

Holiday Homework 2024-2025

Class XI Mathematics

1. Decide, among the following sets, which are subsets of which.

$$A = \{x : x \text{ is a solution of } x^2 - 8x + 12 = 0\}, B = \{2, 4, 6\},$$

$$C = \{x : x \text{ is an even natural number}\}, D = \{6\}.$$

2. State whether each of the following statements is true or false for the sets A and B where

$$A = \{x : x \text{ is a letter in the word TRACT}\},$$

$$B = \{x : x \text{ is a letter in the word CATARACT}\}$$

$$(i) n(A) = 5$$

$$(ii) n(B) = 8$$

$$(iii) A \subset B$$

$$(iv) A \text{ is a proper subset of } B \quad (v) A = B.$$

3. Let ξ = the set of all letters in the word "TAMILNADU" and

$$X = \{x : x \text{ is a vowel and } x \in \xi\}$$

$$(i) \text{ Write } \xi \text{ and } X \text{ in the roster form.}$$

$$(ii) \text{ Tell } n(\xi) \text{ and } n(X).$$

$$(iii) \text{ List all the proper subsets of } X.$$

$$(iv) \text{ What is the cardinal number of the power set of } X?$$

4. Let A be the set of letters in the word "POOR". Write the power set of A.

5. Find the power sets of the following sets:

$$(i) \{-1, 0, 1\}$$

$$(ii) \{0, 1, \{0, 1\}\}.$$

6. If $A = \{2, 3, 5, 7, 8\}$, $B = \{1, 5, 9\}$ and $A' = \{1, 4, 6, 9\}$, verify that

$$(i) (A \cup B)' = A' \cap B'$$

$$(ii) B - A = A' \cap B.$$

7. Let $f : X \rightarrow Y$ be defined by $f(x) = x^2$ for all $x \in X$ where $X = \{-2, -1, 0, 1, 2, 3\}$ and $Y = \{0, 1, 4, 7, 9, 10\}$.

Write the relation f in the roster form. Is f a function?

8. Is $g = \{(1, 1), (2, 3), (3, 5), (4, 7)\}$ a function? If this is described by the relation $g(x) = \alpha x + \beta$, then what values should be assigned to α and β . (Exemplar)

9. Determine a quadratic function ' f ' defined by

$$f(x) = ax^2 + bx + c \text{ if } f(0) = 6, f(2) = 11 \text{ and } f(-3) = 6.$$

10. Find the domain and the range of the function $f(x) = 2 - 3x^2$. Also find $f(-2)$ and the numbers which are associated with the number -25 in its range.

11. Find the domain and the range of the following functions:

$$(i) \sqrt{x-3}$$

$$(ii) \sqrt{25-x^2}$$

$$(iii) 5 - |x+1|.$$

12. Draw the graph of the function $f(x) = \begin{cases} 1+2x, & x < 0 \\ 3+5x, & x \geq 0 \end{cases}$.

Hence, find its range.

13. If $f(x) = 2x + 5$ and $g(x) = x^2 - 1$ are two real valued functions, find the following functions:

$$(i) f + g$$

$$(ii) f - g$$

$$(iii) fg$$

$$(iv) \frac{f}{g}$$

$$(v) \frac{g}{f}$$

$$(vi) 3g + 2f^2.$$

14. A railway carriage is travelling along a circular railway track of radius 1500 metres with a speed of 66 km/hour. Find the angle in degrees turned by the engine in 10 seconds.

15. If $\tan x = \frac{a}{b}$, show that $\frac{a \sin x - b \cos x}{a \sin x + b \cos x} = \frac{a^2 - b^2}{a^2 + b^2}$.

16. Is the equation $6 \sec^2 x - 5 \sec x + 1 = 0$ possible?

17. Show that $\sqrt{3} (\tan 170^\circ - \tan 140^\circ) = 1 + \tan 170^\circ \tan 140^\circ$.

18. If $A + B = 45^\circ$, prove that $(1 + \tan A)(1 + \tan B) = 2$.

Hence, find the value of $\tan 22\frac{1}{2}^\circ$.

19. If $\tan y = \frac{Q \sin x}{P + Q \cos x}$, prove that $\tan(x - y) = \frac{P \sin x}{Q + P \cos x}$.

20. Prove that $\cos^2\left(x - \frac{2\pi}{3}\right) + \cos^2 x + \cos^2\left(x + \frac{2\pi}{3}\right) = \frac{3}{2}$.

English (XI SC.A & Humanities)

Read the following books and write a review on anyone.

