English:

INSTRUCTION :

1.Summer Holiday Homework is to be done in English Home-Work Notebook only.

2.HW notebook is to be submitted for marking on the day the school reopens after vacation.

3. A copy of this assignment page should be pasted in the Home-work notebook.

VISTAS. (Supplementary Reader)

Do self study of Chapters marked .Write down Central theme of each chapter & Solve the questions given below.

CH 2.- Tiger King

1. Who was the Tiger King and how did he get this name?

2. What kind of life was enjoyed by crown prince Jung Bahadur till he reached the age of twenty?

3. What did the Maharaja do to find the required number of tigers to kill?

4. Did the Tiger King actually kill the 100th tiger?

5. How did the Tiger King die?

CH 3– Journey to the end of the earth.

Q1. 'The world's geological history is trapped in Antarctica'. How is the study of this region useful to us?

Q 2. What was the first reaction of the writer when she set foot in Antarctica?

Q 3.Why is a visit to Antarctica important to realise the effect of global warming?

Q 4. What are Geoff Green's reasons for including high school students in the 'Students on Ice' expedition ?

Q5. Take care of small things and the big things will take care of themselves.' What is the relevance of this statement in the context of the Antarctic environment ?

CH 4- The Enemy

Q 1 : What was his father's chief concern for Sadao?

Q 2 : Why was DrSadao not sent abroad along with the troops?

Q 3 : Why did the General overlook the matter of the enemy soldier?

Q 4 : Why did DrSadao treat the American solider even though, it was an unpatriotic act on his part?

Q 5 : How did DrSadao plan the American prisoner's escape?

CH 6- On the face of it.

Q.1. Why do kids call Mr. Lamb 'Lamey-Lamb'? How does he feel about it?

Q.2. Why did Derry develop an inferiority complex?

Q.3. How did Mr. Lamb try to give courage and confidence to Derry?

Q.4. In which section of the play does Mr. Lamb display signs of loneliness and disappointment? What are the ways in which Mr Lamb tries to overcome these feelings? Q.5 Why does Derek return to Mr. Lamb's garden?

CH 8- Memories of Childhood.

Q1 Why did Zitkala-Sa feel uncomfortable in the dining room?

Q2. What is common between Zitkala-Sa and Bama?

Q3. What were the articles in the stalls and shops that fascinated Bama on her way back from school?

Q4. Why was Zitkala-Sa terrified when Judewin told her that her hair would be cut short? Q5. Which words of her brother made a deep impression on Bama?

Advanced Writing Skills

Q. You are Ravi/Rina of 10, Rajpur Road, Dehradun. The 60 ft wide main road at Dilaram Bazar remains congested throughout the day, because of massive encroachments on both sides of the road, causing a lot of inconvenience to pedestrians, especially children and women. Write a letter in 120 -150 words to the editor of a local daily requesting him to highlight the problems faced by the residents, giving concrete suggestions for improving the situation.

ASL Topics for speaking assessment: Write a short speech on the following :

1. What I would like to do to be famous in the world

2. A childhood memory still fresh in my mine

3. An awkward situation I once found myself in
4. A journey that I would like to make/ go on
5. Why I think my school is cool
6. What I will be ten years from now
7. A leader I'm inspired by
8. Why I like / hate to read newspaper
9. A work of charity that I do/ would like to do
10. My strength and weakness

Hindi :

1–हरिवंशराय बच्चन के व्यक्तित्व और कृतित्व पर प्रकाश डालते हुए सचित्र एक आकर्षक परियोजना तैयार कीजिए।

2–स्त्री–अस्मिता की संघर्षपूर्ण आवाज के रूप में पढ़े गए पाठ भक्तिन के आधार पर नारी सशक्तिकरण को आकर्षक परियोजना द्वारा अभिव्यक्त कीजिए।

3–<u>पत्रकारिता के विविध आयाम</u>–परियोजना कार्य

निर्देश–

परियोजना का –

प्रथमपृष्ठ–विद्यार्थी का नाम, कक्षा अनुक्रमांक, विद्यालय का नाम

द्वितीयापृष्ठ–आभार ज्ञापन

तृतीयापृष्ठ–प्रमाणपत्र

चतुर्थपृष्ठ–अनुक्रमाणिका

पंचमपृष्ठ–प्रस्तावना

षष्ठम् पृष्ठ–सम्पूर्ण चित्राकर्षक परियोजना

अन्तिमपृष्ठ–संदर्भग्रन्थ

<u>निर्देश–सम्पूर्ण कार्य आन्तरिक मूल्याकंन के अन्तर्गत जाँचा जायेगा।</u>

Mathematics:

(A) WORKSHEETS , (TO BE SOLVED IN THE MATHS HOMEWORK NOTEBOOKS)

CHAPTER -2

1. The inverse of cosine function is defined in the interval
    (a) $[-\pi, 0]$ (b) $[\frac{-\pi}{2}, 0]$ (c) $[0, \frac{\pi}{2}]$ (d) $[\frac{\pi}{2}, \pi]$

2. The domain of the function $\cos^{-1}(2x - 1)$ is
    (a) $[0, 1]$ (b) $[-1, 1]$ (c) $(-1, 1)$ (d) $[0, \pi]$

3. The domain of the function defined by $f(x) = \sin^{-1}\sqrt{x - 1}$ is
    (a) $[1, 2]$ (b) $[2, 1]$ (c) $[-1, 1]$ (d) $[0, 1]$

4. The principal value of $\sec^{-1}\frac{2}{\sqrt{3}}$ is
    (a) $\frac{\pi}{3}$ (b) $\frac{\pi}{6}$ (c) $\frac{-\pi}{3}$ (d) $\frac{2\pi}{3}$

5. If $\tan^{-1}\frac{3}{4} = A$ then $CosA = \frac{3}{5}$
    (a) *True*   (b)   *False*   (c)   *cannot say*   (d)   *partially true*

6. The value of $\tan^{-1}\left|2\sin\left(2\cos^{-1}\frac{\sqrt{3}}{2}\right)\right|$ is
    (a) $\frac{\pi}{3}$ (b) $\frac{\pi}{6}$ (c) $\frac{-\pi}{3}$ (d) $\frac{2\pi}{3}$

