

Subject: Sociology

Students of Class XII are requested to submit a Research based Project on any one **Contemporary Social Issue**.

You may choose any of the following topics:

1. Euthanasia
2. Sex- Education
3. Child Labor
4. Role of Religion in Indian Society
5. Problems of Differently-Abled
6. Caste based Reservation in India
7. Impact of Bollywood among Youth
8. Adoption
9. Role of Communication Media in Social life
10. Peer Pressure
11. Urbanisation
12. Rising Divorce rate in India
13. Domestic Violence
14. Begging- A thriving Occupation
15. Dowry

Instructions-

- (a) Conduct interviews, Surveys and then pen down your observation.
- (b) With the help of your presentation prepare a beautifully decorated project file. (This should be hand written. Typed or printed sheets will not be considered)

(c) Project file should be made in the given sequence-

1. Cover page with Title
2. Acknowledgement
3. Certificate
4. Index
5. Research Question
6. Introduction of the topic- 10- 15 pages
7. Rationale of study
- Why did you choose the topic?
- Objectives of your study
8. Review of Literature: it should be in the following sequence:
 - Title of the Article/Book

- Year of Publication
- Name of the Author
- Introduction (a small summary of the article/book)
- Objectives of the article/book- Main argument of the Author
- Results and finding- Conclusion of the Article
- Analysis- Your understanding of the Article

9. Methodology- How will you conduct your research:

- Interview
- Case study
- Sample Survey

10. Questionnaire- The questionnaire should have 15 questions. It can include”

- Open-ended questions
- Close-ended Questions

11. Observation and Data Analysis

- Interpret any **ALL Questions** either through a Pie-Chart or a Bar-Diagram

12. Conclusion-

- It should include the inferences you draw from your research.

13. Bibliography

- Mention all the sources you have collected the data of your research.

Subject: Political Science

Do these activities in the project file.

1. Activity based on the the partition

Students you read the novel or a story on partition by an Indian and Pakistani writer what are the commonalities of the experience across the border collect all the stories prepare a wallpaper that highlights the common experience and has stories on the unique experiences

You can also watch the movie based on the partition and write the causes and consequences of the partition with the help of case studies also .

2.Activity based on Globalisation

This activity enables you to understand how globalisation has penetrated our lives and the impact the all inclusive nature of globalisation has on an individual ,community and a nation as a whole.

Students you have to collect the list the names of products,food products,white goods and luxuries you are familiar with .

you have to write down your favourite TV programs .

Find out who are the manufacturers of the products you are using everyday and the makers sponsors of your favourite TV programs

Now divide them into three categories exclusive foreign companies exclusive Indian companies and companies working in collaboration .

make a short report on it how globalisation has been impacting our life different faces of globalisation as we use more foreign goods are on small scale industries have been losing their customers and are closing down.

SUBJECT: PSYCHOLOGY

Write a detailed case profile on any individual suffering from a mental disorder along with the brief introduction about the disorder.

Subject: English Core

1. *"They said no phone inside the school, Today school is inside the "Phone".*

Write a article on it with 180-200 words.

2. Our language is a part of our culture and we are proud of it. Describe how regretful M. Hamel and the Village elders are for having neglected their native language.

3. Explain the lesson "Lost Spring" is a realistic Portrayal of the lives of the Street Children.

4. "India's Pandemic Lockdown turns into a Human Tragedy."

Write your views on it (speech writing)

5. You are Arun a social activist. Design a poster spreading awareness for Covid-19.

6. "Social injustice and class inequalities is main theme of poem," "The Elementary Classroom in Slum" Explain it.

7. Make a case study (in format of report writing) on managing your family relationship during Covid-19.

8. In Deepwater "William Douglas" with his determination overcame his fear. Have you ever faced same situation in your life and tried to overcome your phobia? If yes, then describe and if no then what would you do if you have been in place of Douglas?

Subject: English Elective

1. Read the Drama "Chandalika" by Ravindranath Tagore write the theme from your understanding. Make a list of words and phrases that bring out the characteristics of Prakriti, Ananda, Prakriti's Mother.

2. Read the long reading text "The Tiger for Malgudi" and Write Critical Appreciation by Explaining the Main Plot.

3. The play "Broken Images" by Girish Karnad takes up a debate that has grown steadily since 1947 the politics of language in Indian literary cultural, specifically in relation to modern Indian languages and English, Discuss.

