English

Research on the state of elderly in India. Based on your research discuss the following issues:
- Plight of old people in India. Support your arguments with facts.
- Reasons for their neglect.
- Measures taken by the old age homes to support the elderly.
- A case study of severed relationship between parents and children.

. 'Down to earth' an environmental awareness magazine,has launched a marathon 'clean your city campaign'.As an active participant write a speech to read out in the morning assembly urging students to participate in the campaign .

. You are the minister of tourism write a speech in 150-200 words about the growth of tourism industry.

. The international book fair is being held at pragati maidan between 7th feb to 14th feb. As the librarian write a notice informing the students about it.

. You have been selected to speak in an inter school debate competition the topic is: "technology can never replace teachers". Write a debate for the motion in 150-200 words.

. You are rekha/kasim & you feel disturbed at the growing violence among children write a speech on "growing violence among children"(150-200) words.

Business Studies

Q.1   Three friends Amar, Akbar and Anthony completed their studies and planned to join their father's business. Amar got engaged in his sugarcane farm. Akbar joined his father's sugar mill and Anthony joined the transport business of his father. Identify the different types of industries being discussed in the given case.

Q.2   Mukul is a teacher in RD Public School. During the weekends, he teaches kids of slum area free of cost. He also opened a book shop in partnership with his neighbour. Identify the human activities done by Mukul.

Q.3   Climax Ltd decided to open up a new factory for readymade garments in the remote area of Bihar. Company's aim is to generate employment opportunities for the unemployed youth and to raise standard of living of people in the rural areas .Identify the objective of business which is followed by the company.

Q.4   Identify the type of industry highlighted in each of the following individual cases.

(a)   Krishna has a cement factory.

(b)   Namit joined his father's business of poultry farming.

(c)   Shivam imports different components from China and assemble them to make computer.

Q.5   (a)   Name the auxiliary to trade which remove the hindrance of information.

(b)   Which auxiliary to trade removes the hindrance of time?

(C)   Which business activity removes all the hindrances in the process of exchange?

(d)   Which type of business risk involves both the possibility of gain as well as the possibility of loss?

(e)   Which type of business risk involves only the possibility of loss or no loss without any possibility of gain?

Economics

Q.1   Define Economics?
Q.2.   Distinguish between Micro Economics and Macro Economics?
Q.3   Give two examples of Micro Economics.
Q.4   Define Economy
Q.5   Distinguish between Market Economy and Planned Economy.
Q.6   What do you understand by Positive Economics? Give Example.
Q.7   What do you understand by Normative Economics? Give example.
Q.8   Why do Economics problems (central Problems) arise in an Economy? Explain.
Q.9   Explain the problem 'What to Produce'?
Q.10   In What way an economic problem become a problem of my choice?
Q.11   With the help of Suitable example explain the problem of 'For whom to produce'
Q.12   With the help of numerical example explain "Production possible Curve".
Q.13   Marginal opportunity cost on production possibility curve increases with increase in production How?
Q.14   production in an economy is below its potential due to unemployment. Government starts employment generation scheme. Explain starts employment generation Scheme. Explain its effect using production possibility curve.

Geography

Q1.   Answer the following :-
        1. What is nebula?
        2. What is a protostar?
        3. When was the Earth formed?
        4. Why are the terrestrial planets rocky?
        5. What were the gases which initially formed the earth's atmosphere?
        6. What do you understand by the process of differentiation?
        7. What is meant by the process of differentiation?
Q2.   1.Give the summary of evolution of life is given in the Geological Time Scale with pictures.
        2. Explain in detail 'big bang' theory with diagram and pictures.
Q3.   Mark the following on the outline map of world:-
   1. Continents 2. Oceans 3. 7 Plate boundaries
   4. Earthquake prone areas 5. Volcanic areas (Pacefic ring of fire)
   (Mid Atlantic Ridge)
   6. Paths of Temperate and Tropic cyclones.
   7. Movements of ocean currents cold and worm.

Accountancy

Q1   What do you mean by Accounting?

Q2   "Accounting is an arts and 'science". Coments.

Q3   Explain brifly three objective of Accounting.

Q4   Explain three diffrence between Book-Keeping and Accounting.

Q5   Write the advantage of Accounting?

Q6   What are the attributes (features) of accounting?

Q7   What is Accounting Cycle?

Q8   Give any three examples of revenues.

Q9   Distinguish between debtors and creditors.

Q10   Distinguish between profit and gain.

Q11   Distinguish between fixed assets and current assets.

Q12   Distinguish between revenue expenditure and capital expenditure.

Q13   Distinguish between expenses and losses.

Q14   Give two characteristics of a business transaction.

Q15   What is Capital?

Q16   Give two examples of Current Liabilities.

Q17   What is revenue?

Q18   What is income?

Q19   What is a Voucher?

Q20   What is Trade Discount?

Q21   What is Cash Discount?

Q22   Explain the following :
   (i)   Dual Aspect Principle
   (ii)   Accrual Concept
   (iii)   Going Concern Concept

Q23   Prepare Accounting equations :-
   (i)   Started business for Cash Rs.2,00,000 and goods Rs.1,00,000.
   (ii)   Half available goods sold to Snjana at Rs.60,000.
   (iii)   Purchased goods from Rashi Rs.40,000.
   (iv)   Received Rs.59200 from Sanjana in full sattelemnt.
   (v)   Paid for Rent Rs.10,000 and Wages Rs.5,000 s
   (vi)   Paid Rs.39,400 to Rashi in full sattlement.
   (vii)   Salary is due Rs.6,000

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Mathematics

Topic : Sets Relation & Functions

To be done in note book.