7. The value of $\sin^{-1}\frac{1}{2} + \tan^{-1}\frac{1}{\sqrt{3}}$ is
    (a) $\frac{\pi}{3}$ (b) $\frac{\pi}{6}$ (c) $\frac{-\pi}{6}$ (d) $\frac{2\pi}{3}$

8. The value of $\sin\left|\frac{\pi}{3} + \sin^{-1}\frac{1}{2}\right|$ is

(a) 0   (b) 2   (c) 1   (d) 4

9. The value of $\tan^{-1}\left(\frac{1}{\sqrt{3}}\right) + \cot^{-1}\left(\frac{1}{\sqrt{3}}\right) + \tan^{-1}\left(\sin\left(\frac{\pi}{2}\right)\right)$ is

(a) $\frac{\pi}{3}$ (b) $\frac{\pi}{6}$ (c) $\frac{3\pi}{3}$ (d) $\frac{\pi}{12}$

10. If $\sin^{-1}x = y$, then $\frac{-\pi}{2} \leq y \leq \frac{\pi}{2}$

(a) True   (b) False   (c) cannot say   (d) partially true

11. For the value $x = \sqrt{3}$, $\sin^{-1}\frac{1}{2} = \tan^{-1}x$

(a) True   (b) False   (c) cannot say   (d) partially true

12. If $4\cos^{-1}x + \sin^{-1}x = \pi$ then value of x is

(a) $\frac{3}{2}$ (b) $\frac{1}{\sqrt{2}}$ (c) $\frac{\sqrt{3}}{2}$ (d) $\frac{2}{\sqrt{3}}$

13. The value of $\sin\left(\frac{1}{4}\sin^{-1}\frac{\sqrt{63}}{8}\right)$ is

(a) $\frac{1}{2\sqrt{2}}$ (b) $\frac{1}{\sqrt{2}}$ (c) $\frac{1}{\sqrt{3}}$ (d) $\frac{1}{3\sqrt{3}}$

14. $\tan^{-1}\frac{1}{11} + \tan^{-1}\frac{2}{11}$ is equal to

(a) 0   (b) $\frac{1}{2}$ (c) -1 (d) none of these

15. $\tan^{-1}3 + \tan^{-1}x = \tan^{-1}8$ then x=

(a) 5   (b) $\frac{1}{5}$ (c) $\frac{5}{14}$ (d) $\frac{14}{5}$

16. if $\tan^{-1}\frac{x+1}{x-1} + \tan^{-1}\frac{x-1}{x} = \tan^{-1}(-7)$ then value of x is

(a) 0   (b) -2 (c) 1   (d) 2

17. The value of $\sin(2(\tan^{-1}0.75))$ is equal to

(a) 0.75   (b) 1.5   (c) 0.96   (d) $\sin^{-1}1.5$

18. The value of $\tan\left(\cos^{-1}\frac{3}{5} + \tan^{-1}\frac{1}{4}\right)$ is

a) $\frac{19}{8}$ (b) $\frac{8}{19}$ (c) $\frac{19}{12}$ (d) $\frac{3}{4}$

19. $\cot\left(\frac{\pi}{4} - 2\cot^{-1}3\right) =$

(a) 5   (b) 6   (c) 7   (d) none of these

20. if $\tan^{-1}(\cot\theta) = 2\theta$ then $\theta=$

(a) $\pm\frac{\pi}{3}$ (b) $\pm\frac{\pi}{6}$ (c) $\pm\frac{\pi}{4}$ (d) none of these

....

CHAPTER 5

1. Show that the fun $f(x) = 2x - |x|$ is continuous at x=0.

2. If $(x) = \frac{\sqrt{2}\cos x - 1}{\cot x - 1}$, $x \neq \frac{\pi}{4}$, find the value of $f\left(\frac{\pi}{4}\right)$ sothat fun f(x) becomes continuous at x=$\frac{\pi}{4}$

3. Show that $f(x) = |x|$ is not differentiable at x=0.

4. If $f(x) = \begin{cases} x^2 + 3x + a, & \text{for } x \leq 1 \\ bx + 2, & \text{for } x > 1 \end{cases}$ is everywhere differentiable, find the values of a and b.

5. if $f(x) = |\cos x|$, find $f'\left(\frac{\pi}{4}\right)$ and $f'\left(\frac{3\pi}{4}\right)$

6. Differentiate with respect to x (i) $\log_x 7(\log x)$ (ii) $\log_7 x(\log 7)$

7. If $\sqrt{1-x^6} + \sqrt{1-y^6} = a(x^3 - y^3)$, Prove that $\frac{dy}{dx} = \frac{x^2\sqrt{1-y^6}}{y^2\sqrt{1-x^6}}$

8. If $x^m y^n = (x+y)^{m+n}$, prove that $\frac{dy}{dx} = \frac{y}{x}$

9. Differentiate with respect to x $x = \frac{1+\log t}{t^2}$, $y = \frac{3+2\log t}{t}$

10. Differentiate $x^{\sin^{-1}x}$ with respect to $\sin^{-1}x$

11. If $y^3 - y = 2x$, prove that $\frac{d^2y}{dx^2} = \frac{24y}{(3y^2-1)^3}$

12. $if\ x = a\cos\theta + b\sin\theta\ and\ y = a\sin\theta - b\cos\theta$, prove that $y^2\dfrac{d^2y}{dx^2} - x\dfrac{dy}{dx} + y = 0$

13. $If\ x = a\sin t - b\cos t, y = a\cos t + b\sin t$, prove that $\dfrac{d^2y}{dx^2} = -\dfrac{x^2+y^2}{y^3}$

14. If $y = \dfrac{\log x}{x}$, show that $\dfrac{d^2y}{dx^2} = \dfrac{2\log x - 3}{x^3}$

15. If $y = 2\sin x + 3\cos x$, show that $\dfrac{d^2y}{dx^2} + y = 0$.

Chapter: 3 AND 4

Q1. Write the value of x + y + z if $\begin{vmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{vmatrix}\begin{vmatrix} x \\ y \\ z \end{vmatrix} = \begin{vmatrix} 1 \\ -1 \\ 1 \end{vmatrix}$

Q2. A matrix A of order 3x3 has determinant 5 .What is the value of $|3A|$

Q3 Write the inverse of the matrix $\begin{vmatrix} \cos x & \sin x \\ -\sin x & \cos x \end{vmatrix}$