1. How to Talk to Anyone - Leil Lowndes
2. Animal Farm - George Orwell

PHYSICS

XI Sc. (A & B)

The x and y coordinates of the particle at any time are $x = 5t - 2t^2$ and $y = 10t$ respectively, where x and y are in metre and t in second. The acceleration of the particle at $t = 2$ sec is

- a) 0
 - b) 5 m/s^2
 - c) -4 m/s^2
 - d) -8 m/s^2
1. A particle is moving with speed $v = b x^{1/2}$ along positive x axis. Calculate the speed of the particle at time $t = k$ (assume that the particle is at origin at $t = 0$).
 - a) $b^2 k/4$
 - b) $b^2 k/2$
 - c) $b^2 k$
 - d) $b^2 k/\sqrt{2}$
 2. The position of a particle as a function of time t, is given by $x(t) = at + bt^2 - ct^3$ where a, b and c are constants. When the particle attains zero acceleration, then its velocity will be
 - a) $a + b^2/2c$

- b) $a + b^2/4c$
 c) $a + b^2/3c$
 d) $a + b^2/c$
3. A ball is thrown vertically downward with a velocity of 20 m/s from the top of a tower. It hits the ground after some time with a velocity of 80 m/s. The height of the tower is ($g = 10 \text{ m/s}^2$)
- a) 340 m
 b) 320 m
 c) 300 m
 d) 360 m
4. A car starts from rest and accelerates at 5 m/s^2 . At $t = 4 \text{ sec}$, a ball is dropped out of a window by a person sitting in the car. What is the velocity and acceleration of the ball at $t = 6 \text{ sec}$?
- a) $20 \text{ m/s}^2, 5 \text{ m/s}^2$
 b) $20 \text{ m/s}, 0$
 c) $20\sqrt{2} \text{ m/s}, 0$
 d) $20\sqrt{2} \text{ m/s}, 10 \text{ m/s}^2$
5. The slope of the velocity – time graph for retarded motion is
- a) Positive
 b) Negative
 c) Zero
 d) Can be positive, negative and zero
6. A body thrown vertically upward with an initial velocity u reaches maximum height in 6 sec. The ratio of the distances travelled by the body in the first second and the seventh second is
- a) 1 : 1
 b) 11 : 1
 c) 1 : 2
 d) 1 : 11
7. The displacement of a particle is given by $4 S = m + 2 n t^4$ where m and n are constants. The velocity of body at any instant is
- a) $m + 2 n t^4/4$
 b) $2 n$
 c) $m + 2n/4$
 d) $2 n t^3$
8. A body starting from rest accelerates uniformly along a straight line, at the rate of 10 m/s^2 for 5 s. it moves for 2 s with uniform velocity of 50 m/s. then, it retards uniformly and comes to rest in 3 s. draw velocity-time graph of the body and find the total distance travelled by body.
9. If a, b, c be the distances moved by a particle moving with a constant acceleration during the $l^{\text{th}}, m^{\text{th}},$ and n^{th} second of its motion respectively, show that: $a(m - n) + b(n - l) + c(l - m) = 0$

10. A particle experiences constant acceleration for 20 s after starting from rest. If it travels a distance S_1 in the first 10 s and distance S_2 in the next 10 s, find the relation between S_1 and S_2 .
11. The distance traversed by a moving particle at any instant is half of the product of its velocity and the time of traverse. Show that the acceleration of particle is constant.
12. An object is thrown vertically upward with some speed. It crosses 2 point p, q which are separated by h metre. If t_p is the time between p and highest point and coming back and t_q is the time between q and highest point and coming back, relate acceleration due to gravity, t_p , t_q , and h.

ASSERTION AND REASON TYPE QUESTIONS

Directions: The question numbers 1 to 20 consist of two statements one labelled Assertion (A) and the other

labelled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given

Below.

- (a) If both A and R are true and R is the correct explanation of A
 - (b) If both A and R are true but R is NOT the correct explanation of A
 - (c) If A is true but R is false
 - (d) If A is false and R is also false
- 1). A : It is not possible to have constant velocity and variable acceleration.
R : Accelerated body cannot have constant velocity.
 - 2). A : The direction of velocity of an object can be reversed with constant acceleration.
R : A ball projected upward reverses its direction under the effect of gravity.
 - 3). A : When the velocity of an object is zero at an instant, the acceleration need not to be zero at that instant.
R : In motion under gravity, the velocity of body is zero at the top-most point.
 - 4). A : A body moving with decreasing speed may have increased acceleration.
R : The speed of body decreases when acceleration of body is opposite to velocity.
 - 5). A : For a moving particle distance can never be negative or zero.
R : Distance is a scalar quantity and never decreases with time for moving object.
 - 6). A : If speed of a particle is never zero then it may have zero average speed.
R : The average speed of a moving object in a closed path is zero.
 - 7). A : The magnitude of average velocity in an interval can never be greater than average speed in that interval.
R : For a moving object distance travelled is greater than or equal to magnitude of displacement
 - 8). A : The area under acceleration-time graph is equal to velocity of object.
R : For an object moving with constant acceleration position-time graph is a straight line.
 - 9). A : The motion of body projected under the effect of gravity without a resistance is in uniformly accelerated motion.

