THE ASIAN SCHOOL, DEHRADUN HOLIDAY HOMEWORK - SUMMER VACATION 2022 FOR CLASS XII

English:

INSTRUCTIONS FOR COMPILATION OF HOLIDAY HOMEWORK:.

- 1. Update your CW notebook. Complete all your pending Class Work / HW Q/A, Word Meanings, Notes etc
- 2. Do all the following, questions in English Home-Work Notebook only.

HW notebook is to be submitted for checking on the day the school reopens after vacation. A copy of this assignment page should be pasted in the Holiday Home-work notebook.

1. - VISTAS. (Supplementary Reader)

Do self study of Chapters marked .

Write down Central theme, Message, Value points of each chapter & Solve the questions given below.

CH 2.- Tiger King

- 1. Who is the Tiger king? Why does he get that name?
- 2. What did the chief astrologer tell to be the cause of the Maharaja's death?.
- 3. What did the Maharaja do to find the required number of tigers to kill?
- 4. What was Maharaja's feeling when he killed the hundredth tiger?
- 5. How did the Tiger King die?.

CH 3- Journey to the end of the earth.

- Q1. How do geological phenomena help us to 1 know about the history of mankind?
- Q 2. What kind of indications do we get while visiting Antarctica to save Earth?
- Q 3. Why is a visit to Antarctica important to realise the effect of global warming?
- Q 4. What was the objective of the 'Students on Ice Programme'?
- Q5. Why was Tishani Doshi filled with relief and wonder when he set foot on the Antarctic continent?

CH 4- The Enemy

- Q 1: What was his father's chief concern for Sadao?
- Q 2: Why was Dr Sadao not sent abroad along with the troops?
- Q 3: In what condition did Dr Sadao find the American soldier at the seashore?
- Q 4: Why did Dr Sadao treat the American solider even though, it was an unpatriotic act on his part?
- Q 5: How did Dr Sadao plan the American prisoner's escape?

CH 6- On the face of it.

- Q.1. How does Mr Lamb keep himself busy when it is a bit cool?
- Q.2. Why does Mr Lamb leave his gate always open? 2011)
- Q.3 What is the bond that unites the two—Mr Lamb, the old and Derry, the small boy? How does the old man inspire the little boy?
- Q.4. How did Derry's handicap damage his life?
- Q.5 Why does Derry's mother not want him to go back to visit Mr. Lamb?

CH 8- Memories of Childhood.

- Q1. Why was Zitkala-Sa in tears on the first day in the land of apples?
- 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. What did Zitkala-Sa feel when her long hair was cut?
- Q5. What was the advice that Annan gave to Bama? Did she follow it?

2. Advanced Writing Skills

- Q1. Lack of employment opportunities in hill regions of Uttrakhand is forcing its young people to abandon their homes and migrate to cities. These villages are almost turned into "ghost villages. Write a letter in 120 150 words to the editor of a national newspaper on how we can create better quality of life, livelihood for the hilly region dwellers and how their distress migration can be checked..
- Q2. You are Rohini/ Rohit you work as excursion-coordinator in ST. John's college. Ashoka Path, Roorkee. Write a business letter to the manager of 'The Sita tour and travel company'. Dehradun, asking him to provide a 50 seater luxury bus for your school students and arrange for 5 day trip to Jim Corbett National Park, Nainital in the month of December.

2. निम्नलिखित प्रश्नों के उत्तर लिखिए।

1) 'महज एक धार्ग के सहारे, पतंगों की धड़कती ऊँचाईयाँ' कैसे धाम लेती है। सविस्तार लिखिए।

2) यदि आप 'कैमरे में बंद अपाहिज' जैसे कार्यक्रम के दर्शक है तो टी०वी० पर ऐसे सामाजिक कार्यक्रम को देखकर अपनी

3) 'पेट को हि पचत, बेचत बेटा-बेटकी' तुलसी के युग का नहीं है, आज के युग का भी सत्य है। वर्तमान परिस्थितियों और