Q4 If A-1 = $\begin{vmatrix} 3 & -1 & 1 \\ -15 & 6 & -5 \\ 5 & -2 & 2 \end{vmatrix}$ and B = $\begin{vmatrix} 1 & 3 & 2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{vmatrix}$ find $(AB)^{-1}$

Q5. Solve the following system of equation using matrix method :

$\dfrac{2}{x} + \dfrac{3}{y} + \dfrac{10}{z} = 4,\ \dfrac{4}{x} - \dfrac{6}{y} + \dfrac{5}{z} = 1,\ \dfrac{6}{x} + \dfrac{9}{y} - \dfrac{20}{z} = 2$

Q6 Find the inverse of the following matrix A = $\begin{vmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{vmatrix}$

Q7. If A = $\begin{vmatrix} 2 & 0 & -1 \\ 5 & 1 & 0 \\ 0 & 1 & 3 \end{vmatrix}$ Prove that $A^{-1} = A^2 - 6A + 11\ I$.

Q8. For what value of K, do the equations 2x- 3y+2z = a, 5x + 4y − 2z = -3, x -13y +kZ= 9, not have a unique solution?

Q9. If A = $\begin{vmatrix} 3 & -2 & 1 \\ 2 & 1 & -3 \\ -1 & 2 & 1 \end{vmatrix}$ find A^{-1} and use it to solve the following equations

3x-2y+z= 2, 2x+y-3z= -5, -x+2y +z = 6.

Q10. Prove that if A is a skew symmetric matrix of odd order n then IAI = 0. values of x for which .

Q11. Find the equation of line joining (3, 1) and (9, 3) using determinants.

Q12 find A^{-1}, using A-1 solve the system of equations

2x − 3y + 5z = 11

3x + 2y − 4z = -5

x + y -2z = -3

Q13 Solve by matrix method

x − y + z = 4

2x + y − 3 z = 0

x + y + z = 2

Q14 Find the equation of the line joining A (1, 30 and B (0, 0) using det. Find K if D (K, 0) is a point such then area of ABC is 3 square unit

....

(B):- THE STUDENTS HAVE TO PREPARE MATHS ACTIVITY FILE THE INTERNAL ASSSESSMENTS IN MATHEMATICS, AS PER THE GUIDELINES ISSUED BY CBSE.

GUIDELINES AND INSTRUCTIONS FOR PREPARING THE ACTIVITY FILE:

➢ The activities should be done in a loose ruled project sheets and fixed in a stick file.
➢ It should contain the following in the order
- INDEX
- ACKNOWLEDGEMENT
- The figures should be drawn with pencil.
- The headings should be written in black in and the content in blue ink.
- Use the graph sheets wherever required.
- Color pencil and pen can be used.
- Mention NAME OF THE SCHOOL, your NAME, CLASS AND SECTION, SUBJECT and SESSION in the activity file.
- Prepare a neat and clean creative activity file.

NOTE: THE PDF OF THE ACTIVITIES TO BE COMPLETED WIL BE SHARED IN THE CLASS WHATASPP GROUPS BY THE SUBJECT TEACHER.

THE HOLIDAY HOMEWORK HAS TO BE SUBMITTED AFTER THE SUMMER VACATIONS.

PHYSICS:

1. Prepare an investigatory project report on any one topic out of the following-
   a) Gauss's Law and its Applications
   b) Dielectric and Polarisation
   c) Parallel Plate Capacitor
   d) Combination of Capacitors in Series and Parallel
   e) Electric Dipole and Electric field due to Dipole at Axial Point and Equatorial point
   f) Wheat Stone Bridge and its Applications
   g) Cells, Emf, Internal Resistance and Combinations in Series and Parallel
   h) Kirchhoff's Law
   i) Solenoid
   j) Moving Coil Galvanometer
   k) The Earth Magnetism
   l) Self Inductance and Mutual Inductance
   m) A.C. Generator
   n) A.C Voltage applied for a series LCR Circuit.
   o) Transformers
   p) Electromagnetic Waves and its Property
   q) Huygen's Principle and its Applications
   r) Microscope and Telescope
   s) Semi Conductor and its Types
   t) Full wave and Half wave Rectifier
   u) P-N Junction Diode and its Applications

Instructions :

(i) The project report should be handwritten in A-4 size Project sheets.

(ii) The project report should be of 25-30 pages.

(iii) The project report should be presented in the following order:

   a) Cover page showing name of school, title of the project, name of subject, academic session, student information and name of the guide teacher along with his/her designation.
   b) Certificate
   c) Acknowledgement
   d) Index
   e) Content with relevant headings
   f) Summary and conclusion based on findings
   g) Bibliography/References

(iv) Credit will be awarded to the original drawings and illustrations and creative use of materials.

(v) All photographs and sketches should be labelled and acknowledged.

(vi)   Check the relevant content and References from different books and web sites.

2. **Following Activities to be written in the activity file from lab manual :**

i) To assemble the components of a given electrical circuit.

ii) To assemble a household circuit comprising three bulbs, three switches, a fuse and a power source.

iii) To draw the diagram of a given open circuit comprising at least a battery, resistor/ rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

iv) To identify a diode, a L.E.D, a transistor, an IC, a resistor and a capacitor from mixed collection of such items.

v) To observe diffraction of light due to thin slit between sharp edges of two razor blades.

vi) To study the nature and size of the image formed by a convex lens, on a screen by using a candle and a screen.

Instructions :

(i)   Separate Practical File to be made for the activity.

(ii)   Following sequence to be followed – (a) Aim   (b) Apparatus   (c) Formula used   (d) Procedure (e) Result   (f) Precaution   (g) Sources of error

(iii)   Circuit diagram to be made by the pencil.

Chemistry :

Prepare an Investigatory project report on any ONE of the following topics :

• Study of the presence of oxalate ions in guava fruit at different stages of ripening.

• Study the quantity of casein present in different samples of milk.

• Preparation of soybean milk and its comparison with natural milk with respect to curd formation, the effect of temperature, etc.

• Study of the effect of Potassium Bisulphate as a food preservative under various conditions (temperature, concentration, time, etc.)

• Study of digestion of starch by salivary amylase and effect of pH and temperature on it.

• Comparative study of the rate of fermentation of the following materials: wheat flour, gram flour, potato juice, carrot juice, etc.

