

## ENGLISH

1. What was the significance of placing a mirror in the zoo at Lusaka, Zambia?
2. Explain the statement 'forests precede mankind; deserts follow' .
3. What do you understand by the term 'a holistic and ecological view' ? Explain.
4. Is there a hope for environmental enrichment in future? What is needed to bring about the change from degradation to enrichment?
5. Are we to leave our successors a scorched planet of advancing deserts , impoverished landscapes and an ailing environment?' Explain with reference to 'The Ailing Planet'.
6. What does Taplow feel about Mr Crocker- Harris?
7. Does Frank encourage Taplow's comments on Crocker- Harris? Give examples.
8. Why could Taplow not understand Crocker's joke? Why did he then laugh at it?
9. What impression of Frank do you get as a teacher?
10. Where can the poet find his childhood? Is it lost irrevocably? (Childhood)
11. Of all the occasions mentioned in the poem, which do you think really shows that the poet is no longer a child? Give reasons for your answer. (Childhood)
12. What is the poet's feeling towards childhood? (Childhood)
13. What did the poet notice about his mind? How important was this discovery? (Childhood)
14. How does the poet view the adult in contrast to the child? (Childhood)
15. Does the poem talk of an exclusively personal experience or is it fairly universal? (Father to Son)
16. Identify the phrases and lines that indicate distance between the father and the son.
17. The anguish of the father comes through very strongly in the poem. Show his feelings about his son as expressed in the poem. (Father to Son)
18. Why does the father feel he and his son are like strangers to each other? (Father to Son)
19. Do you think Albert is being impolite while answering the History teacher's questions? Give your reasons.
20. What was Einstein's chief objection against learning History?
21. Were the teachers interested in understanding Albert and bringing out his potential?
22. Keeping the whole story in mind, briefly discuss Einstein's character as it is revealed here.
23. Is drama a good medium for conveying a social message? Discuss. (Mother's Day)
24. Why is Mrs Pearson always ordered about by her family members?
25. This is a humorous play with many humorous situations. Which situation did you enjoy the most? (Mother's Day)
26. Mrs Annie Pearson and Mrs Fitzgerald are totally opposite to each other in their attitudes. Show the difference between their personalities.
27. How does the behaviour of the family members change after Mrs Pearson speaks to them differently?
28. What dilemma did Andrew face when the child was born? (Birth)
29. What was the child suffering from? What treatment did Andrew apply? (Birth)
30. "Andrew had no premonition that that night would influence his whole future in Blaenelly." How did this happen? (Birth)
31. Do you think that at the end of the story Andrew is justified in saying "I've done something " ? Support your answer suitably. (Birth)

32. Did you enjoy reading the poem? Write about any two points which contributed to your enjoyment. (The Tale of Melon City)
33. What is the principle of 'Laissez Faire' ? How is it established in the poem 'The Tale of Melon City' ?
34. 'The Tale of Melon City' consists of a series of humorous incidents. Describe the events that led to the hanging of the king by his own order.
35. The poet of 'The Tale of Melon City' has made fun of many modes of behaviour such as the king being 'just and placid' . What are the objects of satire in the poem?

## MATHEMATICS

1. The sums of n terms of two arithmetic progressions are in the ratio  $5n + 4 : 9n + 6$ . Find the ratio of their 18th terms.
2. Find two numbers whose AM=34 and GM=16.
3. Find the sum of integers from 1 to 100 that are divisible by 2 or 5.
4. Find the sum of the series  $12 + 42 + 72 + \dots$  to n terms.
5. Find the sum of the series  $2 + 11 + 101 + 1001 + \dots$  To n terms.
6. Find the sum of the sequence 8, 88, 888, 8888,----- to n terms.
7. Find the sum of  $0.7 + 0.77 + 0.777 + \dots$  to n terms.
8. Find the equation of the line that has y intercept 4 and is parallel to the line  $2x - 3y = 7$ .
9. Find the equation of the line that has x intercept - 3 and is perpendicular to line  $3x + 5y = 4$ .
10. Prove that the lines  $7x - 2y + 5 = 0$  and  $14x - 4y - 8 = 0$  are parallel to each other.
11. Prove that the lines  $3x - 2y + 5 = 0$  and  $4x + 6y - 23 = 0$  are perpendicular.
12. The slope of a line is double of the slope of another line. If tangent of the angle between them is  $1/3$ , find the slope of the lines.
13. In the triangle ABC with vertices A (2, 3), B (4, 1) and C (1, 2), find the equation and length of altitude from the vertex A.
14. Find the equation of the circle with radius 5 whose centre lies on x-axis and passes through the point (2,3).
15. Find the equation of the parabola with vertex at (0, 0) and focus at (0, 2).
16. Find the equation of the parabola with focus (2,0) and directrix  $x = - 2$ .
17. Find the equation of the ellipse with major axis along the x-axis and passing through the points (4, 3) and (-1, 4).
18. Find the equation of the ellipse, whose length of the major axis is 20 and foci are (0,  $\pm 5$ ).
19. Show that the points (-2, 3, 5), (1, 2, 3) and (7,0,-1) are collinear.
20. Find the ratio in which the line segment joining the points (4, 8, 10) and (6, 10,-8) is divided by the YZ- plane.
21. The probability that a student will pass the final examination in both English and Hindi is 0.5 and the probability of passing neither is 0.1. If the probability of passing the English examination is 0.75, what is the probability of passing the Hindi examination?
22. Write the contrapositive of the following statements :
  - (i) If a triangle is equilateral, it is isosceles.
  - (ii) If x is a prime number, then x is odd.