4. Throw light upon the main characters of play "Broken Images."

5. Make a case study on Managing your family relationship during Covid-19 (lockdown).

Subject:Painting

1. Work for Sketch file -

One sketch every day in your sketch file from the given topics:

- (a) Object Drawing (daily life objects)
- (b) Parts of face (eyes, ears nose, lips)
- (c) Human Anatomy (Simple working figure)
- (d) Creative Art

Keep doing date wise in your sketch file

2. Composition (A2 Size sheet)

Theme- (a) **Nature** (animal, birds, flowers, tree, landscape) – 5SHEETS

(b) **Zentangle Art/ Mandala art**

3. Still Life (A2 Size Sheets)

(Three objects with two drapery)

- (a) Hatching
- (b) Pencil Shading
- (c) Stippling art

4. Creative Art

- (a) Theme- “Yoga” (A2size sheet)
- (b) **Decorate one file for portfolio (A1size)**

Subject: Computer Science

1. Write a python program to convert temperature in degree Celsius to Fahrenheit.
 $T(^{\circ}F)=T(^{\circ}C)*9/5+32$
2. WAP to calculate the simple interest.
3. WAP to enter 2 integers and perform all arithmetic operation on them.
4. WAP to find average of 3 numbers.
5. WAP to check whether the number is positive, negative or 0.
6. WAP to check whether the number is even or odd.
7. WAP to display the appropriate message as per the colour of signal at the road crossing.
8. WAP to create a simple calculator performing only 4 basic operations.
9. WAP to print even numbers in a given sequence using for loop.
10. WAP to print the table of any number.
11. WAP to print the pattern for a number input by the user.

1 2 3

1 2 3 4

1 2 3 4 5

12. WAP to print the factorial of a given number.
13. WAP using a user-defined function that displays sum of first n natural numbers, where n is passed as an argument.
14. WAP using a user-defined function that accepts the first name and last name as arguments, concatenate them to get fullname and display the output.
15. WAP using a user-defined function that calculate the area and perimeter of rectangle.
16. WAP using a user-defined function that count the number of times a character (passed as argument) occurs in the given string.
17. WAP to input a string from the user and print it in reverse order.
18. WAP to check whether the string is palindrome or not. (A string is called palindrome if it reads same backwards as forward. For eg. MADAM, KANAK)
19. WAP that takes sentence as an input parameter where each word in the sentence is separated by a space. The function should replace each blank with a '*' and then return modified sentence
20. WAP to print the following series
 - 0,1,1,2,3,5,8,13 _____ n.
 - 0,4,9,16,25 _____ n.
 - 3,6,9,12,15,18 _____ n.

(WAP MEANS WRITE A PROGRAM)

Subject: Physical Education

* Basketball, Football, Kabaddi, Kho-Kho, Volleyball, Handball, Hockey, Cricket, Bocce, & Unified Basketball [CWSN (Children With Special Needs- Divyang)]

**Record file shall include:

Practical -1. Fitness test administration for all items.

Practical -2. Procedure for Asanas, Benefits & Contraindication for any two Asanas for each lifestyle disease.

Practical -3. Procedure for administering Senior Citizen Fitness Test for 5 elderly family members.

Practical -4. Any one game of your choice out of the list above. Labeled diagram of field & equipment. (Rules, Terminologies & Skills).

Subject: Mathematics

1. Let $f : \mathbb{R} \rightarrow \mathbb{R}$ be given by $f(x) = \tan x$. Then $f^{-1}(1)$ is

- (a) $\frac{\pi}{4}$
- (b) $\left\{n\pi + \frac{\pi}{4} : n \in \mathbb{Z}\right\}$
- (c) Does not exist
- (d) None of these

2. Let $f : \mathbb{R} \rightarrow \mathbb{R}$ be defined by $f(x) = x^2 + 1$. Then, pre-images of 17 and -3, respectively, are

- (a) $\emptyset, \{4, -4\}$
- (b) $\{3, -3\}, \emptyset$
- (c) $\{4, -4\}, \emptyset$
- (d) $\{4, -4\}, \{2, -2\}$

3. Let $f : [2, \infty) \rightarrow \mathbb{R}$ be the function defined by $f(x) = x^2 - 4x + 5$,
Then the range of f is

- (a) \mathbb{R}
- (b) $[1, \infty)$
- (c) $[4, \infty)$
- (d) $[5, \infty)$

4. Let the R be a relation in the set \mathbb{N} of all natural numbers
Given by

$$R = \{(a, b) : a = b - 2, b > 6\}$$

Then, choose the correct answer:

- (a) $(6, 8) \in R$
- (b) $(2, 4) \in R$
- (c) $(3, 8) \in R$
- (d) $(8, 7) \in R$

5. Let $A = \{a, b, c, d\}$. Then a relation $R = \{(a, b), (b, a), (a, a)\}$
On A is

- (a) symmetric only
- (b) Transitive only
- (c) Symmetric and transitive only
- (d) Reflexive and transitive only