• Extraction of essential oils present in Saunf (aniseed), Ajwain (carum), Illaichi (cardamom).

• Study of common food adulterants in fat, oil, butter, sugar, turmeric power, chilli powder and pepper.

• **Any other topic related to the syllabus.**

Instructions:

(i)   The project report should be handwritten in A-4 size (Interleaf) Project sheets.

(ii)   The project report should be of 25-30 pages.

(iii)   The project report should be presented in the following order:

   (a) Cover page showing name of school, title of the project, name of subject, academic session, student information and name of the guide teacher along with his/her designation.

   (b) Certificate

   (c) Acknowledgement

   (d) Index

   (e) Content with relevant headings

   (f) Summary and conclusion based on findings

   (g) Bibliography/References

(iv)   Credit will be awarded to the original drawings and illustrations and creative use of materials.

(v)   All photographs and sketches should be labelled and acknowledged.

Biology:

Prepare an investigatory project report on any one topic out of the following-

Antibiotics and their effects on humans/ Covid-19 and its effects/Alcohol and Drug abuse amongst adolescents and its control/Smoking and its ill effects/DNA Fingerprinting/ Human Genome Project/Amniocentesis and Female foeticide/ Conservation of wetlands (Ramsar sites)/Forest and wildlife conservation/Sacred groves/Threatened species and their conservation/ Genetically modified Organisms (Study of GM Plants and Transgenic Animals)/*Bacillus thuringiensis*/ Infertility in humans / IVF Technology /Test tube baby programme/Various Contraceptive devices/Study of Human Population and its control/Menstrual hygiene/ Sexually Transmitted Diseases/ Ectopic pregnancy/ Polycystic Ovaries/Pelvic Inflammatory diseases/ Maternal and Child Health Care(Prenatal and post natal care of mother and child)/Breast Cancer/Thalassemia/Haemophilia/Colour blindness/Sickle-cell anaemia/Gene Therapy/Down's Syndrome/ Plastic waste and its remedy/ AIDS/Breast Cancer/Uterine cancer/Brain Tumour/Child immunisation Programme/Vaccination Programme against COVID-19 in India/Ascariasis in children/ Amoebiasis/ Elephantiasis/ Ringworm/ Typhoid/ Pneumonia/ Malaria/ Allergies/Rheumatoid Arthritis-an auto- immune disease/Human Evolution/Maintenance of Aquarium/Assisted Reproductive Technologies/Organic Farming/Mendelian and Chromosomal Disorders/Human Health and Hygiene/Study of Antibiotics on the micro-organisms/Pollination in flowers/Microbes in Human welfare/Invasive weeds in India/Application of Biotechnology in Agriculture/Ecosystem and its components.

Instructions:

i) The project report should be handwritten in A-4 size Project sheets.

ii) The project report should be of 25-30 pages

iii) The project report should be presented in the following order:

   a) Cover page showing name of school, title of the project, name of subject, academic session, student information and name of the guide teacher along with his/her designation.
   b) Certificate
   c) Acknowledgement
   d) Index
   e) Content with relevant headings
   f) Summary and conclusion based on findings
   g) Bibliography/References

iv) Credit will be awarded to the original drawings and illustrations and creative use of materials.

v) All photographs and sketches should be labelled and acknowledged.

vi)   Check the relevant content and References from different books and web sites.

History :

1 Collect the data on any ONE of the following topics:

(a) Town planning and artifacts of the Harappan civilization

(b) Mahabharata through a Readers eye

(c) Magadha

*Guidelines: -

-- Students can use primary sources available in books, newspaper cuttings, Internet etc.

GENERAL GUIDELINES:

➤Students have to preserve the initial drafts of the project as well as any research papers that they may have

used.

➤Students have to be prepared to give a presentation of the project in the class.

➢A summary/synopsis (one page) of the project has to be prepared covering:
➢The objective statement

Political Science:

As per CBSE guidelines, students of Class XII have to submit a handwritten project on **any one** of the following topics on:

1. India and its relation with the neighboring countrles.
2. United Nations Organizations.
3. Non Aligned Movement.
4. European Union, SAARC and ASEAN.
5. Economic growth of China Vs India.

General Instructions:

1. The project should be hand written.
2. It should be well presented, researched, and pictorial.
3. Cover page, table of contents, acknowledgements, bibliography, headings and sub – headings, teacher's observation and student's observation are a must.
4. The project should be presented in a file or get your project spiral bound.
5. The project should **not exceed 25 pages**.

Geography :

1. Prepare maps in accordance to the list provided by the subject teacher.
2. Do the Question Answers of Chapter-1 and Chapter- 2 (Practical Book) in the Practical File

Economics : As per CBSE guidelines for the session 2023-24 the students will prepare a project work on any **ONE** of the following topics :

Suggestive list of Projects :-

* Micro and Small Scale Industries
* Goods & Services Tax Act and its impact on GDP
* Self Help Group
* Exchange Rate Determination- Methods & Techniques
* Sarva Shiksha Abhiyan – Cost Ratio Benefit
* Digital India- Step Towards the future
* Make in India- The way Ahead
* Monetary Policy Committee and its functions
* Waste Management in India – Need of the hour
* Role of RBI in Control of Credit
* Currency War
* Golden Quadrilateral- Cost Ratio Benefit
* Relation between Stock Price Index and Economic Health of Nation
* Minimum Wage Rate-Approach and Application
* Rain Water Harvesting- A Solution to Water Crises
* Bumper Production- Boon or Bane for the Farmer
* Sri Lanka Economic Crisis
* New Education Policy 2020
* Sustainable development Goals

* Contemporary Employment Situation in India
* Human Development Index
* Government Budget and its Components
* Live Stock- Backbone of Rural India
*Organic Farming- Back to the Nature
* Vertical Farming- An alternate way
* Rise of Concrete Jungle- Trend Analysis
* Minimum Support Prices
* Food Supply Channel in India
* Trends in Budgetary Condition of India
*Alternative Fuels Types and Importance
* Silk Route- Revival of the Past

* Aatmnirbhar Bharat

* Environmental Crisis
* e- Rupee (e-Rs)

** * Any other newspaper articles and its evaluation on basis of Economic Principles**

Guidelines for Presentation of the Project:

* Introduction of topic/ title.
* Identifying the causes, consequences and remedies.
* Various stakeholders and effects on each of them.
* Advantages and disadvantages of situations or issues identified.
* Short term and long term implications of economic strategies.
* Presentation and writing that is succinct and coherent in project file.

