



DELHI PUBLIC SCHOOL

CHAS, BOKARO

DURGA PUJA VACATION ASSIGNMENT (SESSION: 2021-22)

CLASS – XI

SUB – ENGLISH

1. Write an agenda notice for the meeting of the discipline committee of your school to discuss rules for students and parents and also to discuss some cases of indiscipline referred to by the class teachers. You are the school secretary.
2. You are unhappy with some of the television serials which present a picture of the society contrary to our social values and norms. Blatant disobedience of the youngsters, their mode of living and the dresses they wear is shocking to you and all who have been born and brought up in an environment which is Indian. Write an article in 200 words expressing your feelings and offering your suggestions to the people to counter this evil.
3. You are Nadini/Navin, President of the Youth Club, Hyderabad. You are organizing an Interschool Cultural Festival in Hyderabad. Write a letter to the secretary, Department of Cultural Affairs, requesting him or her to be the Chief Guest and inaugurate the festival. Do not forget to mention the activities of your club.
4. You are Arpit. Write a letter to the Editor of a leading daily, highlighting the problems faced in commutation during the peak hours, by the office goers and students. Give suitable suggestions to solve the problems.
5. Look at the below given picture and create a creative text. (story/poem/paragraph)



6. Write an article in 120-150 words giving the mythological explanation of festivity / third eye of Goddess Durga.

SUB – MATHEMATICS

- Which of the following are sets ? Justify your answer.
 - The collection of all the months of a year beginning with the letter J.
 - The collection of ten most talented writers of India.
 - A team of eleven best-cricket batsmen of the world.
 - The collection of all boys in your class.
 - The collection of all natural numbers less than 100.
 - A collection of novels written by the writer Munshi Prem Chand.
 - The collection of all even integers.
- Match each of the set on the left in the roster form with the same set on the right described in set-builder form:
 - $\{1, 2, 3, 6\}$ (a) $\{x : x \text{ is a prime number and a divisor of } 6\}$
 - $\{2, 3\}$ (b) $\{x : x \text{ is an odd natural number less than } 10\}$
 - $\{M, A, T, H, E, I, C, S\}$ (c) $\{x : x \text{ is natural number and divisor of } 6\}$
- Let $A = \{1, 2, 3, 4, 5, 6\}$. Define a relation R from A to A by $R = \{(x, y) : y = x + 1\}$
 - Depict this relation using an arrow diagram.
 - Write down the domain, codomain and range of R .
- Define a relation R on the set \mathbf{N} of natural numbers by $R = \{(x, y) : y = x + 5, x \text{ is a natural number less than } 4; x, y \in \mathbf{N}\}$. Depict this relationship using roster form. Write down the domain and the range.
- Write the relation $R = \{(x, x^3) : x \text{ is a prime number less than } 10\}$ in roster form.

SUB – PHYSICS

- The industrial revolution in England and Western Europe more than two centuries ago was triggered by some key scientific and technological advances. What were these advances ?
- India has had a long and unbroken tradition of great scholarship — in mathematics, astronomy, linguistics, logic and ethics. Yet, in parallel with this, several superstitious and obscurantistic attitudes and practices flourished in our society and unfortunately continue even today — among many educated people too. How will you use your knowledge of science to develop strategies to counter these attitudes ?
- A cyclist speeding at 18 km/h on a level road takes a sharp circular turn of radius 3 m without reducing the speed. The co-efficient of static friction between the tyres and the road is 0.1. Will the cyclist slip while taking the turn?
- Circular racetrack of radius 300 m is banked at an angle of 15° . If the coefficient of friction between the wheels of a race-car and the road is 0.2, what is the (a) optimum speed of the racecar to avoid wear and tear on its tyres, and (b) maximum permissible speed to avoid slipping ?
- Constant force acting on a body of mass 3.0 kg changes its speed from 2.0 m s⁻¹ to 3.5 m s⁻¹ in 25 s. The direction of the motion of the body remains unchanged. What is the magnitude and direction of the force ?

SUB – CHEMISTRY

1. Calculate the packing fraction of the following unit cell
(a) Simple cubic (b) body centred cubic
(c) face centred cubic (d) hexagonal close packed (hcp) unit cell
2. Describe the working of concentration cell.
3. Derive the integrated rate expression for the nth order reaction. Also calculate half life time and time for completion of nth order reaction.
4. Describe the following
 - a. Aldol condensation
 - b. Sandmeyer's reaction
 - c. Grignard reagent
 - d. Kolbe's reaction
 - e. Reamer tiemann reaction
5. Describe the following (a) brown ring test and (b) aqua regia

SUB – BIOLOGY

1. What are taxonomical aids? Write a short note on any two.
2. Differentiate between the various classes of kingdom fungi.
3. Give salient features of phylum echinodermata along with examples.
4. What is 9 + 2 arrangement? Explain. Where is it present?
5. Differentiate between prokaryotic and eukaryotic cells

SUB – CS

1. What is RAM is faster than ROM?
2. What is Interpreter? Why it is slow as compare to Compiler?
3. Write a program to print the following pattern
A
A B
A B C
A B C D
A B C D E
4. What is the use of Utility Software? Explain work of any one Utility software.
5. What is the difference between Logical error and Run time error?