6. Let R be a relation on $A = \{a, b, c\}$ such that

$$R = \{(a, a), (b, b), (c, c), (a, b)\}. \text{ Then } R \text{ is}$$

- (a) Identity relation
- (b) Reflexive
- (c) Symmetric
- (d) Anti-symmetric

7. Let R be the relation in the set $\{1,2,3,4\}$ given by
 $R = \{(1,2), (2,2), (1,1), (4,4), (1,3), (3,3), (3,2)\}$. Then

- (a) R is reflexive and symmetric but not transitive
- (b) R is reflexive and transitive but not symmetric
- (c) R is symmetric and transitive but not reflexive
- (d) R is an equivalence relation

8. Let $f: \mathbb{R} \rightarrow \mathbb{R}$ be defined by $f(x) = x^8$. Then

- (a) f is one –one onto
- (b) f is one –one but not onto
- (c) f is one –one into
- (d) f is neither one-one nor onto

9. Let $f: \mathbb{N} \rightarrow \mathbb{N}$ given by $f(1) = f(2) = 1$ and $f(x) = x - 1$ for $x > 2$. Then

- (a) f is not one –one but onto
- (b) f is one –one and onto
- (c) f is neither one –one nor onto
- (d) f is many one but not onto

10. Let $f: \mathbb{R} \rightarrow \mathbb{R}$ be defined by $f(x) = 3x$. Then

- (a) f is one-one onto
- (b) f is many one onto
- (c) f is one –one but not onto
- (d) f is neither one-one nor onto

11 . The value of $\sin^{-1} \left(\cos \frac{\pi}{9} \right)$ is

- (a) $\frac{\pi}{9}$

(b) $\frac{5\pi}{9}$

(c) $\frac{-5\pi}{9}$

(d) $\frac{7\pi}{18}$

12. The value of $\cot(\sin^{-1} x)$ is

(a) $\sqrt{\frac{1+x^2}{x}}$

(b) $\frac{x}{\sqrt{1+x^2}}$

(c) $\frac{1}{x}$

(d) $\frac{\sqrt{1-x^2}}{x}$

13. The domain of $\sin^{-1} 2x$ is

(a) $[0,1]$

(c) $[-\frac{1}{2}, \frac{1}{2}]$

(b) $[-1,1]$

(d) $[-2,2]$

14. If $3\tan^{-1} x + \cot^{-1} x = \pi$, then x equal to

(a) 0

(c) -1

(b) 1

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

15. The value of $\cos^{-1}\left(-\frac{1}{2}\right) + \sin^{-1}\left(-\frac{\sqrt{3}}{2}\right)$ is

(a) $\frac{\pi}{3}$

(c) $\frac{2\pi}{3}$

(b) 0

(d) $\frac{\pi}{6}$

16. The value of $\cot^{-1} 3 + \cot^{-1} 2$ is

(a) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$

$(b) \frac{\pi}{2}$

$(d) \frac{\pi}{6}$

17. The value of $\tan^{-1}\left(\frac{1}{3}\right) + \tan^{-1}\left(\frac{1}{5}\right) + \tan^{-1}\left(\frac{1}{7}\right) + \tan^{-1}\left(\frac{1}{8}\right)$ is

Equal

$(a) \pi$

$(c) \frac{3\pi}{4}$

$(b) \frac{\pi}{4}$

$(d) \frac{\pi}{6}$

18. Considering principal values, the number of solutions of

$$\tan^{-1} 2x + \tan^{-1} 3x = \frac{\pi}{4}$$

$(a) 2$

$(c) 1$

$(b) 3$

$(d) 4$

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

$(a) \frac{3}{2}$

$(c) \frac{2}{\sqrt{3}}$

$(b) \frac{1}{\sqrt{2}}$

$(d) \frac{\sqrt{3}}{2}$

20. If $\tan^{-1}(\cot \theta) = 2\theta$, then θ is equal to

$(a) \frac{\pi}{3}$

$(c) \frac{\pi}{4}$

$(b) \frac{\pi}{6}$

$(d) -\frac{\pi}{3}$

PROJECT

Project on history of Mathematicians: It may include history of Indian mathematicians such as Aryabhata, Brahmgupta, Varahamihir, Sridhara, Bhaskaracharya, Ramanujan etc., and history of foreign mathematicians such as Cantor, Pythagoras, Thales, Euclid, Appollonius, Descartes, Fermat, Leibnitz, Euler, Fibonacci, Gauss, Newton, etc.

ECONOMICS HOLIDAYS HOMEWORK

1) Complete the project work according to the CBSE guidelines.

2) For guidelines of the project refer the following link:-

https://1drv.ms/p/s!AgtW148ZQRwrgWtdQawcJ_18phS2

3). Practice numericals of National Income Accounting, from Sandeep Garg.

4) Revise the chapters completed in the class.