23. The variance of 20 observations is 5. If each observation is multiplied by 2, Find the new variance of the resulting observations.
24. The mean and standard deviation of six observations are 8 and 4, respectively. If each observation is multiplied by 3, find the new mean and new standard deviation of the resulting observations.
25. Find the equation of the hyperbola with vertices ( 7,0) and  $e = 4/3$ .
26. Find the equation of the hyperbola where foci are (0,  $\pm 12$ ) and the length of the latus rectum is 36.
27. Find the equation of the set of points which are equidistant from the points (1, 2, 3) and (3, 2, -1).
28. If the origin is the centroid of the triangle PQR with vertices P (2a, 2, 6), Q (- 4, 3b, -10) and R(8, 14, 2c), then find the values of a, b and c.
29. Find the Coordinates of the points which trisect the line segment joining the points P (4, 2,-6) and Q(10, -16, 6).
30. Show that the points A(1, 2, 3), B(-1,-2,-1), C(2, 3, 2) and D(4, 7, 6) are the vertices of parallelogram ABCD, but it is not a rectangle.

## PHYSICS

Q1 Why does a long bar help a tightrope walker to keep his or her balance?

Q2 A student stands on a table rotating with an angular speed  $w$  while holding two equal dumbbells at arm's length. Without moving anything else, the two dumbbells are dropped to the floor. What change, if any, is there in the student's angular speed? Is angular momentum conserved? Explain your answers.

Q3 A helicopter flies off, its propellers rotating. Why doesn't the body of the helicopter rotate in opposite direction?

Q4 A person is sitting in the compartment of a train moving with uniform velocity on a smooth track. What will be the velocity of the center of mass of the compartment if he person begins to run in the compartment?

Q5 Two discs of same mass and thickness are made of materials having different densities. Which one of them will have larger moment of inertia?

Q6 A small object of uniform density rolls up a curved surface with an initial velocity  $v$ . It reaches up to a maximum height of  $3v^2/4g$  w.r.t. the initial position. Name the given object.

Q7 When a fat person tries to touch his toes, keeping the legs straight he generally falls. Explain.

Q8 When a body is weighed on an ordinary balance we demand that the arm should be horizontal if the weights on the two pans are equal. Suppose equal weights are put on the two

pans, the arm is kept at an angle with the horizontal and released. Is the torque of the two weights about the middle point (point of support) zero? Is the total torque zero? If so, why does the arm rotate and finally become horizontal?

Q9 You are walking along a narrow rail and you start to lose your balance. If you start falling to the right, which way do you turn your body to regain balance?

Q10 A door hinged at one end and is free to rotate about a vertical axis. Does its weight cause any torque about this axis? Give reason for your answer.

Q11 In a moving metro when we have nothing to hold we stand with our feet apart. Explain.

Q12 Why do spring balance show wrong readings after long use?

Q13 How are we able to break the wire by repeated bending?

Q14 Persons confined to bed are less likely to develop sores on their bodies if they use a waterbed rather than an ordinary mattress. Explain.

Q15 Liquid containers tend to leak when taken aloft in an airplane. Why?

Q16 Explain why a soap film collapses if a small hole appears in it?

Q17 Logs dropped upright into a pond do not remain upright, but float “flat” in the water. Explain.

Q18 Explain why golf balls are dimpled?

Q19 According to Bernoulli’s equation, an increase in velocity should be associated with decrease in pressure. Yet, when you put your hand outside the window of a moving car, increasing the speed at which the air flows by you sense an increase in pressure. Why is this not the violation of Bernoulli’s equation?

Q20 When a stopper is pulled from a filled basin, the water drains out while circulating like a small whirlpool. The angular velocity of fluid element about a vertical axis through the orifice appears to be greatest near the orifice. Explain.

Q21 An ice cube floats in a glass of water filled to the brim. What happens to the level of water when the ice melts?

Q22 We usually find fast moving winds in mountain passes. Explain why?

Q23 The accumulation of snow on the wings of an aeroplane reduces the lift. Why?

Q24 When some wax is rubbed on a cloth, it becomes waterproof. Explain.

Q25 The Young's modulus for steel is much more than that for rubber. For the same longitudinal strain, which one will have greater tensile stress?

Q26 A vessel filled with water is kept on weighing pan and the scale adjusted to zero. A block of mass  $M$  and density  $d$  is suspended by a massless spring of spring constant  $K$ . This block is submerged in the water in the vessel. What is the reading of the scale?

Q27 When a glass capillary tube is dipped at one end in water, water rises in the tube. The gravitational potential energy is thus increased. Is it the violation of conservation of energy?

Q28 A gypsy car has a canvas top. When the car runs at high speed, the top bulges out. Explain.

Q29 Two thermometers are constructed in the same way except that one has spherical bulb and the other has an elongated cylindrical bulb. Which will respond quickly to temperature changes and why?

Q30 Why do marine animals live deep inside a lake when the surface of the lake freezes?

Q31 If an automobile engine is overheated, it is cooled by putting water on it. It is advised that water should be put slowly with engine running. Explain the reason.

Q32 When a tyre bursts, the air coming out is cooler than the surrounding air. Explain.

Q33 On a hot summer day we want to cool our room by opening a refrigerator door and closing all the windows and doors. Will the process work?

Q34 An ordinary electric fan does not cool the air, still it gives comfort in summer. Explain.

Q35 Explain why your fingers sticks to a metal ice tray just taken from your refrigerator?

Q36 On a cold winter night you are asked to sit on a chair. Would you like to choose a metal chair or a wooden chair, both are kept in the same lawn and are at the same temperature.

Q37 If a piece of paper wrapped tightly on a wooden rod is observed to get charred quickly when held over a flame as compared to a similar piece of paper when wrapped on a brass rod. Explain.

Q38 Can water be boiled without heating?

Q39 Air pressure in a car tyre increases during driving. Explain.