The Project should include the following details:

a) The total length of the project report should be 3500-4000, words (excluding diagrams and graphs).

b) The project work should be hand written and credit will be given to original drawing.

c) It should be presented in a neatly bound simple project file. The project should be developed and presented in the following order :

    i)   Cover page showing project title, student information, school and year.
    ii) List of contents with page number.
    iii) Certificate page
    iv) Acknowledgement
    v)   Summary and Conclusion
    vi) Bibliography

Account Do the following Assignment

1   Ritesh and Hitesh are childhood friends. Ritesh is a consultant whereas Hitesh is an architect. They contributed equal amounts and purchased a building for 2 crores. After a year, they sold it for ☐ 3 crores and shared the profits equally. Are they doing the business in partnership? Give reason in support of your answer. **1**

2   What is meant by Fixed Capital of partners? **1**

3   What is meant by Partnership Deed? **1**

4   Give the average period in months for charging interest on drawings for the same amount withdrawn at the beginning of each quarter. **1**

5   What share of profits would a "sleeping partner", who has contributed 75% of the total capital, get in the absence of a deed? **1**

6   Mohit and Rohit were partners in a firm with capitals of ☐ 80,000 and ☐ 40,000 respectively. The firm earned a profit of ☐ 30,000 during the year. Mohit's share in the profit will be: **1**
    (i)   ☐ 20,000 (ii) ☐ 10,000   (iii) ☐ 15,000   (iv) ☐ 18,000

7   The interest on Partner's Capital accounts is to b credited to......... **1**
    (i)   Profit & Loss A/c   (ii) Interest A/c
    (iii) Partner's Capital A/c   (iv) None of these

8   X has given a loan of ☐ 50,000 to the firm. He claims 10% p.a. interest. Is his claim valid in case partnership deed is silent in his matter? **1**

9   Which one of the following items cannot be recorded in the profit and loss appropriation account? **1**
    (i)   Interest on Capital (ii) Interest on Drawings (iii)Rent paid to Partners (iv) Partner's Salary

10 Net profit of a firm is ☐ 79,800. Manager is entitled to a commission of 5% of profits after charging his commission. Manager's commission will be: **1**
    (i)   ☐ 4,200   (ii) ☐ 380 (iii) ☐ 3,990   (iv) ☐ 3,800

11 On 1-4-2021, Jay and Vijay, entered into partnership for supplying laboratory equipments to government schools situated in remote and backwards areas. They contributed capitals of ☐ 80,000 and ☐ 50000 respectively and agreed to share the profits in the ratio of 3:2. The partnership deed provided that interest on capital shall be allowed at 9% p.a. During the year, the firm earned a profit of ☐ 7,800. **3**
    Showing your calculations clearly, prepare 'Profit and Loss Appropriation Account' of Jay and Vijay for the year ended 31-3-2022.

12 Zee and Vee are partners in a firm. Their capital accounts showed the balance on 1ˢᵗ April, 2017 as ☐ 20,000 and ☐ 15,000 respectively. During the year 2017-18, Zee introduced additional capital of ☐ 10,000 on August 1, 2017 and Vee introduced ☐ 15,000 on 1ˢᵗ October, 2017. Interest on capital is allowed @ 6% p.a. on the capital. Calculate interest on capital of each partner **3**
    The average profit earned by a firm is Rs. 80,000 which includes under valuation of stock of Rs. 8,000 on an average basis. The capital invested in the business is Rs. 8,00,000 and the normal rate of return is 8%. Calculate goodwill of the firm on the basis of 7 times the super profit.

13 A, B and C are partners sharing profits in the ratio of 5:4:1. C is given a guarantee that his share of profits in any given year would be ☐ 5,000. Deficiency if any, would be borne by A and B equally. The profit for the year ended 31st March, 2016 amounted to ☐ 40,000. Pass necessary entries in the books of the firm.

14 The partners of a firm , Alia, Bhanu and Chandu distributed the profits for the year ended 31st **4** March, 2017, ☐ 80,000 in the ratio of 3:3:2 without providing for the following adjustments:
  (i)   Alia and Chandu were entitled to a salary of ☐ 1,500 each p.m.
  (ii) Bhanu was entitled for a salary of ☐ 4,000 p.a.
Pass the necessary Journal entry for the above adjustments in the books of the firm.

PART- IV

15 Moli, Bhola and Raj were partners in a firm haring profits and losses in the ratio of 3:3:4. Their **8** partnership deed provided for the following;
  (i)   Interest on capital @ 5% p.a.
  (ii) Interest on Drawing @ 12% p.a.
  (iii) Interest on partner's loan @ 6% p.a.
  (iv) Moli was allowed an annual salary of ☐ 4,000; Bhola was allowed a commission of 10% of net profit as shown by Profit and Loss Account and Raj was guaranteed a profit of ☐ 1,50,000 after making all the adjustments as provided in the partnership agreement.
  (v)   Their fixed capitals were Moli: ☐ 5,00,000; Bhola: ☐ 8,00,000 and Raj: ☐ 4,00,000. On 1st April, 2016 Bhola extended a loan of ☐ 1,00,000 to the firm. The net profit of the firm for the year ended 31st March, 2017 before interest on Bhola's loan was ☐ 3,06,000.
Prepare Profit and Loss Appropriation account of Moli, Bhola and Raj for the year ended 31st March, 2017 and their Current Accounts assuming that Bhola withdrew ☐ 5,000 at the end o each month. Moli withdrew ☐ 10,000 at the end of each quarter and Raj withdrew ☐ 40,000 at the end of each half year.

16 On March 31st ,2014, the balances in the capitals accounts of Ekta, Ankit and Chahat after making **8** adjustments for profits and drawings were ☐ 1,50,000; ☐ 2,10,000 and ☐ 2,70,000 respectively. Subsequently, it was discovered that the interest on capital and drawings had been omitted.
  1.   The profit for the year ended 31st March, 2014 was ☐ 1,20,000.
  2.   During the year Ekta withdrew ☐ 24,000 and Ankit and Chahat each withdrew a sum of ☐ 24,000 in equal instalments in the middle of each quarter.
  3.   The interest on drawing is to be charged @ 5% p.a. and interest on capital is to be allowed @10% p.a.
  4.   The profit sharing ratio among the partners was 1:2:3.
  5.   Showing your working notes clearly, pass the necessary rectifying entry.