R : If a body is projected upwards or downwards, then the direction of acceleration is downward.

10). A : The relative acceleration of two objects moving under the effect of gravity only is always zero,

irrespective of direction of motion .

R : The acceleration of object moving under the effect of gravity have acceleration always in the downward direction and is independent from size and mass object.

11). A : In the presence of air resistance, if the ball is thrown vertically upwards then time of ascent is less than the time of descent.

R : Force due to air friction always acts opposite to the direction of motion of body.

12). A : Average velocity can be zero, but average speed of a moving body cannot be zero in any finite time interval.

R : For a moving body displacement can be zero but distance can never be zero.

13). A: For a particle moving in a straight line its acceleration must be either parallel or antiparallel to velocity.

R : A body moving along a curved path may have constant acceleration.

14). A : A body can have acceleration even if its velocity is zero at that instant.

R : The body will be momentarily at rest when it reverses its direction of motion.

15). A : When a body is dropped or thrown horizontally from the same height, it would reach the ground at the same time.

R : Horizontal velocity has no effect on the vertical direction.

16). A : Displacement of a body may be zero, when distance travelled by it is not zero.

R : The displacement is the largest distance between initial and final positions.

17). A: Retardation is directly opposite to the velocity.

R : Retardation is equal to the rate of decrease of speed.

18). A : A body having a non-zero acceleration can have constant velocity.

R : Acceleration is the rate of change of velocity.

19). A : Two balls of different masses are thrown vertically upwards with same speed. They will pass through the point of projection in the downward direction with the same speed.

R : The maximum height and downward velocity attained at the point of projection are independent of the mass of the ball.

20). A : An object can have constant speed but variable velocity.

R : Speed is a scalar but velocity is a vector quantity.

Chemistry (XI SC. A)

1. The density of the 3 molal solution of NaOH is 1.110 g mL^{-1} . Calculate the molarity of the solution.

2. If 4 g of NaOH dissolves in 36 g of H_2O , calculate the mole fraction of each component in the solution. Also, determine the molarity of solution (specific gravity of solution is 1 g mL^{-1})

3. . Match the following:

- | | |
|---|--------------------------------------|
| (i) 88 g of CO_2 | (a) 0.25 mol |
| (ii) 6.022×10^{23} molecules of H_2O | (b) 2 mol |
| (iii) 5.6 litres of O, at STP | (c) 1 mol |
| (iv) 96 g of O | (d) 6.022×10^{23} molecules |
| (v) 1 mol of any gas | (e) 3 mol |

4. In the following questions a statement of Assertion (A) followed by a statement of Reason (R) is given. Choose the correct option out of the choices given below each question.

Q1. Assertion (A): The empirical mass of ethene is half of its molecular mass.

Reason (R): The empirical formula represents the simplest whole-number ratio of various atoms present in a compound.

- (i) Both A and R are true and R is the correct explanation of A.
- (ii) A is true but R is false.
- (iii) A is false but R is true.
- (iv) Both A and R are false.

Q2. Assertion (A): One atomic mass unit is defined as one-twelfth of the mass of one carbon-12 atom.

Reason (R): Carbon-12 isotope is the most abundant isotope of carbon and has been chosen as the standard.

- (i) Both A and R are true and R is the correct explanation of A.
- (ii) Both A and R are true but R is not the correct explanation of A.
- (iii) A is true but R is false.
- (iv) Both A and R are false.

Q3. Assertion (A): Significant figures for 0.200 are 3 whereas for 200 it is 1.

Reason (R): Zero at the end or right of a number is significant provided they are not on the right side of the decimal point.

- (1) Both A and R are true and R is the correct explanation of A.
- (ii) Both A and R are true but R is not a correct explanation of A.
- (iii) A is true but R is false.
- (iv) Both A and R are false.

Q4. Assertion (A): Combustion of 16 g of methane gives 18 g of water.

Reason (R): In the combustion of methane, water is one of the products.

- (i) Both A and R are true but R is not the correct explanation of A.
- (ii) A is true but R is false.
- (iii) A is false but R is true.
- (iv) Both A and R are false.