1. Write A = { x / x is an integer and − 3 < x < 7 } in roster form.

2. Write B = { 2 , 4 , 8 , 16 , 32 } in set builder form.

3. List all elements of the set A = { x/x is odd natural number}

4. Write any non empty set.

5. Are the following pair of sets equal? Give reasons A = {2, 3}, B = {x / x is solution of x^2 + 5x+ 6} = 0}.

6. How many elements has P(A) if A = Q?

7. Write the following as intervals $\{x / x \in R, -42x \le 6\}$.

8. Let A = { a, b}, B = { a, b, c}. Is A⊂B? What is A∪B?

9. If A = { 1, 2, 3, 4}, B = {3, 4, 5, 6}. Find $A \cup B$, $A \cap B$, A − B, B − A.

10. Let μ = {1, 2, 3, 4, 5, 6}, A = { 2, 3}, B = { 3, 4, 5}. Find A', B', $A' \cap B'$ and hence show that $(A \cup B)' = A' \cap B'$.

11. In a school there are 20 teachers who teach mathematics or physics: of these, 12 teach mathematics and 4 teach both physics and mathematics. How many teach physics?

12. Show that $A \cup B = A \cap B \Rightarrow$ A=B

13. Show that if $A \subset B$ then $C - B \subset C - A$

14. Is it true that for any sets A and B, P(A) ∪P(B) = P $(A \cup B)$? Justify your answer.

15. Using properties of sets, show that $A \cup (A \cap B) = A \, and \, A(A \cap B) \cup (A - B)$

16. Let A = {1, 2}, B = {1, 2, 3, 4}, C = {5, 6}. Verify that $A \times (B \cap C) = (A \times B) \cap (A \times C)$.

17. Let A = { 1, 2, 3, ………. 14}. Define a relation R from A to A by R = { (x, y) / 3x − y = 0, where x, y∈ A}. Write down its domain codomain and range.

18. Write domain and range of function $f(x) = \sqrt{9 - x^2}$

19. If A × B = { (a, x), (a, y), (b, x), (b, y)}. Find A and B.

20. If A = {-1, 1}, find A × A × A.

Chemistry

1. What is the mass of 1L of mercury in grams and in kilograms, if density mercury is 13.6 cm^{-3}?
2. Calculate the number of He atoms in (i) 52 μ , (ii) 52g.
3. If 6.023 × 10^{23} molecules of N_2 react completely with H2 according to the equation $N_2(g)$ + $3H_2(g) \rightarrow 2NH_3(g)$, then calculate the number of molecules of NH_3 formed.
4. Write the electronic configuration of Cu^{+2} (29) and Cr^{3+} (24).
5. Calculate the velocity of a particle of mass 0.1 mg which is associate with a wavelength of 3.3 × 10^{-29} m. (h = 6.626 × 10^{-34} kg m^2s^{-1})

Biology

1. Mention the characteristics of living organisms?
2. Define metabolism and anabolism.
3. Describe Binomial Nomenclature with an example.
4. Name the four processes that are basic to taxonomy.
5. Write a short account on herbarium as a taxonomic aid.
   Note: Do all questions in Biology register.

Political Science

Constitution Why and How?

1. What is meant by the term Constitution?
2. When was constituent assembly for framing the constitution of India established?
3. Name any 4 members of the constituent assembly
4. What is meant by preamble?
5 . What is the objective of the Indian Constitution?
6. What is the nature of foreign policy according to the Preamble
7. What is the need and importance of a constitution 8 what is meant by the term secular is India a secular state
9. Describe the four main features of the Indian Constitution.
10 India is a union of states discuss
11 write down the different forms of Liberty mentioned in the Preamble of the constitution
12. What are the four main ideals enshrined in the Preamble to the Indian Constitution.
13 describe the new words included in the Preamble by 42nd amendment.
14 Why is the Indian Constitution bulky?
15. Refer the first function of the Constitution (Page 2-3), answer the following questions.
   a) How Indian constitution encourages respect for diversity and minority rights?
   b) What will happen when communities see each other as equal?
   c) What was a huge challenge for the makers of the constitution?
   d) Identify the values in the above paragraph.
16. Refer to the +page 18 paragraph and answer the following.
"I have realised --------------------of the country."
   a) Who was the chairman of drafting committee?
   b)   What made the constituent assembly of India unique?
   c) How long the constitution of India took in framing?
   d) Who was the chairman of the constituent assembly?
17. Study the cartoon given on page 9 and answer.
   a) Name the ethnic group in Iraq.
   b) What do these group stand for?
   c) What are the demands of each group here?
   d) Do you think they will resolve the issue?
18. Why do we need a constitution?
19. " The constitution of India is a bag of borrowing." Discuss
20. How is India a Sovereign Democratic Republic? Discuss.
21. What are the unique features of Indian Constitution?

Physics

1. The readings for time period of a simple pendulum are – 2.63 s, 2.56s, 2.42s, 2.71s & 2.80s. Calculate absolute errors relative error & percentage error.

2. 5.74 g of a substance occupies 1.2 cm^3. Express its density by keeping the significant figures in view.

3. Check the dimensional accuracy of the following equations –

   (i) $\dfrac{1}{2}mv^2 = mgh$

   (ii) $T = 2\sigma\sqrt{\dfrac{\ell}{g}}$

   (iii) $v^2 - u^2 = 2as$

4. State the no. of significant figures in the following –

   (i) 2.64×10^{24} kg

   (ii) 0.007 m^2

   (iii) 0.2370 g cm^{-3}

5. Differentiate between –

   (i) accuracy & precision

   (ii) systematic errors & random errors