y - 7z = 2$

   (xii) $x + 2y + z = 4$
   $-x + y + z = 0$
   $x - 3y + z = 4$

2. Find A^{-1}, where $A = \begin{bmatrix} 1 & 2 & -3 \\ 2 & 3 & 2 \\ 3 & -3 & -4 \end{bmatrix}$. Hence , solve the system of equations

   $x + 2y - 3z = -4$, $2x + 3y + 2z = 2$, $3x - 3y - 4z = 11$

3. If $A=\begin{bmatrix} 1 & -2 & 1 \\ 0 & -1 & 1 \\ 2 & 0 & -3 \end{bmatrix}$, then find A^{-1} and hence solve the following system of equations

$$x - 2y + z = 0, \quad -y + z = -2, \quad 2x - 3z = 10$$

4. If $A=\begin{bmatrix} 8 & -4 & 1 \\ 10 & 0 & 6 \\ 8 & 1 & 6 \end{bmatrix}$, then find A^{-1} and hence solve the following system of equations

$$8x - 4y + z = 5, \quad 10x + 6z = 4, \quad 8x + y + 6z = \frac{5}{2}$$

5. If $A=\begin{bmatrix} 1 & -1 & 1 \\ 2 & 1 & -3 \\ 1 & 1 & 1 \end{bmatrix}$, then find A^{-1} and hence solve the following system of equations

$$x + 2y + z = 4, \quad -x + y + z = 0, \quad x - 3y + z = 2$$

6. Use product $\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix}\begin{bmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{bmatrix}$ to solve the system of equations

$$x - y + 2z = 1, \quad 2y - 3z = 1, \quad 3x - 2y + 4z = 2.$$

7. Determine the product of $\begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix}\begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$ and then use to solve the system off

$$x - y + z = 4, \quad x - 2y - 2z = 9, \quad 2x + y + 3z = 1.$$