5. Calcium carbonate reacts with aqueous HCl to give CaCl₂ and CO₂ according to the reaction given below:



What mass of CaCl₂ will be formed when 250 mL of 0.76 M HCl reacts with 1000 g of CaCO₃? Name the limiting reagent. Calculate the number of moles of CaCl₂ formed in the reaction.

6. Define the law of multiple proportions. Explain it with two examples. How does this law point to the existence of atoms?

7. How is volume measured in the laboratory? Convert 0.5L into mL and 30 cm³ into dm³.

8. Convert 35°C to °F and K.

9. Calculate the number of moles in the following masses:

i 7.85g of Fe

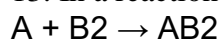
ii 7.9 mg of Ca

10. How much potassium chlorate should be heated to produce 2.24 L of oxygen at NTP?

11. 4 litres of water added to 2L of 6 molar HCl solution. What is the molarity of the resulting solution?

12. Vitamin C is essential for the prevention of scurvy. Combustion of 0.2000g of vitamin C gives 0.2998g of CO₂ and 0.819g of H₂O. What is the empirical formula of Vitamin C?

13. In a reaction



Identify the limiting reagent, if any, in the following reaction mixtures.

(i) 300 atoms of A + 200 molecules of B

(ii) 2 mol of A + 3 mol of B

(iii) 100 atoms of A + 100 molecules of B

(iv) 5 mol of A + 2.5 mol of B

(v) 2.5 mol of A + 5 mol of B

14. What is the difference between the terms orbit and orbital?

15. Table-tennis ball has a mass of 10 g and a speed of 90 m/s. If speed can be measured with an accuracy of 4% what will be the uncertainty in speed and position?

16. Match the following species with their corresponding ground state electronic configuration.

Atom / Ion

(i) Cu

(ii) Cu²⁺

(iii) Zn²⁺

(iv) Cr³⁺

(e) 1s² 2s² 2p⁶ 3s² 3p⁶ 3d³

Electronic configuration

(a) 1s² 2s² 2p⁶ 3s² 3p⁶ 3d¹⁰

(b) 1s² 2s² 2p⁶ 3s² 3p⁶ 3d¹⁰
4s²

(c) 1s² 2s² 2p⁶ 3s² 3p⁶ 3d¹⁰
4s¹

(d) 1s² 2s² 2p⁶ 3s² 3p⁶ 3d⁹

17. Match the quantum numbers with the information provided by these.

Quantum number

Information provided

(i) Principal quantum number

(a) orientation of the orbital

(ii) Azimuthal quantum number

(b) energy and size of orbital

- (iii) Magnetic quantum number (c) spin of electron
 (iv) Spin quantum number (d) shape of the orbital

18. . Match the following rules with their statements:

Rules

Statements

(i) Hund's Rule

(a) No two electrons in an atom can have the same set of four quantum numbers.

(ii) Aufbau Principle

(b) Half-filled and completely filled orbitals have extra stability.

(iii) Pauli Exclusion Principle

(c) Pairing of electrons in the orbitals belonging to the same subshell does not take place until each orbital is singly occupied.

(iv) Heisenberg's Uncertainty Principle

(d) It is impossible to determine the exact position and exact momentum of a subatomic particle simultaneously.

(e) In the ground state of atoms, orbitals are filled in the order of their increasing energies.

19. Threshold frequency, ν_0 is the minimum frequency that a photon must possess to eject an electron from a metal. It is different for different metals. When a photon of frequency $1.0 \times 10^{15} \text{ s}^{-1}$ was allowed to hit a metal surface, an electron having $1.988 \times 10^{-19} \text{ J}$ of kinetic energy was emitted. Calculate the threshold frequency of this metal. Show that an electron will not be emitted if a photon with a wavelength equal to 600 nm hits the metal surface.

20. Calculate the energy and frequency of the radiation emitted when an electron jumps from $n = 3$ to $n = 2$ in a hydrogen atom.

21. What transition in the hydrogen spectrum would have the same wavelength as the Balmer transition, $n=4 \rightarrow n=2$ of H^+ spectrum?

22. Arrange the electrons represented by the following sets of quantum numbers in decreasing order of energy.

1. $n=4, l=0, m=0, s=+1/2$ $n=4, l=0, m=0, s=-1/2$

2. $n=3, l=1, m=1, s=-1/2$ $n=3, l=1, m=1, s=+1/2$

3. $n=3, l=2, m=0, s=+1/2$ $n=3, l=2, m=0, s=-1/2$

23. Write the electronic configuration of (i) Mn^{4+} and Mn^{2+} , (ii) Fe^{3+} and Fe^{2+} , (iii) Cr^{2+} and Cr^{3+} and Zn^{2+} and Zn^{4+} . Mention the number of unpaired electrons in each case. 24.

a) How many sub-shells are associated with the $n = 4$?

