

ENGLISH

A. Answer the following questions in 30 to 40 words.

1. "That's professional etiquette." Who says this and why?
2. What did Louisa Mebbin plant in her garden? Why?
3. Explain the lines: "And the frog with great precision counted heads and charged admission".
4. Why will the living record of memory remain?

B. Answer the question in 120 to 150 words.

The play on one side is pessimistic because it highlights the plight of old people but on the other side the play is optimistic because it gives a hope that even elderly people may chose to live merrily, despite their old age. Elaborate.

- C. You are an ardent reader and want to inculcate reading habits in others. For this purpose, a good library is needed. Write a letter to the editor of the 'The Hindu' emphasizing the need to establish a public library in your town.
- D. Read the passage and answer the questions that follow.

*And immediately I regretted it.
I thought how paltry, how vulgar,
what a mean act,
I despised myself and the voices of
my accursed human education.*

- (a) What did the poet regret?
- (b) Find out the word from the extract which means the same as 'felt sorry or sad about a situation'.
- (c) Why did the poet curse his human education?

GEOGRAPHY

1. Major cause of land degradation Punjab , Haryana and Western Uttar Pradesh .
2. Name the multipurpose project on Mahanadi river .
3. In which soil leaching is found ?
4. Rain water harvesting method of Jaisalmer .
5. What is called a bloodless revolution .
6. Name the leguminous crop .
7. In which type of farming one single crop is grown on a large area ?
8. In which state bamboo drip irrigation is practised ?
9. Rows of tress are planted to check soil erosion .
10. The crop is used both as food and fodder.
11. At which place the artificial lake of 11th century was built ?
12. What type of farming has been developed at Western and Central Himalaya.
13. Due to diffusion of which mineral the soil became red in colour ?
14. Which is the largest coffee producing state of India ?
15. Materials (resources) found in the environment which can satisfy human wants but cannot be developed due to lack of technology .

Economics

1. Which one of the following is not a measure of development in the Human Development Report of the UNDP?
 - a. Per capita income in USD
 - b. Education levels of the people
 - c. Body Mass Index
 - d. Life expectancy at birth
2. In which state in India is the infant mortality rate lowest?
 - a. Kerala
 - b. Bihar
 - c. Uttar Pradesh
 - d. Punjab
3. Development goals of different sections of our society can be achieved by:
 - a. Force
 - b. Democratic Political Process
 - c. Violent Agitation
 - d. Terrorism
4. We can obtain per capita income of a country by calculating:
 - a. The total income of a person
 - b. By dividing the national income by the total population of a country
 - c. The total value of all goods and services
 - d. The total exports of the country
5. BMI is a method of finding out which of the following?
 - a. Infant Mortality
 - b. Health status
 - c. Longevity
 - d. Economic status
6. GDP is the total value of:
 - a. All goods and services
 - b. All final goods and services
 - c. All intermediate goods and services
 - d. All intermediate goods and final goods and services
7. Which of the following statements is true in respect of Public Sector?
 - a. Big companies own most of the assets
 - b. Government owns the assets
 - c. A group of people owns most of the assets
 - d. An individual owns most of the assets
8. Workers enjoy job security in:
 - a. Agriculture Sector
 - b. Private sector
 - c. Unorganized Sector
 - d. Organised Sector
9. Under employment occurs when people
 - a. Do not want to work
 - b. Are not paid for their work
 - c. Are not skilled
 - d. Are working less than they are capable of

10. Why did the government shift its strategy from long term to short term programmes to remove unemployment?
- Large scale corruption
 - Lukewarm response from the state government
 - Long term programmes take a long time to implement
 - Lack of funds

HINDI

- 1 निम्नलिखित पद्यांशों को पढ़कर पूछे गए प्रश्नों के उत्तर दें ।

जो बीत गई सो बात गई,
जीवन में एक सितारा था
माना, वह बेहद प्यारा था,
वह डूब गया तो डूब गया
अंबर के आनन को देखो।
कितने इसके तारे टूटे,
कितने इसके प्यारे छूटे
जो छूट गए फिर कहाँ मिले?
पर बोलो टूटे तारों पर,
कब अंबर शोक मनाता है?
जो बीत गई से बात गई।
जीवन में वह था एक कुशुम,
थे उस पर नित्य निछावर तुम
वह सूख गया तो सूख गया
मधुबन की छाती को देखो।
सूखी इसकी कितनी कलियाँ,
मुरझाई कितनी वल्लरियाँ
जो मुरझाई फिर कहाँ खिली,
पर बोलो ! सूखे फूलों पर
कब मधुबन शोर मचाता है?
जो बीत गई सो बात गई।