4) आप बाज़ार की भिन्न-भिन्न संस्कृति से अवश्य परिचित होंगे। मॉल की संस्कृति और सामान्य बाज़ार और हाट की संस्कृति में क्या अन्तर है? पर्चेजिंग पावर आपको किस तरह के बाज़ार में नज़र आती है? समझाइये।

3. परियोजना तैयार कीजिए-

1) हिन्दी साहित्य का इतिहास

2) आधुनिक काल के कवि 'हरिवंश राय बच्चन'

Note: सम्पूर्ण कार्य आन्तरिक मूल्यांकन के अन्तर्गत जाँचा जायेगा।

Mathematics:

INSTRUCTIONS: SOLVE THE QUESTIONS IN THE MATHS HOMEWORK NOTEBOOK **CHAPTER-2 INVERSE TRIGONOMETRIC FUNCTIONS**

Q1. Write the principal value of $\cos^{-1}\left(\cos\frac{2\pi}{3}\right) + \sin^{-1}\left(\sin\frac{2\pi}{3}\right)$?

Q2. Evaluate: $tan^{-1}[2 cos (2sin^{-1}\frac{1}{2})]$

Q3. Evaluate: $\tan \left(\frac{1}{2}\cos^{-1}(\sqrt{5}/3)\right)$

Q4. Prove that $\tan \left[\frac{1}{2} \sin^{-1} \left(\frac{2x}{1+x^2} \right) + \frac{1}{2} \cos^{-1} \left(\frac{1-y^2}{1+y^2} \right) \right] = \frac{x+y}{1-xy}$

Q5. Prove that: $\tan \left(\frac{\pi}{4} + \frac{1}{2} \cos^{-1} \left(\frac{a}{b} \right) \right) + \tan \left(\frac{\pi}{4} - \frac{1}{2} \cos^{-1} \left(\frac{a}{b} \right) \right) = \frac{2b}{a}$

Q6.Prove that $cos[tan^{-1}{sin(cot^{-1}x)}] = \frac{\sqrt{1+x^2}}{\sqrt{2+x^2}}$

Q7. Show that $\tan (\frac{1}{2} \sin^{-1} \frac{3}{4}) = \frac{4 - \sqrt{7}}{3}$

Q8. Solve the equation $\sin^{-1}6x + \sin^{-1}6\sqrt{3}x = \frac{\pi}{2}$

Q9. Prove that $\cos (\sin^{-1} \frac{3}{5} + \cot^{-1} \frac{3}{2}) = \frac{6}{5\sqrt{13}}$

Q10. Solve the equation $\sin^{-1}\sqrt{x^2+x+1} + \tan^{-1}\sqrt{x^2+x} = \frac{\pi}{2}$

Q11. Simplify: $\tan\left(\frac{1}{2}\cos^{-1}\frac{\sqrt{5}}{3}\right)$

Q12. Solve the equation $\sin^{-1} x + \sin^{-1} 2x = \frac{\pi}{3}$

Q13. If $\alpha = \sin^{-1}\frac{7}{25}$ and $\beta = \cos^{-1}\frac{3}{5}$; find $\sin(\alpha + \beta)$

Q14. If $\tan^{-1} a + \tan^{-1} b + \tan^{-1} c = \pi$., prove that a+b+c = abc

Q15. Evaluate tan ($2\tan^{-1}(\frac{1}{5}) - \frac{\pi}{4}$)

Q16. Solve the equation : $cos(tan^{-1}x) = sin(cot^{-1}(x+1))$

Q17. Evaluate $\tan^{-1} \sqrt{3} + \sec^{-1} (-2)$

Q18. Prove that $2\tan^{-1}(\frac{1}{5}) + \sec^{-1}\frac{5\sqrt{2}}{7} + 2\tan^{-1}(\frac{1}{8}) = \frac{\pi}{4}$

Q19. Prove that $\sin(2\tan^{-1}\frac{1}{3}) + \cos(\tan^{-1}2\sqrt{2}) = \frac{14}{15}$

Q20. Prove that $\tan(\frac{1}{2}\sin^{-1}\frac{3}{4}) = \frac{4-\sqrt{7}}{3}$.