(b) How many electrons would be present in the sub-shells having an m_s value of $-1/2$ for $n = 4$?

25. Calculate the uncertainty in the velocity of a wagon of mass 4000 kg whose position is known accurately of $\pm 10\text{m}$

26. What transition in the hydrogen spectrum would have the same wavelength as the Balmer transition, $n = 4$ to $n = 2$ of He^+ spectrum

27. What designations are given to the orbitals having

- (i) $n = 2, l = 1$ = (ii) $n = 2, l = 0$ = (iii) $n = 4, l = 3$ =
(iv) $n = 4, l = 2$ = (v) $n = 1, l = 1$ = ?

28. When an electric discharge is passed through hydrogen gas, the hydrogen molecules dissociate to produce excited hydrogen atoms. These excited atoms emit electromagnetic radiation of discrete frequencies which can be given by the general formula

$$\bar{\nu} = 109677 \left[\frac{1}{n_i^2} - \frac{1}{n_f^2} \right]$$

What points of Bohr's model of an atom can be used to arrive at this formula? Based on these points, derive the above formula giving a description of each step and each term.

29. Why was a change in the Bohr Model of atom required? Due to which important development (s), the concept of movement of an electron in an orbit was replaced by, the concept of probability of finding an electron in an orbital? What is the name given to the changed model of the atom?

30. What is the photoelectric effect? State the result of a photoelectric effect experiment that could not be explained on the basis of laws of classical physics. Explain this effect on the basis of quantum theory of electromagnetic radiation.

Assignment for Class 11 for Summer Vacation

Biology

Biological Classification

Define Biological Classification.

What is the importance of biological classification in biology?

Five Kingdom System:

Describe the Five Kingdom classification system proposed by R.H. Whittaker.

What are the main criteria used in this classification?

Monera:

What are the main characteristics of the kingdom Monera?

Explain the differences between Archaeobacteria and Eubacteria.

Protista:

Describe the key features of kingdom Protista.

Give examples of different types of organisms found in Protista and their roles in the environment.

Fungi:

List the main characteristics of kingdom Fungi.

Discuss the different modes of reproduction in fungi with examples.

Plantae:

What are the main features of kingdom Plantae?

Explain the criteria used to classify plants into different groups.

Animalia:

Describe the main characteristics of kingdom Animalia.

How is the classification of animals different from the classification of plants?

Viruses, Viroids, and Lichens:

SUB – CHEMISTRY

CLASS – XI Sc. B

Q1. S.I unit of energy, density respectively are:

- (a) Ergs, gcm^{-3} (b) joule, Kgm^{-3} (c) Ergs, Kgm^{-3} (d) joule, gcm^{-3}

Q2. Which of the following measurement is more precise ?

- (a) 4.0 (b) 4.00 (c) 4.000 (d) 4.0000

Q3. Lyman series belong to :

- (a) UV region (b) I.R region (c) Visible region (d) none of these

Q4. Energy is radiated or absorbed in form of packets called-

- (a) Electron (b) photon (c) positron (d) proton

Q5. Classify the following in to elements , compounds ,and mixtures:

Water, tea , silver, steel ,carbon dioxide and platinum.

Q6. Calculate the percentage of nitrogen in NH_3 . (atomic mass of N=14 , H=1)

Q7. Define – (i) Zeeman effect (ii) Stark effect

Q8. Calculate wave number of the line having frequency 5×10^6 Hz.

Q9. A compound on analysis found to contain following percentage composition :

Na = 43.4% , C=14% , and O= 45.3% . Determine the empirical and molecular formulae. Given : The relative molecular mass of the compound is 106.

Q10. Define – (i) Photoelectric effect

(ii) Dual nature of matter

Q11. One investigatory project (according to your lab manual)

English

1) Write an article in 800---1000 words stressing on the benefits of 'Meditation' .

Or

Write an article in 800--1000 words on 'The importance of time management for students'.

2) Write a review in 800--1000 words on any one novel .

A) A Tale of Two Cities(Charles Dickens)

B) Far from the Madding Crowd(Thomas Hardy)

C) The Mayor of Casterbridge(Thomas Hardy)

3) You are Vikram/Sonia, a Hons, graduate in History with specialisation in Medieval India. You are well-acquainted with places of historical interest in Delhi, Agra and Jaipur. You are looking for the job of a tourist guide. Write an advertisement in about 50 words for the 'Situation Wanted' column of a local newspaper. Put the advertisement in a box.