17. Vidit and Seema were partners in a firm sharing profits and losses in the ratio of 3: 2. Their capitals were ☐ 1,20,000 and ☐2,40,000, respectively. They were entitled to interest on capitals @ 10% p.a. The firm earned a profit of ☐ 18,000 during the year. Calculate the amount of interest on Partners' capitals to be shown in P& L Appropriation A/c.   2

18. The capital accounts of Alka and Archana showed credit balances of ☐ 4,00,000 and ☐ 3,00,000 respectively, after taking into account drawings and net profit of ☐ 2,00,000. The drawings of the partners during the year 2018 -19 were:
(i) Alka withdrew ☐ 10,000 at the end of each quarter.
(ii) Archana's drawings were: ☐
31st May, 2018   8,000
1st November, 2018   7,000
1st February, 2019   5,000
Calculate interest on partners' drawings @ 6% p.a. for the year ended 31st March, 2019.2

19. E, F and G are partners sharing profits in the ratio of 3:3:2. As per the partnership agreement, G is to get a minimum amount of Rs.80,000 as his share of profits every year and any deficiency on this account is to be personally borne by E. The net profit for the year ended 31st March, 2020 amounted to Rs. 3,12 ,000. Calculate the amount of deficiency to be borne by E? 2

20. Arun, Shobha and Yuvraj were partners in a firm. On 1st April, 2018 their Fixed Capitals Stood at ☐ 1,00,000, ☐50,000 and ☐ 50,000 respectively. As per the provisions of partnership deed,
(i) Partners were entitled to an annual salary of ☐ 20,000 each.
(ii) Interest on Capital @ 10% p.a. was to be provided.
(iii) Profits were to be shared in the ratio 3: 1: 1. Net profit for the year ended 31st March, 2019 was ☐ 90,000.
Pass Journal Entries for the above in the books of the firm. 3

21. Ram, Mohan and Sohan were partners sharing profits in the ratio of 2: 1: 1. Ram withdrew ☐ 3,000 every month and Mohan withdrew Rs 4,000 every month. Interest on drawings @ 6% p.a. was charged, whereas the partnership deed was silent about interest on drawings.
Showing your working clearly, pass the necessary adjustment entry to rectify the error.   3

22. E, F and G were partners in a firm sharing profits in the ratio of 3:3:4. Their Fixed capitals were ☐ 3,00,000, ☐ 4,00,000 and ☐ 5,00,000 respectively. **The partnership deed provided for allowing interest on capital @ 12% p.a. even if it results into a loss to the firm. The net profit of the firm for the year ended 31st March, 2021 was ☐ 1,10,000.**
Pass necessary journal entries for allowing interest on capital and division of profit/loss in the books of the firm.   3

23. Puneet and Akshara were partners in a firm sharing profits and losses in the ratio of 2:3. The following was the balance sheet of the firm as on 31st March, 2019.
Balance sheet of Puneet and Akshara as on 31st March, 2019.

Liabilities	Amount (☐)	Assets	Amount (☐)
Capitals:		Sundry Assets	2,00,000
Puneet 90,000			
Akshara 1,10,000	2,00,000		
	2,00,000		2,00,000

The profits ☐40,000 for the year ended 31st March, 2019 were divided between the partners without allowing interest on capital @ 5% p.a. and commission to Akshara @ ☐ 1,000 per quarter.
The drawings of the partners during the year were:
Puneet ☐2,500 per month.
Akshara ☐ 10,000 per quarter.
Showing your workings clearly, pass necessary adjustment entry in the books of the firm.   5

24. Yadu, Vidu and Radhu were partners in a firm sharing profits in the ratio of 4: 3: 3. Their fixed capitals on 1st April, 2018 were ☐ 9,00,000, ☐ 5,00,000 and ☐ 4,00,000 respectively. On 1st November, 2018, Yadu gave a loan of ☐ 80,000 to the firm. As per the partnership agreement:
(i) The partners were entitled to an interest on capital @ 6% p.a.
(ii) Interest on partners' drawings was to be charged @ 8% p.a.
The firm earned profits of ☐ 2,53,000 (after interest on Yadu's loan)
during the year 2021-22. Partners' drawings for the year amounted to
Yadu: ☐ 80,000, Vidu: ☐ 70,000 and Radhu: ☐ 50,000.
Prepare Profit and Loss Appropriation Account for the year ending 31st March, 2022.   5

Radhika, Bani and Chitra were partners in a firm sharing profits and losses in the ratio of 2:3:1. With effect from 1st April,2018 they decided to share future profits and losses in the ratio of 3:2:1. On that date their Balance sheet showed a debit balance of Rs.24,000 in profit and loss and a balance of Rs. 1,44,000 in general reserve.It was also agreed that:

(a) The goodwill of the firm be valued at Rs. 1,80,000.

(b) The Land (having book value of Rs. 3,00,000) will be valued at Rs. 4,80,000.

Pass the necessary journal entries for the above changes.

BST :

6. Get up early in the morning.
7. Do surya namaskar and pranayama daily.
8. Read at least 5 pages daily from your text book.
9. Revise the syllabus done so far.
10. Write and learn the meaning of following key words:

(a) Management, (b) Process, (c) Efficiency, (d) effectiveness (e) art, (f) science, (g) profession, (h) planning (i) organizing, (j) staffing (k) directing (l) controlling (m) coordination (n) espirit de corps, scalar chain, gang plank, unity of direction, unity of command, mental revolution, differential piece wage system, fatigue study, motion study, method study, time study, standardization of work, functional foremanship.

Do the following assignment.