Q21 Evaluate : $tan_{\frac{1}{2}}cos^{-1}$ (v5/3)

Q22 Solve for x: $2\tan^{-1}(\cos x) = \tan^{-1}(2\csc x)$

Q24 Prove that
$$\cos[\tan^{-1}{\sin(\cot^{-1}x)}] = \frac{\sqrt{1+x^2}}{\sqrt{2+x^2}}$$
 where $x \in \mathbb{R}$

Q25 Solve the equation
$$\tan^{-1} x + 2\cot^{-1} x = \frac{2\pi}{3}$$

Q26 Solve the following equation:
$$(\tan^{-1}x)^2 + (\cot^{-1}x)^2 = \frac{5\pi^2}{8}$$

Q27 Solve the following equation:
$$\tan^{-1} \frac{1}{1+2x} = \tan^{-1} \frac{2}{x^2} - \cot^{-1} \frac{1+4x}{1}$$

CHAPTER- 3 AND 4 MATRICES AND DETERMINANTS

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

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

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

Q5 If A-1 =
$$\begin{bmatrix} 3 & -1 & 1 \\ -15 & 6 & -5 \\ 5 & -2 & 2 \end{bmatrix}$$
 and B = $\begin{bmatrix} 1 & 3 & 2 \\ -1 & 3 & 0 \\ 0 & -21 \end{bmatrix}$ find (AB)⁻¹

Q6. Solve the following system of equation using matrix method:

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

Q7.Find the inverse of the following matrix using elementary operations A =
$$\begin{bmatrix} 1 & 2 - 2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}$$

Q8. If
$$A = \begin{bmatrix} 2 & 0 & -1 \\ 5 & 1 & 0 \\ 0 & 1 & 3 \end{bmatrix}$$
 Prove that $A^{-1} = A^2 - 6A + 11 I$.

Q9. 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?

Q10. If
$$A = \begin{bmatrix} 3 & -2 & 1 \\ 2 & 1 & -3 \\ -1 & 2 & 1 \end{bmatrix}$$
 find A^{-1} and use it to solve the following equations $3x-2y+z=2$, $2x+y-3z=-5$, $-x+2y+z=6$.

Q11. Prove that if A is a skew symmetric matrix of odd order n then IAI = 0.

Q12. If A (x_1, y_1) , B (x_2, y_2) and C (x_3, y_3) are vertices of an equilateral Δ whose each side is equal to 'a' then prove that

$$\begin{vmatrix} x_1 & y_1 & 2 \\ x_2 & y_2 & 2 \\ x_3 & y_3 & 2 \end{vmatrix} = 3a^4$$

Q13. IF A =
$$\begin{pmatrix} 4 & 3 \\ 2 & 5 \end{pmatrix}$$
, find x & y such that A² -xA + yI = O.

CHAPTER-5 CONTINUITY AND DIFFERENTIABILITY

Q1. Find the value of K so that
$$f(x) = \begin{cases} \frac{x^2 + 3X - 10}{X - 2}, & \text{if } x \neq 0 \\ K, & \text{otherwise} \end{cases}$$

is continuous at x = 0

Q2. Show that the function f(x) = 2x-|x| is continuous but not differentiable at x = 0.

Q3. If xy = ex-y then show that
$$\frac{dy}{dx} = \frac{\log x}{(\log (xe))^2}$$

Q4. Differentiate
$$\tan^{-1} \left[\frac{\sqrt{1+x^2}-1}{x} \right]$$
 with respect to x.

Q5. If y = log tan
$$\left(\frac{\pi}{4} + \frac{x}{2}\right)$$
 show that $\frac{dy}{dx}$ - sec x = 0.

Q6. If
$$y = x^x \cos x + \frac{x^2 + 1}{x^2 - 1}$$
, find $\frac{dy}{dx}$

Q7. Differentiate with respect to x.
$$\sin^{-1} \left(\frac{2^{x+1}3^x}{1+(36)^x} \right)$$

Q8. If y =
$$x \sin^{-1}x / \sqrt{1 - x^2}$$
 + log $\sqrt{1 - x^2}$, FIND dy / dx.