XI HUMANITIES HOLIDAY HOMEWORK 2024-2025

Political Science

Objective: - To enable the students to know about the inventions of new concepts in world politics and constitution of India.

- To develop 21st century managerial skills of co-ordination, self-direction and time management.

- To understand contemporary political issues in context to our past. To develop a global perspective and an international outlook.

Assignment: - Project Work

Project Ideas/Topics

1- Local Government- Importance and need for local government.

Functions and responsibilities of local government bodies

Significance of the 73rd and 74th Amendments

Merits and demerits of decentralization

Challenges faced by local government bodies

2. Federalism -a) What is Federalism?

b) Federalism in the Indian Constitution and Division of Powers

c) Federalism with a strong central government

d) Conflicts in India's federal system

Centre-State Relations Demands for Autonomy

Role of Governors and President's Rule, Demands for New States, Interstate Conflicts

e) Special provisions - Jammu and Kashmir

3. Judiciary-a) Need of an independent Judiciary.

b) Different jurisdictions of the Supreme Court

c) Distinction between Judicial Activism, Judicial Review and Judicial Over-reach

d) Conflicts between Judiciary and Parliament.

4. Legislature-a) Importance of Legislature.

b) Types of Legislatures- Unicameral and Bicameral.

c) Powers and functions of the Indian Parliament.

d) Law-making process and the different types of bills in India

e) Instruments of parliamentary control over the executive.

f) Composition, powers and functions of the Lok Sabha and Rajya Sabha.

5. Executive. A)• Meaning of Executive

b) Distinction between Parliamentary and Presidential forms of Executive

c) Power and position of the President of India.

d) Composition, powers and functioning of the Council of Ministers and the importance of the Prime Minister

e) Importance and functioning of the administrative machinery.

Guidelines for Project Work

The expectations of the project work are that

1. Students have to complete only one project in each academic session from the above five topics.

2. Project should be hand written
 3. It will be an independent, self-directed piece of study
- Scope of the project
Learners may work upon the following lines as suggested following

1. Choose a title/topic
 2. Certificate
 3. Acknowledgement
 4. Index
 5. Introduction
 6. Main event, Origin, history, identify the causes, consequences, and remedies
 7. Validity, reliability of case study used for the project
 8. Report Writing
 9. Draw the relevant Conclusion
 10. Bibliography
- General Instructions for assignment questions.

- 1) The work should be done neatly and in a systematic way.
- 2) The given questions are to be done in your respective subject notebooks.

Subject: Political Science
Assignment Work

- Q.1 What is the philosophy of Indian Constitution? Discuss.
- Q.2 Explain the role of the Election Commission of India.
- Q.3 How does the Election Commission of India ensure its independence?
- Q.4 Describe the powers and functions of the President of India.
- Q.5 How does the Indian Parliament control the Executive?
- Q.6 Write any two features of Indian secular state.
- Q.7 Why Fundamental Rights are important?
- Q.8 Mention the amendment made in constitution of India in 1989.
- Q.9 Correct the following statement and rewrite:
The legislature is the branch of government responsible for the implementation of laws and policies adopted by the executive.
- Q.10 Mention two motions which the Parliament in India can adopt to control the government..

History

Project Topics -are as mentioned below choose any one of them and prepare the project file

(1) Anthropological Research based on Darwin's theory;

(2) Collect at least five different denominations currency notes in circulation today. For each one of these ,describe what you see on both side of the currency .Prepare a report on the common features.

(3) Interview any one of your older relations who has travelled outside your town or village .Find out

-where they went.

-how they travelled.

-did they face any difficulties

-why they went.

(4) Making and unmaking of Mesopotamia;

(5) Read a biography of any one of the leaders of the revolt of 1857. Prepare a report on your finding.

GUIDELINES FOR THE PROJECTS:

It must be emphasized that the process of doing the project is as important as the final project.

Once the project/projects are chosen, there should be a process of brainstorming to make out a draft/structure for the project before embarking on research.

Internet sites could be referred, but care must be taken in selecting, using and citing these sites.

Avoid plagiarism

Marks to be awarded for content and originality and not for decorative elements and embellishments.

Projects must be the original work of the student.

Project may be supported by- Data, fact sheets, maps, articles, newspaper clips

Maximum of 25-30 page projects.

Subject : English

Read the following books and write a review on anyone.