1	What is meant by "Effectiveness in Management"?	1
2	What are the organizational objectives of management?	1
3	Give any two points of the features of Art.	1
4	"The management principles can be applied to all types of activities." Which characteristic of management is highlighted by this statement?	1
5	ITC contributes Rs. 1 on the sale of every four classmate notebooks to its rural development initiative that supports, among other projects, primary education in villages. It uses eco-friendly and chlorine free paper for the production of its notebooks. Identify the management objective which ITC is trying to achieve.	1
6	Volvo Ltd's target is to produce 10,000 shirts per month at a cost of Rs. 100 per shirt. The production manager achieved this target at a cost of Rs. 90 per shirt. Do you think the 'Production manager' is effective? Give one reason in support of your answer.	1
7	"In an organisation, the employees are happy and satisfied, there is no chaos and the effect of management is noticeable." Which characteristic of management is highlighted by this statement?	1
8	Anmol, the sales manager of PQR Ltd., is given the responsibility of selling 2,000 LEDs in a month. This target could be achieved if he has a sales team of 10 people. Presently, only 8 persons are working under him. He was not allowed to hire more persons by his superiors. As a result, he fails to meet the target. Which principle of management is being violated here?	1
9	Mr. Ram started a small business with limited investment, he hired labour at very less wages. Over the time with broad vision of Ram and hard work of his employees, the business started earning very good revenue. But, with increase in earning capacity of company also Ram did not increase the wages and salary of his employees, they were not able to maintain a reasonable standard of living. Identify the principle of management, overlooked by Mr. Ram.	1
10	What do you meant by principle of management?	1
11	Explain the followings: (ii) Principle of Scalar Chain (iii) Unity of Command	4
12	Management has evolved like a discipline. There are number of books on management. Students are learning various principles and theories of management from these books. But all students of MBA do not become successful only by learning these principles. The success	4

depends upon creative application of these principles. Today many companies have started giving importance to corporate social responsibility and Business Ethics.

In the above para one feature of Science, Art and Profession each are given. Identify each one of them by quoting lines.

13 XYZ Power Ltd. set up a factory for manufacturing solar lanterns in a remote village as there 4
was no reliable supply of electricity in rural areas. The revenue earned by the company was sufficient day by day, so the company decided to increase production to generate higher sales. For this they decided to employ people from the nearby villages as very few job opportunities were available in that area. The company also decided to open schools and crèches for the children of its employees

Identify and explain the objectives of management discussed above.

14 Management is a series of continuous interrelated functions. Comment. 4

15 Ashutosh Goenka was working in 'AxeLtd.', a company manufacturing air purifiers. He found 4
that the profits had started declining from last six months. Profit has an implication for the survival of the firm, so he analysed the business environment to find out the reasons for this decline.

(ii)   Identify the level of management at which Ashutosh Goenka was working.

(iii) Explain three functions being performed by Ashutosh Goenka.

16 Explain any five features of Management Principles. 5

17 Company X is facing a lot of problems these days. It manufactures white goods like washing 5
machines, microwave ovens, refrigerators and air conditioners. The company's margins are under pressure and the profits and market share are declining. The production department blames marketing for not meeting sales targets and marketing blames production department for producing goods, which are not of good quality meeting customers expectations. The finance department blames both production and marketing for declining return on investment and bad marketing.

What quality of management do you think the company is lacking? Explain it and also explain the importance of it?

18. Bhuvan Ltd., a garment manufacturing Company set the target production of 100 garments per month
at the estimated cost of Rs. 200 per garment. Mohan, a worker worked double shift and manufactured around 150 garments but at the estimated cost of Rs. 230 per garment. On the other hand, Ravi another worker focussed on cost and handled resources very carefully so the manufactured 90 garments but at the estimated cost of Rs. 190 per garment. Third worker maintained the balance and achieved target of 100 garments at the estimated cost of Rs. 200 per garment.

a. Identify the quality possessed by Ravi, Mohan and what they are lacking.

b. Which worker is preferred by management? (2 marks)

19. Look at the image and highlight the feature of management depicted by the image given here.
(2 marks)

Together
Everyone
Achieves
More

20. Explain "management is all pervasive "as a characteristic of Management. (2 marks)

21. Govinda Ltd. is a highly reputed company. Different functions are performed by different individuals in this company, who are bound together in a hierarchy of relationships. Every individual in the hierarchy is responsible for successful completion of a particular task. Mr. Gauranga is responsible for the welfare and survival of the organization. He formulates overall organizational goals and strategies for their

achievement. MR. Nityanand ensures that quality of output is maintained, wastage of materials is minimized and safety standards are maintained. Mr. Sanatan assigns necessary duties and responsibilities to the personnel and motivates them to achieve desired objectives

At what levels of management are MR. Gauranga, Mr. Nityanand and Mr. Sanatan working in Govinda Ltd.? justify your answer. (3 marks)

22. Can management be called an art? Give reason. (3 marks)

23. What are the organisational objectives of management? (3 marks)

24. The management of Vrinda Ltd. strongly believes that the members of an organization should work towards fulfilling the common organizational goals. This requires team work and integration of efforts of all individuals, departments and specialists. This is because all the individuals and departments depend on each other for information and resources to perform their respective activities. Managers need to reconcile differences in approach, timing, effort or interest. At the same time, it should enable all its members to grow and develop. Thus, there is a need to harmonize individual goals and organizational goals.

1. Identify the concept of management discussed above.

2. State any three features of the concept identified in (a).

3. Identify and explain the characteristic of management which is reflected from the above para.
(5 marks)

25. Sanjana is the branch manager of ABC Handicrafts Pvt. The company's objective is to promote the sales of Indian handloom and handicraft products. Its sells fabrics, furnishings, ready-mades and household items are made out of traditional Indian fabrics. Sanjana decides quantities, variety, colour and texture of all the above items and then allocates resources for their purchase form different suppliers. She appoints a team of designers and crafts people in the company, who developed some prints for bed covers in bright colour on silk. Although they looked very impressive, they were more expensive than they had planned to sell. Average customer could not afford to buy it. Praising their effort, Sanjaja suggested that they should keep the silk bed covers for special occasions like Diwali and Christmas and offer the cotton bed covers on a regular basis to keep costs under control.

Identify the functions of management which Sanjaja performs by quoting the lines the above para.
(5 marks)

26. Explain the following principles of scientific management:

(a) Harmony, not discord; and

(b) Development of each and every person to his or her greatest efficiency and prosperity.