SUB – ACCOUNTANCY

1. If the acceptor of the bill refuses to pay the bill on maturity, what is it called?
2. Name any two types of commonly used negotiable instruments.
3. What is noting of a bill of exchange?
4. Explain briefly the procedure of calculating the date of maturity of a bill of exchange. Give example.
5. Differentiate between bill of exchange and a promissory note.
6. P draws on Q three bills of exchange for Rs. 15,000, Rs. 12,000 and Rs. 9,000 respectively for goods sold to him on 1st February, 2013. These bills were for a month, 2 months and 3 months, respectively. The first bill was endorsed to his creditor R. The second bill was discounted with his bank on 4th February 2013 @12% per annum discount and the third bill was sent to his bank for collection on 30th April. On the due dates, all the bills were duly met by Q. The bank sent the collection advice for the third bill after deducting Rs. 75 as collection charges. Pass the journal entries in the books of P and Q.
7. B owes A Rs.4,000 on 1st January 2018. B accepts a three month bill for Rs.3,900 being in full settlement of the claim. At its due date the bill is dishonoured. Noting charges Rs.50 are paid by A. Give the Journal Entries in the books of A and B.
8. On 1st January, X sold goods worth Rs. 1,00,000 to Y and drew a bill on Y at 3 months for the amount. Y accepted the bill and returned it to X, who endorsed the bill a month after the acceptance, in favour of a creditor Z in the settlement of his debt for Rs. 1,02,000. The bill is duly honoured at maturity. Pass the necessary journal entries in the books of X, Y and Z.
9. X sells goods for Rs.40,000 to Y on 1st January 2018 and on the same day draws a bill on Y at three months for the amount. Y accepts it and returns it to X, who discounted it on 4th January 2018 his bank at 6% p.a. The acceptance is dishonoured on the due date and the noting charges were paid by bank being Rs.200. On 4th April 2018, Y accepts a new bill at three months for the amount then due to X together with interest at 12% p.a. Make Journal entries to record these transactions in the books of X.
10. On 14th February, 2015, Rashmi sold goods worth Rs. 7,500 to Alka. Alka paid Rs. 500 in cash and for the balance accepted a bill of exchange drawn upon her by Rashmi payable after 2 months. On 10th April, 2015, Alka approached Rashmi to cancel the bill since she was short of funds. She further requested Rashmi to accept Rs. 2,000 in cash and draw a new bill for the balance including interest Rs. 500. Rashmi accepted Alka's request and drew a new bill for the amount due payable after 2 months. The bill was accepted by Alka. The new bill was duly met by Alka on maturity. Record the necessary journal entries in the books of Rashmi and Alka and prepare Alka's account in the books of Rashmi's and Rashmi's account in the books of Alka.

SUB – BST

1. Prepare a questionnaire to find out the actual problems faced by an owner of a small-scale unit.
2. How do small scale industries contribute to the socio-economic development of India.
3. What are the different parameters used to measure the size of business.
4. Identify various fixed shop retailers in your locality and classify them according to the different types you have studied.
5. How does market information provided by the wholesalers benefit the manufacturers.

SUB – ECONOMICS

- 1) Convert the following simple frequency series into less than and more than cumulative frequency series.

Class-interval	Frequency
0 – 10	7
10 – 20	15
20 – 30	20
30 – 40	24
40 – 50	16
50 - 60	8

- 2) Convert the following 'Inclusive series' into 'Exclusive series'.

Class-interval	Frequency
50 – 59	6
60 – 69	14
70 – 79	23
80 – 89	11
90 – 99	5

- 3) Calculate the arithmetic mean of the following data (using direct, short – cut and step – deviation method).
82, 84, 86, 83, 80, 88, 85, 89, 79, 86
- 4) Write formulas of direct, short – cut and step – deviation method to find Mean from Individual series, Discrete series and Continuous series.
- 5) Briefly explain the causes of economic problems.

SUB – PE

Long Answers type questions:-

1. What do understand by the term physical education? What are the career options in Physical Education?
2. Describe in brief about Khelo India program?
3. What is the difference between Ancient and Modern Olympics? Explain in detail?
4. Explain in detail about IOA and IOC?

5. What do you mean by Physical fitness? Explain the importance of physical activity in enhancing the life.
6. What do you understand by Wellness? What is the importance of wellness in one`s life?
7. Define measurement. What is the importance of test and measurement in sports?
8. Describe the measurement of health related fitness components in detail?
9. What do you understand by the term Physiology? Write its importance?
10. Define joints? Describe widely the types of joints in the body?