1. How to Talk to Anyone - Leil Lowndes
2. Animal Farm - George Orwell

GEOGRAPHY

TOPIC: An island of India or world

Date of submission 20.6.24

GUIDELINES:

Page no 1 Topic of the project. Page no 2 Acknowledgement.

Page no 4 and continue till page 19 :Introduction: Definition of Island and classification.

Page no 3 Contents.

Location, climate, soil, natural vegetation and animals found in the selected region.

Economy of the island.

Tourism.

Write about the species protected, steps taken by the Government.

Conclusion: Statistics on the declining wild life in India. Concept of eco tourism. Legislation on wild life protection.

Page 20 BIBLIOGRAPHY.(Name of the books, news papers, and websites used for the project)
Use pictures maps news paper cuttings, statistical representations to support the data

given.

Page limit: 20 pages

Use only black and blue colour for writing

English (XI SC.A & Humanities)

Read the following books and write a review on anyone.

1. How to Talk to Anyone - Leil Lowndes
2. Animal Farm - George Orwell

CLASS 11th COMMERCE HOLIDAY HOMEWORK 2024-2025

ECONOMICS

- 1) Write a note on one of your favorite economists and mention their contribution to the Indian economy in detail. [500 words]
- 2) Prepare a report on India's GDP growth since 2014 till now in about 500 words.
- 3) Write a note on how consumers can attain maximum satisfaction through utility analysis.
- 4) Write a note on the central problems of an economy along with the methods to overcome them.**

English

- 1) Write an article in 800---1000 words stressing on the benefits of 'Meditation' .
Or

Write an article in 800--1000 words on 'The importance of time management for students'.

- 2) Write a review in 800--1000words on any one novel .

A) A Tale of Two Cities(Charles Dickens)

B)Far from the Madding Crowd(Thomas Hardy)

C)The Mayor of Casterbridge(Thomas Hardy)

3) You are Vikram/Sonia, a Hons, graduate in History with specialisation in Medieval India. You are well-acquainted with places of historical interest in Delhi, Agra and Jaipur. You are looking for the job of a tourist guide. Write an advertisement in about 50 words for the 'Situation Wanted' column of a local newspaper. Put the advertisement in a box.

BST

- 1 . Make a project on Cooperative Societies/ Partnership form of business/ Sole proprietorship of business
2. How the beginning of Ram temple in Ayodhya helping in raise of Hotel Industry in Faizabad.

Accountancy

1- Revise all chapters covered in class.

2- Imagine any business unit choose its name, prepare two sample vouchers of debit note, credit note, cash memo, invoice and write in your notes register. Take help of text book for the format.

3- Note down the transaction for 15 days from 1 June 2024 to 15 June 2024 of the business organisation (any one of the below) and prepare an accounting equation for the transaction that has been noted :

Grocery shop

Salon

Cosmetics shop

B

akery shop

Sweet shop

4- Do any three question of ledger in your notebook and also prepare trial balance for the same.

Optional Subjects

Informatics Practices (065)

1) Who developed the Python language?

1. Zim Den
2. Guido van Rossum
3. Niene Stom
4. Wick van Rossum

2) In which language is Python written?

1. English
2. PHP
3. C
4. All of the above

- 3) Which one of the following is the correct extension of the Python file?
1. .py
 2. .python
 3. .p
 4. None of these
- 4) Which of the following declarations is incorrect?
1. `_x = 2`
 2. `__x = 3`
 3. `__xyz__ = 5`
 4. None of these
- 5) Which of the following is not a keyword in Python language?
1. `val`
 2. `raise`
 3. `try`
 4. `with`
- 6) Which of the following statements is correct for variable names in Python language?
1. All variable names must begin with an underscore.
 2. Unlimited length
 3. The variable name length is a maximum of 2.
 4. All of the above
- 7) Which of the following declarations is incorrect in python language?
1. `xyzp = 5,000,000`
 2. `x y z p = 5000 6000 7000 8000`
 3. `x,y,z,p = 5000, 6000, 7000, 8000`
 4. `x_y_z_p = 5,000,000`
- 8) Which of the following words cannot be a variable in python language?
1. `_val`
 2. `val`
 3. `try`
 4. `_try_`
- 9) Which of the following operators is the correct option for a^b
1. `a ^ b`
 2. `a**b`
 3. `a ^^ b`
 4. `a ^ * b`
- 10) Which of the following precedence order is correct in Python?
1. Parentheses, Exponential, Multiplication, Division, Addition, Subtraction
 2. Multiplication, Division, Addition, Subtraction, Parentheses, Exponential
 3. Division, Multiplication, Addition, Subtraction, Parentheses, Exponential
 4. Exponential, Parentheses, Multiplication, Division, Addition, Subtraction
- 11) Study the following statements:
1. `>>> str1 = "jvat"`
 2. `>>> str2 = ":"`
 3. `>>> str3 = "point"`
 4. `>>> str1[-1:]`

12) What will be the output of this statement?