Q9. If
$$x \sqrt{1+y} + y \sqrt{1+x} = 0$$
, prove that dy/ dx = $\frac{-1}{(1+x)}$ 2

Q10. If
$$y = (x + \frac{1}{x})x + n(1 + \frac{1}{x})$$
, find $\frac{dy}{dx}$.

Q11. Differentiate
$$x^{\sin^{-1}x}$$
 with respect to $\sin^{-1}x$

Q12. Show that the fun
$$f(x) = 2x - |x|$$
 is continuous at x=0.

Q13. If
$$f(x) = \frac{\sqrt{2}\cos x - 1}{\cot x - 1}$$
, $x \neq \frac{\pi}{4}$, find the value of $f(\frac{\pi}{4})$ so that fun f(x) becomes continuous at $x = \frac{\pi}{4}$

Q14. Show that
$$f(x) = |x|$$
 is not differentiable at x=0.

Q15. If
$$f(x) = \begin{cases} x^2 + 3x + a, & for \ x \le 1 \\ bx + 2, & for \ x > 1 \end{cases}$$
 is everywhere differentiable, find the values of a and b.

Q16. IF
$$f(x) = |\cos x|$$
, find $f'(\frac{\pi}{4})$ and $f'(\frac{3\pi}{4})$

Q17. Differentiate with respect to x (i)
$$log_x 7(logx)$$
 (ii) $log_7 x(log7)$

Q18. If
$$\sqrt{1-x^6} + \sqrt{1-y^6} = a(x^3-y^3)$$
, Prove that $\frac{dy}{dx} = \frac{x^2\sqrt{1-y^6}}{y^2\sqrt{1-x^6}}$

Q 19. If
$$x^m y^n = (x + y)^{m+n}$$
, prove that $\frac{dy}{dx} = \frac{y}{x}$

Q20. Differentiate with respect to x
$$x = \frac{1 + logt}{t^2}$$
, $y = \frac{3 + 2logt}{t}$

Physics:

Instructions:

- i) The project report should be handwritten in A-4 size pages.
- ii) The project report should be presented in the following order-
- a) Cover Page showing title of the project, student information, name of school and academic session.
- b) Acknowledgement
- c) Chapters with relevant headings
- d) Summary and Conclusion based on findings
- e) Bibliography
- iii) Credit will be awarded to the original circuit diagram, illustrations and creative use of materials.
- iv) All photographs and sketches should be labelled and acknowledged.

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 Bridge and its Applications g) Cells, Emf, Internal Resistance and Combinations in Series and Parallel
 - f) Wheat Stone

- h) Kirchhoff's Law i) Solenoid I) Self Inductance and Mutual Inductance
- j) Moving Coil Galvanometer m) A.C. Generator
- k) The Earth Magnetism

- 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

Chemistry:

Instructions:

- 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.
- (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.

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 Health Care(and post natal care of mother and and Child Prenatal 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 microorganisms/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.

Guidelines:

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

- Q1. Post Soviet Republics- Life and Disintegration
- Q2. India- China Relation
- Q3. Give recent examples to show the influence of European Union in Europe in World Politics.
- Q4. Show the positive and negative impact of globalization on India.

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

NOTE- Work to be done on A-4 Sheets and complied in a file.

Geography:

Prepare maps in accordance to the list provided by the subject teacher.

Do the Given Question Answers of Chapter-1(Practical Book) in the Practical File

Write the answers of the given questions in your Geography Homework Note Book.

CHAPTER- HUMAN DEVELOPMENT

- Q1. Define the term Human Development.
- Q2. Who Introduce the concept of Human Development.
- Q3. What is Human Development Index?
- Q4. Which States of India has the top rank in the Human Development Index?
- Q5. Which State has the lowest literacy rate?
- Q6. Explain the concepts of productivyt and empowerment as the pillars of human development.
- Q7. Name the three indicators used for measuring HDI.
- Q8. What do Equity and Sustainability refer to within the concept of human development?
- Q9. Discuss How Literacy, Economic Development and Social Disparities have resulted in state level various in human development.
- Q10. On the political outline map of India, locate and label the following with appropriate symbols : One state with highest level of HDI and One lowest level of HDI.