27. Explain the following principles of management

(a) Scalar Chain

(b) Division of work

(C) Discipline

(d) Remuneration to employees

Physical Education:

1. Make a project on Procedure for Asanas, Benefits and Contradiction for any two Asanas for each lifestyle disease.

2. Any one game of your choice related to class XII syllabus along with labeled diagram of field and equipment (Rules, Terminologies and Skills)

Computer :

Q1: write program in python in order to:

a) read a file and replace every character by its consecutive character.

b) to read a binary file emp.dat and increase salary of 'aman' by 20% record consists of eno,ename,esal

c) to read all content of "student.csv" and display records of only those students who scored more than 80 marks. Records stored in students is in format :Rollno, Name, Marks

Q2: Consider table Lab and give SQL commands for

LAB

No	ItemName	CostPerItem	Quantity	Dateofpurchase	Warranty	Operational
1	Computer	60000	9	21/5/96	2	7
2	Printer	15000	3	21/5/97	4	2
3	Scanner	18000	1	29/8/98	3	1
4	Camera	21000	2	13/10/96	1	1
5	Switch	8000	1	31/10/99	2	1
6	UPS	5000	5	21/5/96	1	4
7	Router	25000	2	11/1/2000	2	5

a) to create structure of table
b) list the name of items where price is in between 5000 and 10000
c) increase qty by 10 %
d) add a column price
e) put price of computer @35000 and switch @ 3500
f) remove the tuple of camera
g) find total number of products in lab
h) decrease the cost by 20%
i) find degree and cardinality
j) display records in descending order of price.

Q3 : Give 3 example of each DDL,DML and TCL commands with their syntax

Q4: Solve paper of ut1.

Psychology:

- **Attempt all the in your home work notebook**

1) What is meant by delay of gratification? Why it is considered important for adult development?
2) How does Freud explain the structure of personality?
3) Discuss the main observational method used in personality assessment. What problems do we face in using these methods?
4) What is meant by structured personality tests? Which are the two most widely used structured personality test?
5) Explain how projective techniques assess personality. Which projective tests of personality are widely used by psychologist?
6) A child wants Ice cream cone. How do you explain it by using his structural elements of personality i.e id, ego and super ego?
7) How is Karen Horney's dew point regarding women different from that of Freud's?
8) Mir had no re collection of the bicycle he received as a gift on his 10th birthday. But when Neeta reminder him about the same he was able to recall it. What do you think why Mir has no re collection of the bicycle?

Case study based questions

A. **Read the case given below and answer the questions that follow.**

Samar is a school going child. Due to lockdown he is at home. One day he happens to have an instance to eat ice cream cone. However, there is only one ice cream cone in refrigerator. He wants to grab the cone and eat it.He also realizes that of he grabs the cone without asking, he may be punished.

The best way for Samar to achieve gratification is to ask for permission to eat the cone. In this way, he knows that if his behaviour is morally correct and this approach towards obtaining the ice cream will not create guilt, fear or anxiety in him.

i. The instinctual energy of Samar to eat ice cream cone is derived from:
   a) Repression   b) Reaction formation   c) Pleasure principle   d) Rationalization

ii. The realisation experienced by Samar that if he grabs the cone without asking, him may be punished comes from:
   a) Id   b) Ego   c) Super ego   d) Repression

iii. Which of the following determine that the behaviour of Samar is morally correct and guilt free?

    a) Id   b) Ego   c) Superego

B. Read the case given below and answer the questions that follow.

There is a tribe in Jharkhand namely Birhor. The Birhor tribe lives a nomadic life, which requires constant moment in small bands from one forest to another in search of games and other forest products such as foods,mushrooms, honey etc. In the Birhor society, children from an early age are allowed a normal freedom to move into forest and learn hunting and gathering skills. Theirchild socialization practice are also aimed at making children to do things without the help from elders, take decisions for themselves, and accept risks and challenges such as those involved in hunting from an early age of life.

i. The development of personality among children occurs through

    a) Behavioural approach b) Cultural approach   c) Humanistic approach   d) Psychodynamic approach

ii. Which of the following create allows the child in Birhor tribe to take decisions for them?

    a) Independence   b) Autonomous   c) Achievement   d) Livelihood

iii. The groups economic maintenance system please a vital role in which of the following?

    a) Psychodynamic approach   b) Humanistic approach c) Cultural approach   d) Behaviour approach

iv. Which statement in the above passage reflex the achievement oriented behaviour?

    a) Children from and early age are allowed enormous freedom to move into forest and done hunting and gathering skills.

    b) The Birhor tribe lives on nomadic life, which requires constant moment in small bands from one forest to another in search of games and other forest products.

    c) Their child socialization practices are also aim that making children to do things without the help from elders.

    d) They can take decision for themselves.

PRACTICAL WORK REMINDER

Students complete your boards practical work that has been discussed in class.

Painting:

    * Make 10 still life in water colour.
    * Size – Half Imperial Sheet.
    * Colour- Artist Water Colour (Camelin)
    * Brushes- Use Round Brushes

Music (Vocal) :

Project Work

1. Musical Terms- Alankaar, Meend, Khatka, Murki, Alaap, Taan, Moorchhana, Gamak, Gram
2. Sangeet Ratnakar
3. Description of Raga Bhairav , Raga Malkauns and Raga Bageshri along with Notation of the Composition (Chhota Khayal)
4. Time Theory of Ragas
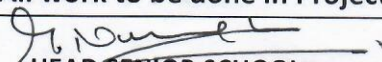5. Dugun and Chaugun Laykari of Jhaptaal, Rupak and Dhamar Taal.

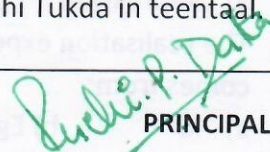**Note- All work to be done in Project File only.**

Music (Instrumental Tabla) :

Project Work

1. Definition of Uthan with example
2. Classification of Laykari
3. Biographies – 1. Pt. Kishan Maharaj
4. Description of Delhi Gharana and Ajrada Gharana
5. Taal – Teentaal, Chaptaal , Ektaal, Rupaktaal (Dugun, Tigun and Chaugun Laykari)
6. Write down the Peshkar, Two Kaidas in teentaal, Kaida Rela in teentaal, Rela in teentaal, Tukda in teentaal, Lapet Ka Tukda in teentaal, Chakradaar Tukda and Farmaishi Tukda in teentaal.

Note- All work to be done in Project File only.

HEAD SENIOR SCHOOL   PRINCIPAL