1. t
2. j
3. point
4. java

13) Study the following code:

1. `>>> print (r"\n javat \n point")`

What will be the output of this statement?

1. java
point
2. java point
3. \n javat \n point
4. r
javat
point

14) - What is output for `- 2 * 2 **3`

- A. 12
- B. 64
- C. 16
- D. 36

15) – Python code can run on a variety of platforms, it means Python is a
Language.

1. Graphical
2. Cross-platform
3. independent
4. All of these

16) The..... mode of Python gives instant result of typed statement

1. Interactive mode
2. Script mode
3. Combination of interactive and script modes
4. All of these

17) Which of the following are not valid strings in Python?

- a) "Hello"
- b) 'Hello'
- c) "Hello'
- d) { Hello }

18). Create following Variables

- i) "mystring" to contain "hello"
- ii) "myfloat" to contain "2.5"
- iii) "myint" to contain "10"

19). Write the value justification

- i) $2*(3+4)$
- ii) $2*3+4$
- iii) $2+3*4$

20). What is the type of the following result:

i) $1+2.0+3$

21). Which of the following is the valid variable name:

i) global

ii) 99flag

iii) sum

iv) an\$wer

22). True or False

i) Character Data type values should be delimited by using the single quote.

ii) None is one of the data type in python

iii) The += operator is used to add the right hand side value to the left hand side variable.

iv) The data type double is not a valid python data type.

v) Python does not have any keywords

vi) The equal to condition is written by using the == operator

23). Check all syntactically correct statements

a) Which input statements are correct?

i) `a = raw_input ()`

ii) `a = raw_input ("enter a number")`

iii) `a = raw_imput (enter your name)`

b) Which print statements are correct?

i) `_print "9" + "9"`

ii) `_print int("nine")`

iii) `_print 9+9`

iv) `print 9`

c) Which are correct arithmetical operations?

i) `a = 1*2`

ii) `2 = 1+1`

iii) `5 + 6 = y`

iv) `Seven = 3 * 4`

d) Which are correct type conversions?

i) `int (7.0+0.1)`

ii) `str (1.2 * 3.4)`

iii) `float ("77"+"0")`

iv) `str (9 / 0)`

e) Which operations result in 8?

i) `65 // 8`

ii) `17 % 9`

iii) `2 * * 4`

iv) `64 * * 0.5`

f) Which lines are commented?

i) `"""This is a comment"""`

ii) `# This is a comment`

iii) `// this is a comment`

iv) `"""This is a comment"""`

g) Find the matching pairs of expressions and values.

i) `1023` boolean

ii) `None` int

iii) `[2, 4, 8, 16]` tuple

iv) `True` list

- v) 17.54 str
- vi) ("Roger", 1952) None Type
- vii) "my fat cat" float

- 24) The _____ data type allows only True/False values
a) bool b) boolean c) Boolean d) None
- 25) If the value of a = 20 and b = 20, then a+=b will assign _____ to a
- 26) The _____ operator is used to find out if division of two number yields any remainder
a) / b) + c) % d) //
27. How can we change the value of $6*1-2$ to -6 from 4?
28. Is python case sensitive?
29. What does "immutable" mean; which data type in python are immutable.
30. Name four of "Python"s Basic data types? Why are they called so?
31. What are relational operators? Explain with the help of examples.
32. What is an integer?
33. What is a variable? What names may variable have?
34. How are keywords different from variable names?
35. Why are data types important?
36. How can you convert a string to integer and when can it be used?
37. How can text be read from the keyboard?
38. How are comments written in a program?
39. Write a code to show the use of all 6 math function.
41. Write a program that asks two people for their names; stores the names in variables called name1 and name2; says hello to both of them.

Hindi

कक्षा-एकादश परियोजना कार्य

- ▶ 1- तुलसीदास की दस चौपाई उनके अर्थ लिखो ।
- ▶ एक शिक्षाप्रद कहानी लिखो ।
- ▶ मजदूर दिवस पर स्वरचित कविता लिखो ।
- ▶ चुनाव प्रचार का विग्यापन तैयार करो ।
- ▶ जल संरक्षण कैसे किया जाय सचित्र वर्णन करे।
- ▶ नोट- फाइल, a4 size पेपर , फाइल कलर ,चाकलेटी