Q40 When air is pumped into a cycle tyre the volume and pressure of the air in the tyre both are increased. What about Boyle's law in this case?

Q41 A vertical rod is hit at one end. What kind of wave propagates in the rod if (a) the hit is made vertically. (b) hit is made horizontally.

Q42 The bob of a simple pendulum is a hollow sphere filled with water. How will the period of oscillation change if the water begins to drain out of the hollow sphere?

Q43 A simple pendulum having a bob of mass  $m$  is suspended by a thread of length  $l$ . The time period of the simple pendulum is  $T$ . Now positive charge  $q$  is given to the bob of the pendulum and the pendulum is suspended in an electric field of intensity  $E$  directed vertically upward. What will happen to the time period of the pendulum?

Q44 The bus begins to make a loud rattling sound at a certain speed. Explain why?

Q45 When you strike one prong of a tuning fork, the other prong also vibrates, even if the bottom end of the fork is clamped firmly. How can this happen?

Q46 Two waves of the same amplitude and frequency are travelling on the same string. At a certain instant the string looks like a straight line. Are the two waves necessarily travelling in the same direction? What is the phase relationship between the two waves?

Q47 A flute has several holes in it. Explain why?

Q48 A light wave is reflected from the mirror. The incident and the reflected waves superimpose to form stationary wave, but the nodes and anti-nodes are not seen. Why?

Q49 Sound is produced due to vibratory motion, then why a vibrating pendulum does not produce sound?

Q50 Two loudspeakers are arranged facing each other at some distance. Will a person standing behind one of the loud speakers clearly hear the sound of the other loudspeaker. Explain.

## CHEMISTRY

1. What is COD? Why is it preferred over BOD? How is it determined?
2. Explain the term Eutrophication.
3. How will you convert ethanoic acid to Benzene?
4. Draw the cis and trans structure for hex-2-ene. Which isomer will have higher b.p and why?
5. Why HF forms H bonding with ethyne even though it is nonpolar in nature?
6. Sodium salt of which acid will be needed for the preparation of propane? write the chemical equation involved
7. How do you account for formation of ethane during chlorination of methane?
8. What effect the branching of an alkane has on its melting point?
9. A reaction is carried out using aniline as a reactant as well as a solvent. How will you remove unreacted aniline?
10. How will you test the presence of nitrogen in hydrazine?
11. Silanes are few in number whereas alkanes are large in number. explain

12. Carbonmonoxide is easily absorbed by ammonical cuprous chloride solution but carbondioxide is not.explain
13. What is inorganic benzene?why is it so called? How will you get it from diborane?
14.  $\text{BF}_3$  exist but not  $\text{BH}_3$  why?
15.  $\text{PbO}_2$  is a stronger oxidizing agent than  $\text{SnO}_2$ .Explain
- 16.How does hydrogen peroxide behaves as a bleaching agent?
17. Why does hard water not form lather with soap?
18. An acidic solution of hydrogen peroxide behaves as an oxidizing agent as well as reducing agent.Illustrate it with the help of chemical equation.
19. What ishydrolith? How is it prepared?
20. How will you distinguish between sodium carbonate and sodium bicarbonate?
21. What is dry ice? Why is it so called?
22. What is water gas? How is it prepared?
23. How does sodium borohydride react with iodine?
24. From where does ozone come into the photochemical smog?
25. State Huckel rule
26. tert- butylbenzene does not give benzoic acid on oxidation with acidic  $\text{KMnO}_4$
27. Why does rain water normally have a pH of about 5.6? When does it become acid rain?
- 28.How CO links to haemoglobin?
29. Explain with the help of equation wurtz fittig reaction.
30. What happens when  $\text{Pb}_3\text{O}_4$  react with  $\text{HCl}$  and  $\text{HNO}_3$ ? why does the reaction proceed differently?

## BIOLOGY

Q1. What will be the DNA content of a cell at G<sub>1</sub>, after S and G<sub>2</sub>, if the content after M phase is 2C?

Q2. A flowering plant is planted in an earthen pot and irrigated. Urea is added to make the plant grow faster, but after some time the plant dies. Give its possible reason.

Q3. A well watered potted herbaceous plant shows wilting in the afternoon of a dry sunny day. Give reason. 2

Q.4 Observe the diagram and answer the following:

i) Which of these guard cells show higher water content, A or B?

ii) Are these types of guard cells found in monocots or dicots?

iii) Name the element which plays important role in opening and closing of stomata.

Q5. Do different species of plants growing in the same soil show the same rate of transpiration at a particular time? Justify your answer.

Q6. Why do green plants start evolving carbon dioxide instead of oxygen on a hot sunny day?

Q7. A farmer observed some broad leaved weeds in a wheat crop farm. Which plant hormone would you suggest to remove them?

Q8 What would be expected to happen if:

- i) GA<sub>3</sub> is applied to rice seedling
- ii) A rotten fruit gets mixed with unripe fruits
- iii) You forget to add cytokinin to culture medium. 3

Q.9 A primary root grows from 5cm to 19cm in a week. Calculate the growth rate and relative growth over the period.

Q10. If a plant is girdled, which part of the plant dies first- the root or the shoot? Answer giving reasons.

Q11 Pickles are well salted to protect them from bacterial contamination. Why?

Q.12 What causes the leaves of the grasses to roll in dry weather?

Q. 13 A farmer observed drops of water along the margins of leaves of tomato plants growing in his well irrigated field on a winter morning. Give reasons of this occurrence. Why had the water drops appeared only along the leaf margins.

Q.14 Give reason why the xylem sap flows out from the cut end if a well hydrated plant is cut below the first leaf or near the base of stem.

Q.15 The nitrogen is present in the atmosphere in huge amount but higher plants fail to utilize it. Why?