- (क) 'जो बीत गई सो बात गई' - के माध्यम से कवि क्या कहना चाहता है? 2
(ख) 'जीवन में वह था एक कुशुम' - यहाँ कुशुम किसका प्रतीक है?
(ग) 'मधुबन की छाती को देखो , सूखी इसकी कितनी कलियाँ ' में निहित अलंकार बताइए।
(घ) कवि ने अंबर का उल्लेख क्यों किया है?
(ङ) कवि ने मधुबन की छाती की ओर देखने के लिए क्यों कहा है?
इससे मनुष्य को क्या सीख लेनी चाहिए?

- 2 निम्नलिखित को निर्देशानुसार उत्तर दें -

- (क) बस छूट गई इसलिए वह कार्यालय नहीं गया। (संयुक्त वाक्य में बदलें)
(ख) गांधीजी का हर जगह स्वागत हुआ। (मिश्र वाक्य में बदलें)
(ग) उस कारीगर से काम कराना जो सबसे कुशल हो। (कौन सा वाक्य है?)

- 3 (घ) वह उस घर में रहता है जो बहुत बड़ा है। (सरल वाक्य में बदलें)

निम्नलिखित में रेखांकित पदों के पद- परिचय लिखें।

- (क) तमिल बहुत प्राचिन भाषा है।
(ख) उसने मेहनत से सफलता अर्जित की है।
(ग) यात्री रास्ते भर गाता गया।

- 4 निम्नलिखित के वाच्य बदलें

- (क) विगोर से हँसा जाता है। (वाच्य पहचान कर लिखें)

- (ख) घायल व्यक्ति चल नहीं सकता। (वाच्य पहचान कर लिखें)
 (ग) रोहिणी से उठा नहीं जाता है। (कर्तृ वाच्य में बदलें)
 (घ) राशि ने कविताएँ सुनाई। (कर्म वाच्य में बदलें)
- 5 निम्नलिखित पद्यांश के रस के नाम बताएँ स्थायी भाव लिखें एवं आलंबन तथा उद्दीपन लिखें।
 भए भुवन घोर, कठोर रव रवि बाजि तजि मारग चले।
 चिक्करहि दिग्गज डोल महि अहि कोल कूरम कलमले।।
- 6 माँ के प्रति अधिक लगाव न होते हुए भी विपत्ति के समय भोलानाथ माँ के आँचल में ही प्रेम और शान्ति पाता है। इसका आप क्या कारण मानते हैं?

अथवा

माता के आँचल पाठ में आए ऐसे प्रसंगों का उल्लेख कीजिए जो आपके दिल को छू गए हैं?

PHYSICS

- (a) Describe how hydro-energy can be converted into electrical energy. Write any two limitations of hydro-energy.
 (b) Charcoal is better fuel than wood. Why?
- (a) Draw the pattern of magnetic field lines produced by a current carrying circular wire.
 (b) What is the function of earth wire?
 (c) State the factors on which magnetic field produced at the centre of current carrying circular wire depends. State the rule used to determine the direction of magnetic field produced due to circular wire.
- Draw a schematic diagram of a circuit consisting of a battery of three of 2V each, a 3ohm resistor, a 6 ohm resistor connected in parallel, with an ammeter to measure total current in the circuit and a plug key. Calculate the electric current through each resistor when the key is closed.
- n resistors each of resistance R are first connected in series and then in parallel. What is the ratio of total effective resistance of the circuit in series and parallel combination?

CHEMISTRY

- Define Oxidation and Reduction reaction. Identify which is oxidized and which one reduced?
 $3\text{MnO}_2 + 4\text{Al} \rightarrow 2\text{Al}_2\text{O}_3 + 3\text{Mn}$
- How Plaster of Paris is prepared? Why temperature should be controlled during the preparation of Plaster of Paris from Gypsum?
- What happens when:
 (a) Steam is passed over red hot iron? Write the equation involved.
 (b) Ferrous sulphate is heated in the presence of air. Write the equation involved.
- With a suitable diagram show the electrorefining of Copper. Write the equation involved?