CHAPTER -(LAND RESOURCES AND AGRICULTURE

- Q1. Explain with Examples how has degradation of cultivable land became a serious problem in India.
- Q2. How is the Cropping density calculated in India?
- Q3. Describe any five problems related to Indian Culture.
- Q4. Give reasons why the Green Revolution was not equally successful in all parts of India.
- Q5. Distinguish between Kharif and Rabi Crops.
- Q6. On the political outline map of India, locate and label the following with appropriate symbols.

 Leading producing States of the following Crops: Rice, Wheat, Jower, Cotton, Jute, Sugarcane, Tea, Coffee

Economics: As per CBSE guidelines for the session 2022-23 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

- * 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,

- * 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

* Vertical Farming- An alternate way

* Minimum Support Prices

* Food Supply Channel in India

* Silk Route-Revival of the Past

* Rise of Concrete Jungle- Trend Analysis

* Trends in Budgetary Condition of India

*Alternative Fuels Types and Importance

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:
 - 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: 1. Do Illustrations number 1-80 from Chapter 4 - Admission of a New Partner (D.K. Goel) Page No- 4.2 Note- Holiday Homework to be done in a Separate Note book.

BST: Make a detailed project on any one of the following topics:

- a) Marketing
- b) Business Environment
- c) Principle's of Management
- d) Stock Exchange

Guidelines

- a) The project work should be hand written.
- b) The project should be of 30-35 pages.
- c) It should be presented in a neatly bound simple project file. The project should be developed and presented in the following order:
 - Cover page showing project title, student information, school and year.
 - ii) List of contents with page number.
 - iii) Certificate page
 - Acknowledgement iv)
 - v) Summary and Conclusion
 - vi) Bibliography

Physical Education:

- Make a project on Physical Fitness test according to SAI KHELO INDIA TEST.
- 2. Make a project on Various Asana which can prevent Life Style Diseases (Diabeties, Hypertention, Obesity and Asthama) along with procedure, Benefits and Contraindications of related Asana.
- 3. Make a project on any one game of your choice related to Class 12 syllabus along with labeled diagram of field, equipment, rules, terminology and various skills.

Computer:

- Q1: Write programs in order to perform following operations using File Handling in Python:
- a) Read a file and display words starting from character 'a' and ending with character 'z'
- b) Read a file and count number of special characters in a file "alpha.txt"

- c) Create a file "Names.txt" and write 10 names starting with character 'Z' after reading from user and checking it.
- Q2: write different modes of opening a file along with their use.
- Q3. Define a function which displays Armstrong number from 1 to 500
- Q4: Define a method which pass two values as parameter and return their HCF
- Q5. Solve Question paper of First Unit Test
- Q6. Solve sample paper of term1 provided at CBSE website.

Psychology:

- 1. Explain the relationship between culture and intelligence. How do you think your culture has shaped your intelligence?
- 2. Explain in detail any one of the approaches to personality that appeals to you the most? Why do you find this theory interesting?
- 3. What are defense mechanisms? Explain any five defense mechanisms with examples from your day to day life.
- 4. Write about the effects of stress on psychological functioning and health.
- 5. What is examination anxiety? Have you ever experienced it? How do you usually cope with it?
- 6. Explain in detail any 3 stress management techniques.
- 7. Choose a character from any book/ movie/ TV series which exhibits symptoms of a psychological disorder. Explain their signs and symptoms in detail and suggest a therapy technique for them.
- 8. Write in detail about any one type of therapy that interests you the most.

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, Kan
- 2. Sangeet Ratnakar
- 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 2. Ustad Zakir Hussain
- 4. a) Tabla Gharanas (Description)
 - b) History of Tabla with Diagram
- 5. Taal Teentaal, Rupaktaal (Dugun, Tigun and Chaugun Laykari)

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

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