Q.16 Select a plant from the following which is photosynthetically more efficient? Give any two reasons in support of your answer: Pea, Soyabean, Sugarcane, Mustard, Ground nut





- Q.38 What happens if a person suffers from prolonged hyperglycemia?
- Q39. Why does exchange of respiratory gases continue to occur in the lungs even if you hold the breath for 30 seconds?
- Q.40 Why is blood group identification not needed for serum transfusion?
- Q41. A person with blood group AB is universal recipient and can be donated blood of group A, B AB or O. Explain.
- Q.42 Due to developmental abnormality, the wall of the left ventricle of an infant's heart is as thin as that of right ventricle. What would be its specific effect in circulation of blood?
- Q.43 Terrestrial animals are generally either ureotelic or urecotelic, not ammonotelic. Why?
- Q44. Why is blind spot devoid of vision?
- Q45. Can all the four chambers of the human heart experience systole simultaneously? Explain justifying your answer.
- Q46 Why are villi present in ileum and not in the stomach?

## **Computer Science**

1. Write a C++ program for finding the simple interest.
2. Write a C++ program to print the Fibonacci series (0 1 1 2 3 5 8.... Upto n terms).
3. Differentiate between logical error and syntax error with example.
4. What is the role of main( ) in C++ program?
5. What is the range of values that an unsigned integer variable can store?
6. What are the lengths in bytes of long double variables?
7. Use a statement to print out the character variable letter.
8. What is a function?
9. What is a library function?
10. What is a user defined function?
11. Differentiate between Global variable and Local variable.
12. What are scope rules of variables?
13. Differentiate between Call by value and Call by reference using a C++ example.
14. What is the purpose of Void in a function prototype?

15. What is the purpose of using Return statement?
16. Differentiate between Formal and Actual parameter.
17. What are overloaded functions?
18. How many values can be returned by a function?
19. How many times can a function be called?
20. What is function recursion?
21. When is the execution of the function terminated?
22. What is the meaning of an empty parentheses in a function declaration?
23. How will you call a function?
24. What is the purpose of Function Prototype?
25. What are the methods to call functions? Explain with example.
26. What is a module?
27. Describe the different styles of working prototypes.
28. WAP to print sum of the series  $1+3+5+7+\dots+n$  terms
29. WAP to print multiplication table up to 10 of any inputted integer.
30. WAP to print the sum of series  $S = x + \frac{x^2}{2} + \frac{x^3}{3} + \frac{x^4}{4} + \dots + n$  terms
31. WAP to input 2 number and print whether it is divisible by 5 or 7 or both.
32. WAP to input length. Take the user choice of converting it from feet into inches or inches
33. WAP to input a no. If it is the even printout its square root, if it is odd then print out its cube
34. WAP to input 5 nos and print largest of them.
35. WAP to print first 20 fibonacci nos.
36. WAP to input a no. and check whether it is prime or not.
37. WAP to print perfect no between m to n.

38. WAP to print area of all circles which have radius between 5 to 25 in step of 5.
39. WAP to input a character and check whether it is vowel or not.
40. WAP to input the no. of day and print its name in words(e.g. print Monday for 1 Tuesday for 2).
41. WAP to input first 10 odd nos and their sum
42. WAP to input a no and check whether it is Armstrong no or not. In an Armstrong no the sum of the cube of the digits of the no is equal to the no.  
e.g.  $153 = 1^3 + 5^3 + 3^3$
43. WAP to calculate the bonus of a salesman. A salesman get a bonus of 7% if sales are less than 10000 and 10% if greater than 10000. Input the sales and print out bonus.
44. WAP to input a single character and change its case.
45. WAP to input the choice of user to calculate the volume of a cylinder.
46. WAP to input the rollno and marks in 3 subjects of a student. Calculate the average marks and print the result with rollno , avg marks and grade. A student is given A grade if avg marks is greater than 80, B grade if avg marks are between 80 and 40 and C grade if its less than 40.

## **PHYSICAL EDUCATION**

### **Unit VI Physical Activity Environment**

1. “Physical activities can be of value in promoting sound mental health”. Justify your answer with the need for participating in physical activities with specific reference to mental and personal health.
2. Positive sports environment essential for the development sports. Justify.
3. A set of proper exercise guidelines for different stages of growth is essential. Comment.
4. Why principles of physical activity environment are to be followed for involving in physical activities?

### **Unit VII Test & Measurement in Sports**

1. Why is test and measurement important in sports?
2. Will Somato type assessment help the selection of sports activity?
3. How calculation of BMI and waist-hip ratio combined asses the cardiac risk?

### **Unit VIII Fundamentals of Anatomy & Physiology**

1. Knowledge of anatomy and physiology helps in learning sports skills. Comment.
2. Why the knowledge about various systems of the body is vital for a sports teacher?
3. How will you assess the onset of second-wind?

### **Unit IX Biomechanics & Sports**

1. Knowledge of biomechanics of sports helps in learning sports skills. Comment.
2. Although we use 3rd class levers more than any others in the human body, they in fact offer no mechanical advantage thus, regardless of where you apply the force, the force you apply must always be greater than the force of the load. So why does the human body rely so much upon 3rd class levers to initiate movement?
3. The position of centre of gravity have a high relationship with the style in high jump. Comment.

### **Unit X Psychology & Sports**

1. Why the study of child growth and development is essential for a physical education teacher.
2. Knowledge of adolescent problems and its management is an essential tool for a physical education teacher. Comment.
3. Transfer of learning help in acquiring new skills in sports. Comment.

### **Unit XI Training in Sports**

1. Sports training are scientifically based and pedagogically organised process. Comment.
2. Sports training and sports measurements are closely knitted. Comment.
3. Sports training incorporate the physiological, psychological and sociological principles for the enhancement of performance ability. Justify.