BIOLOGY

- Name the largest artery in the human body?
- How does a touch – me – not plant respond on touching? What is this movement called?
- DDT that was sprayed in minute amount on food plants was detected in high concentration in man? How did it happen? Explain.
- List three things you have done over the last one week to-
 (a) Conserve our natural resources.
 (b) Increase the pressure on our natural resources.

MATHEMATICS

1. Find the HCF of 4052 and 12576 by Euclid's division lemma.
2. Find out whether the lines representing the following pair of linear equation intersect at a point, parallel or coincident:
 $9x+3y+12=0$
 $18x+6y+24=0$
3. Find two consecutive odd positive integers, sum of whose squares is 290.
4. Prove that the sum of the squares of the sides of a rhombus is equal to the sum of the squares of its diagonals.
5. Find the ratio in which the y-axis divides the line segment joining the points (5,-6) and (-1,-4). Also find the point of intersection.
6. Find the value of k if the points A(2,3), B(4,k) and C(6,-3) are collinear.
7. State and prove Basic proportionality (Thales) theorem.
8. Use Euclid's division lemma to show that the cube of any positive integers is of the form $9m$, $9m+1$ or $9m+8$.
9. The area of a rectangle gets reduced by 9 square unit, if its length is reduced by 5 units and breadth is increased by 3 units. If we increase the length by 3 units and the breadth by 2 units, the area increased by 67 square units. Find the dimensions of the rectangle.

संस्कृत

- (1) सन्धि/ सन्धिच्छेदं कुरुत ।
 - (I) तत् + श्रुत्वा तेषु एकः बालकः उवाच ।
 - (II) यथा + उचिताम् क्रियताम् ।
 - (III) रमणीया हि 'सृष्टिरेशा' ।
 - (IV) 'प्रियच्छात्राः' अभिनन्दनम् भवताम् ।
- (2) समास/समास विग्रहं कृत्वा लिखत ।
 - (I) पाठतः अपि 'अनभ्यासः' ।
 - (II) शतवर्षानाम् 'शतानाम् आब्दानाम् समाहारः' कथ्यते ।
 - (III) विद्वज्जनान् 'राजपुरुषाः' नमन्ति ।
 - (IV) वानराणाम् 'यूथस्य पतिः' अवदत् ।
- (3) प्रकृति/प्रत्यय संयोज्य विभाज्य च लिखत ।
 - (I) एकस्मिन् आश्रमे 'श्रद्धा + मतुप्' शिष्याः वसन्ति स्म ।
 - (II) वृक्षारोपणं अस्माकं नीति + ठक् कर्तव्यम् अस्ति ।
 - (III) नृत्यं कृ + अनीयर् बालिका गीतं अपि गायति ।
 - (IV) छात्रैः समये विद्यालयः गम् + तव्यत् ।
 - (V) नृपेण प्रजाः 'पालनीयाः' ।
 - (VI) मनुष्यः 'सामाजिकः' प्राणी अस्ति ।
- (4) उचित समयं लिखत ।
 - (I) सायम् --- वादने अहं उत्तिष्ठामि ।

(11)मध्याहने-----वादने अहं विद्यालयात् आगच्छामि ।

(5) वाच्यानुसारं रिक्त स्थानानि पूरयत ।

माता--पुत्री! बहिःके आगच्छन्ति?

पुत्री--मातः!बहिः-----आगम्यते ।

माता---पुत्री!किम्-----भोजनं याचन्ति ।

पुत्री---मतः!-----भोजनं न याच्यते ।

(ते, तैः , भिक्षुकैः)

(6)प्रश्न निर्माणं कुरुत ।

(1)प्राणिणाम् मूढता " निद्रा " कथिता ।

(11)राजा पुत्रवत् "प्रजाः"पालयति स्म ।

(111)"लोके" चक्षुर्दानम् दुष्करमेव ।

(7)रिक्त स्थानानि पूरयत ।

(1)सभायाम्-----मा वद ।

(11)वृक्षाणाम् अभावे पशवः-----भ्रमन्ति ।

(111)समुद्रेषु----- वृष्टिः।

(उच्चैः , इतस्ततः, वृथा)