## **Home Science**

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Q1. Give one method of food preservation for the following food products

a) Apples      b) Tomatoes      c) Orange      d) Cauliflower

Q2. How do the mustard seeds help in food preservation?

Q3. Write down about the chemical changes that will occur when the milk is kept at room temperature.

- Q4. Why is khichri more nutritious than plain rice?
- Q5. How can you enhance the nutritive value of foods without spending extra money?
- Q6. Categorise the following resources  
 a) Road    b) Farmhouse    c) time    d) Knowledge
- Q7. Resources are limited. Justify the statement.
- Q8. Why do workers from Riya's garment factory complain of fatigue? Suggest suitable ways of reducing fatigue among these workers.
- Q9. How can time and energy be saved by bringing changes in finished products? Give examples.
- Q10. List two ways by which a 10 year old can help in the work organisation at home.
- Q11. You are aspiring to go to medical college. How do various steps of management are helpful to you in getting admission to this college?
- Q12. How would you lift a heavy object from the floor so that less effort is required.
- Q13. What are the factors on which the sequence of daily activities depend.
- Q14. Reema is living in one room apartment. How will she manage kitchen in that single room?
- Q15. How would you use colours, so that a small room may appear larger in size.
- Q16. Nylon is called a "Magic Fabric". Comment
- Q17. Why is silk called the "Queen of fabric"?
- Q18. For strong and long lasting quality of cloth which weave is good and why?
- Q19. Jacquard weave is different to make. Explain
- Q20. You have some 'grey fabrics', which finishing can be used to make them more attractive?
- Q21. What can be done to subdue the defects in fabric?
- Q22. What is the prerequisite of the group under DWCRRA to take the loan from the bank?
- Q23. Communication is a two way process. Explain.
- Q24. Compare the importance of radio and personal talk in connection with communication. Which one is better and why?
- Q25. Which method of communication you will suggest to create awareness about the education of the girl child?

## **BUSINESS STUDIES**

1. When enterprises behave as good citizen, towards which group are they showing their responsibility?
2. "A Business owes certain obligations towards different groups" Identify those groups and explain the obligation of business towards those groups.
3. Which groups expects that the companies must provide good quality and unadulterated goods and services as their social responsibility?
4. Name the concept which is concerned with what is right and what is wrong?
5. What is the relationship between ethics and moral values?
6. Give any two reasons against social obligation.
7. It is an unsecured promissory note by a firm to raise funds for a short period varying from 90 days to 364 days. Mention it.
8. A company requires fund to meet its working capital. State the sources available along with their features.
9. Which deposits are directly raised from the public?
10. Name the fund needed for day to day operations of business.
11. Name the institution which was set up in 1955 to promote the growth of SSI.
12. Give the full form of NABARD.
13. Explain any 3 incentives offered by govt to small scale enterprise so that they can contribute in the development of overpopulated country like India.
14. Spencer, big Apple and Big Bazar are examples of a type of fixed shop what is it?
15. "Both departmental stores and multiple shops are large retail establishment ,yet they are different." Explain how.
16. Name any two Export Processing Zones.
17. Which documents helps to avoid and solve any ambiguity or conflict between exporter and importer?
18. Why do exporters demand letters of credit?
19. Trendz industries has received an export order of 5,000 kids jeans from Walmart store, USA. What procedure you will follow to execute this export order?

20. Arif and Rohit are childhood friends. Though they come from different religious backgrounds but there is a very good understanding between them. After completing their MBA, both decided to take their friendship a step further and become business partners. They decided to start a wire manufacture business. They know that the factory of wire manufacturing pollutes environment. They are contemplating on two options. First option is to establish factory in rural area. The poor and illiterate local residents will not be aware of the adverse effect of pollution and thus Arif and Rohit can manufacture wires at low cost. Second option is to fulfill their social responsibility as business but that would require an additional cost of Rs. 135000. After a lot of thinking they decided to go with the second option. A) Do you think Arif and Rohit are right in going with the second option? B) What specific steps their business may take to control pollution? C) Mention the values adopted by Arif and Rohit while setting up their factory.

21. State with reason which source of finance you would prefer for the following need for finance:

- i) An immediate need for cash
- ii) Raise of finance from owner's funds for a period of 10 years.
- iii) To raise funds to buy a sick unit in Singapore
- iv) Building stock of inventories to gain from bulk buying
- v) Issue of funds from public with an aim to save taxes

22. Private Investors Ltd. decided to raise funds through issue of equity shares. The board of directors was in the favour of issuing equity shares because they know that a company has to pay dividend to equity shareholders only when it earns profits. Board of directors decided that they record losses for the first three years so that they do not have to pay dividends to the shareholders. I) Are the directors right in their thinking? Why? ii) What values they have ignored.

23. Surya Bakery Ltd. Has set up their new factory in Gandhinagar, to produce biscuits and cakes. They purchased automatic machinery and to ensure that proper sanitation and cleanliness is maintained, they ensured that the workers washed their hands with sanitizer and wore sanitized caps, overcoats and shoes before entering the factory area. The company provides free lunch to all employees and every employee must eat food available in the cafeteria irrespective of their post and position. They also organized a crèche with play area for children of women working in the factory. Mention the various values Surya Bakery Ltd has adopted while establishing factory.

24. Jamshedji Tata conceived an idea of formation of company in 1908 when East India Company was ruling Indian market. He selected hilly region bordering three states Jharkhand ( the then part of Bihar), Orissa and West Bengal. All states were thickly populated and poor. The area he chose was rich in iron ore, so he decided to develop iron and steel industry. He wanted to tap the unproductive saving of the public and issued capital of Rs. 500000. Area was undeveloped, so he decided to spend 10% of profits every year for providing infrastructure to the employees. To begin with he provided them accommodation and later he spend share of profits for building schools, hospitals, development of



playgrounds and gardens and also contributed in road construction. He also built temples mosques and churches. Employees were satisfied and worked hard. As the result the profits grew up substantially every year and more industries were floated by him. Which values lead to these roads to success?

25. Rama Industries was established to manufacture fashion shoes. Since they were new in the market, they decided to sell their products through wholesalers. They appointed one wholesaler in each district and promised verbally that they will remain exclusive wholesalers in the area. After three years during one of the review meetings the sales manager informed that if the company sells directly to retailers, they will be able to offer competitive prices, which will increase their sales volume and consequently their profits. He was directly advocating elimination of wholesalers. i) Should the company follow sales manager's suggestion and start direct business with retailers? Give reason. ii) What values would the company ignore if they by-pass wholesalers to earn extra profit.

26. Great Alpha One Pvt. Ltd. is a company engaged in setting up big departmental stores in big and small towns. Recently they decided to establish a departmental store in a small town on Mehsana. To get demand they will launch products at much cheaper rates. They have plans to provide training on marketing skills to local people and employ them in departmental store. i) What will be the effect of departmental store in the small area? ii) What values are shown by the owners of Great Alpha One Pvt. Ltd. while establishing departmental store in a small town.

27. 'V-Connect Pvt. Ltd.' is a leading mobile phone manufacturer. They manufacture and sell cell phones across the country. Arpita joined in as marketing manager. During a sales meeting she suggested to sell cell phones online. Everyone in the meeting looked surprised because from last many years they have been selling the cell phones through their distributors on their authorized stores only. The sales director asked Arpita to prepare a detailed report on online selling concept. Soon the cell phones were available online. Within three months they received a big order from South Africa. This would be their first export. i) State and explain the concept of selling online

ii) Discuss the payment mechanism of selling online

iii) Explain in brief the export procedure to export cell phones to South Africa.

28. A famous doctor charges high for consultation from his patients and refuses to treat the Poor patients without consultation charges. He also pays attention to the medical representatives and agents of Pharma co. he takes gifts and commission also. In your view, is it professional behaviour of doctor? Does he follow the code of conduct of doctor?

29. An entrepreneur wants to start his business in backward area because govt. gives many incentives & rebates in taxes. Which results in low cost and he will be able to see the product at low prices. There he will be able to get large area by deforestation. Which values are being affected here?

30. A fast food manufacturing foreign company plans to open chain of cheap fast food centres near the schools in Delhi. According to you what will be the results of this plan?

31. An automobile Company runs a factory in a backward area. It has opened a training centre to train the people. Which value has been kept in mind here?

32. Tobacco manufacturer is planning to sell its products outside the School & colleges. Which values are violated here from your point of view?

## **ACCOUNTANCY**

1. Distinguish between tangible & intangible assets.

2. Under which basis of accounting, prepaid expenses are not recorded?

3. Define capital reserves, give an example.

4. Distinguish between bill of exchange and promissory note.

5. Identify the value/s involved in the following transactions:

1. Donation given to an organisation for physically challenged.

2. Purchased a machine for making eco-friendly paper bags.

6. Give two advantages of each one of the following:

1. Ready made software.

2. Tailor made software.

7(a) Delhi Development Authority has computerised the booking and allotment of D.D.A flats. What values have been added to society by D.D.A?

(b) A computer system is capable of performing many things. Explain any four of the capabilities of a computer system.

8. Pass rectifying entries:

1. RS5000 being the cost of a radio purchased for personal use of the proprietor has been debited to Radio account in the ledger.

2. Goods taken by the Proprietor RS1000 has not been entered in the books at all

3. A cheque of RS500 received from X was credited to the account of Y and debited to cash instead of Bank A/C.

4. A cheque RS130 received from Ram was dishonoured and debited to General expenses a/c.

9. Purchases book is a record prepared from invoices received from suppliers. Is it correct? Give reasons.
10. Do you agree that a Sales Book is used to record invoices issued to customers in respect of goods sold on credit and not cash. Give reasons.
11. A wholesaler sold 55 items to a retailer at a price of RS200 each, less 20% trade discount. The retailer subsequently returned 12 of these items. As a result of this, the retailer should be sent a credit note for how much amount?
12. In the cash book of a firm, bank account showed a credit balance of RS5000. There were unpresented cheques amounting to RS 1500. The bank statement showed bank charges of RS700 not recorded in cash book. What is the balance in the bank statement?
13. Cash Balance was RS 1790(DR) when compared with the bank statement, unpresented cheques were Rs1040 and deposits but not credited were RS 820. What was the balance in bank statement ?
14. Why Is Bank Rec oncillation Statement prepared?
15. A trial balance is only a prima facie evidence of the arithmetical accuracy of records. Do you agree with this statement? Give reason.
16. Trial balance is an account. Is it correct? Give reason.
17. Do you agree that Depreciation is a permanent continuing and gradual shrinkage in the book value of fixed assets?
18. Land is a depreciable assest. Comment.
19. M/S Business Service has not used its CNG Bending Machine No 0 during the year. Hence the accountant has not provided depreciation on it. Do you consider it to be correct? Give your reasons.
20. Which method of depreciation assumes that an assets should be depreciated more in the earlier years and less in the later years of use.
21. Promissory Note requires the acceptance. Comment.
22. Do you think that a cancellation entry is not required when a bill is renewed?
23. Refusal by the acceptor to pay the bill on maturity date is called the retirement of bill. Comment.
24. Do you agree that Profit and Loss Account shows the financial position of the enterprise?

25. Give a formula to calculate operating profit from net profit.
26. Why do you need to provide outstanding expenses?
27. A limited company cannot maintain its accounts under single entry system. Why?
28. Books maintained by the single entry system are not reliable as they are when maintained following the double entry system. Comment.
29. Which generally Accepted Accounting Principle (GAAP) is followed and which one is ignored while preparing the accounts under single entry system?
30. Why the statement of assets & liabilities prepared under single entry system at end of accounting period is called a statement of affairs instead of balance sheet?

Hots  
Subject - Economics  
Class – X1

1. Give the difference between relative poverty and absolute poverty.
2. Which four measures have been taken by the government of India to remove poverty.
3. What are the flaws in the poverty alleviation programmes in India?
4. What is the minimum calorie intake estimated for rural and urban areas?
5. Which states in India are the most poor?
6. Name two major programmes that aim at improving the food and nutritional value of the poor.
7. Suppose you are from a poor family and you wish to get help from the government to set up a petty shop. Under which scheme will you apply for assistance and why?
8. What is meant by 'food for work' programme?
9. Suppose you are a resident of a village, suggest a few measures to tackle the problems of poverty.
10. Name the key issues relating to rural development.
11. How does government generate employment?
12. Why is worker – population ratio higher in males than in females in India?
13. What are the causes of unemployment?
14. Meena is a housewife. Besides taking care of household chores, she works in the cloth shop which is owned and operated by her husband. Can she be considered as a worker? Why?
15. Compare the contribution of Industrial sector and Service sector to GDP of India and Pakistan.
16. Though India, Pakistan and China started their process of economic development almost at the same time, yet China has marched ahead of them. Discuss.
16. Mention the various indicators of Human Development. Discuss any two.
17. 'Though Public Sector is essential for Industries, many Public Sector Undertakings incur huge losses and are a drain on the economy's resources.' In light of above fact, bringing out the role of Public Sector undertakings in a country like India.
18. What is human capital? How does it compare with physical capital?
19. How can human capital be improved in future?
20. How is electricity produced in India? Which is the largest source for electricity?
21. Define Infrastructure

22. Name two sources of renewable energy
23. What is the difference between economic infrastructure and social infrastructure?
24. What is water management?
25. Define 'global warming' How it can be controlled?
26. How is land degradation happening in India?
27. 'sustainable development is lasting development' Argue in favour of this statement and suggest ways to achieve sustainable development.
28. What type of economic system is followed in China?
29. Which country has the highest agricultural output in the world
30. Give full form of BRICS.
31. Mention any four problems faced by the power sector in India.
32. Discuss the main drawbacks of health care system .
33. What are the various non – commercial sources of energy?
34. What are the factors leading to inflation in India?
35. Give two positive effects of inflation .

## **POLITICAL SCIENCE**

1. Who called Political Science 'A Master Science' and why?
2. Why is Political Science stated as Science of 'Power'?
3. 'Political Science begins and ends with the State'. Explain.
4. "Liberty implies proper restraints rather than absence of restraints." Comment.
5. "Liberty and equality are commentary to each other." Explain.
6. "Liberty and equality are opposed to each other." Comment.
7. "Political liberty in the absence of Economic equality is meaningless." Explain.
8. "Eternal vigilance is the price of Liberty." Discuss the statement.
9. "Law and liberty are two sides of the same coin." Explain.
10. What is the meaning of 'Equality before law'?
11. 'Absolute equality is neither feasible nor desirable.' Comment.
12. How does our Constitution stop protecting system of inequality?

13. Name types of inequalities, which still prevalent in our society.
14. Why do some people say “Justice delayed is justice denied”?
- 15.” It is the notion of justice which binds liberty with equality. “Do you agree with this view?
16. Why is the statute of Justice blind folded?
17. Write any two essential values which ensure social justice.
18. Why Right to Freedom of Religion is an important right?
19. Explain the role of education in the development of human personality.
20. “Right implies duty.” Explain.
21. Describe the Individual Rights of citizens of a modern democratic country.
22. “The Right to Freedom is actually a cluster of several rights.” Explain.
23. Name the international organization who proclaimed Universal Declaration of Human Rights.
24. What do you mean by natural born citizen?
25. How can we say that lack of education is a big obstacle to any kind of progress?
26. What is the relationship between citizenship and rights?
- 27.” A nation is constituted by belief.” Explain.
28. What do you understand by doctrine of ‘Nation Self-Determination?
29. Write the view of Pt. Jawaharlal Nehru on secularism.
30. Write down the criticism of Indian Secularism.
31. Is Secularism suitable for India? Explain.
32. State one example how Indian Constitution protects religious minorities.
33. What is the meaning of ‘Non-Alignment’ with reference to India’s foreign policy?
- 34.”Though humanity has learnt to value peace even then there is great danger.” Explain.
35. What are the forms of structural violence?
36. Give an example that social order based on class generates great deal of equality and oppression.

37. Give an example of a country where military discipline rules.
38. How far life is affected by the process of development?
39. Name the leading movement against the 'Sardar Sarovar Dam.'
40. Why did followers of Narmada Bachao Andolan oppose Sardar Sarovar Dam?

## **SOCIOLOGY**

1. How do you think have schools and families changed or remained same over time, over generations?
2. Is it possible to have a society with no competition? Why/why not?
3. Why is competition a necessary good in the society and a must for development?
4. How do normative compulsions play a role in cooperation or conflicts in lives of women in our society?
5. How is voluntary cooperation different from enforced cooperation?
6. How are cooperation and conflict two sides of the same coin?
7. How is a village different from a town or a city in terms of social changes?
8. Rapid social change is a comparatively new phenomenon in human history. Explain.
9. How may Religion bring about a social change?
10. What is NREGA?
11. Why is NREGA considered to be an important development program?
12. "Society is not a static phenomenon, instead it is subject to social changes". Discuss.
13. How do demographic factors, education, and social legislation cause social change?
14. Think and explain why environmental problems also account for social problems?
15. Why is sociology not limited only to the forces of nature?
16. How does social organization shape the relationship between the environment and society?
17. Why is environmental management a complex and a huge task for the society?
18. How do different patterns of water use affect different social groups?
19. Elaborate 3 aspects of human ecology in human society?
20. Why is enlightenment important for the development of sociology?
21. Why do classes come into conflict?
22. How are moral codes indications of social solidarity?
23. How can one recognize the social facts?
24. How was industrial revolution responsible for giving rise to sociology?
25. How did Max Weber explain "social action"?
26. Relating tribal communities was a debatable topic. Explain how?
27. Mention Ghurye's contribution to sociology?



28. Discuss the factors that brought about social changes in the society?
29. What was D.P. Muerji's view about traditions and modernity?
30. How is rural and urban community different from each other?

### **MULTIMEDIA & WEBTECHNOLOGY**

1. What is the role of case default in a switch case statement.
2. Differentiate between Do while and while loop
3. Differentiate between : For next and nested for next
4. Write a script to print 20 odd numbers between 1 to 100.
5. Write a script to print multiples of 7 up to 10 Places.
6. What is the difference between entry controlled loop and exit controlled loop.
7. Differentiate between procedure and a function.
8. Write function called getsmallest() that takes three numbers as arguments and returns the largest of the three numbers.
9. Write scripts for the following series:
  - a)  $2+(2+4)+(2+4+6)\dots\dots\dots n$
  - b)  $2^2+4^2+6^2\dots\dots\dots n$
  - c)  $2+4+6+8\dots\dots\dots n$
10. Answer the following questions based on Web Scripting :
  - a) Give the output of the following statements:
    1. `Document.write(monthname())`
    2. `Document.write(now())`
    3. `Document.write(Len("Printmedia"))`
    4. `Document.write(UCase("Multimedia"))`
    5. `Document.write(strreverse("PANORAMA"))`

6. Document.write(mid("Multimedia and Web Technology",12))

7. Document.write(mid("POPULATION",7,3))

11. What is Variable? Write any four naming rules for variable declaration.

12. What is a Comment in a Script? How are Comments added to a Script?

13. Give the output for the following script code :

```
<script language="JavaScript">  
  
dim a,b  
  
b=5  
  
a=1  
  
Do while a<=10  
  
document.write("<br>"&a+b)  
  
a=a+1  
  
Loop  
  
</script>
```

14. Give the output for the following script code :

```
<script language="JavaScript">  
  
dim a,b  
  
b=9  
  
a=4  
  
do  
  
document.write("<br>"&a+b)  
  
a=a-1  
  
b=b+a
```

```
loop while a>=1
```

```
</script>
```

15. Give the output for the following script code :

```
<script language="JavaScript">
```

```
dim x,y
```

```
y=16
```

```
for x=1 to 10 step 2
```

```
document.write("<br>"&x+y)
```

```
next
```

```
</script>
```

16. Change the following script using Do Loop While without effecting the output :

```
<script language="JavaScript">
```

```
dim a,b
```

```
b=5
```

```
a=1
```

```
Do while a<=4
```

```
document.write("<br>"&a+b)
```

```
a=a+1
```

```
Loop
```

```
document.write("<br>"&a+b)
```

```
</script>
```

17. Rewrite, the following code after removing errors with each correction underlined.

```
<script Language="JavaScript">
```

```
Var a, b, c
For a = 1 to 5
If a>2 Then
Document.print("Su-Bodh")
End
Loop
</script>
```

18. Give the output for the following script code :

```
<Script language="JavaScript">
Dim A, SUM
SUM = 0
For A=1 to 5
SUM = SUM + A
Document. Write
Next
Document. write ("Sum is (A & "<br>)" & SUM)
</Script>
```

19. Give the output for the following script

```
<Script Language="JavaScript">
B=10
For A=1 to 12 step 3
C=A+B
Document.Write(C)
```

B=B-1

Document.Write("<BR>")

Next

</Script>

20. Give output of the following statements :

<%

Y=5

FOR X=1 TO 5

IF X>Y THEN

Document.write(Y)

ELSE

Document.write(X)

END IF

Y=Y - 1 Next %>

21. Give the output for the following script code :

<Script language="JavaScript">

SUM + A

Write (A & "<br>")

("Sum is " & SUM)

</Script>

22. Give the output for the following script

<Script Language="JavaScript">

Dim A, SUM

SUM = 0

```
For A=1 to 5
SUM = SUM+A
Document. Write("Sum is "&Sum)
Next
Document. write
B=10
For A=1 to 12 step 3
C=A+B
Document.Write("<BR>")
Next
</Script>
```

23. Give the output for the following script code :

```
<Script language="JavaScript">
SUM + A
Write (A & "<br>")
("Sum is " & SUM)
</Script>
```

24. Give the output for the following script

```
<Script Language="JavaScript">
B=10
For A=1 to 12 step 3
C=A+B
Document.Write(C)
```

B=B-1

Document.Write("<BR>")

Next

</Script>

25. Give output of the following statements :

Dim A, SUM

SUM = 0

For A=1 to 5

SUM = SUM+A

Document. Write(SUM)

Next

Document. write

<%

Y=5

FOR X=1 TO 5

IF X>Y THEN

Document.write(Y)

ELSE

Document.write(X)

END IF

Y=Y - 1 Next

%>

27. What is an Object? What are its Properties?

28. What is event driven Programming?

29. What is the difference between Prompt and Alert box?

30. What are iterative statements.