

North Ex Public School
School Block, Jain Nagar, Delhi- 110081
Holiday Homework (Summer Break)
Class - XI

Dear Parents,

Summer brings with it the ever smiling sun, fresh breeze, blossoming flowers and HOLIDAYS!

Holidays are the time for the parents to become teachers and friends! Vacations help to rejuvenate your child and develop an everlasting bond between you and your child by devoting your precious time towards him/her.

Allow us to facilitate you to help your child explore his/her environment. Make optimum use of this time to cultivate your child's interest in co - curricular activities. Have fun with family and friends.

HAPPY VACATIONS

GENERAL INSTRUCTIONS

1. Start the revision as per the syllabus which is scheduled from April onwards.
2. Written Homework is to be done in the Weekly test notebooks and further as per the instruction & guidance given by the subject teacher.
3. The child will be assessed for the Handwriting, presentation, neatness, completion of all the given question, indexing of the work.
4. Charts, Presentations and Projects must be labeled properly indicating very clearly the Name, Class, Roll No and Subject.

Parents can be the facilitators for the child at home but let the child complete his/her work independently & in his / her own handwriting.

ENGLISH

1. Make a poster for promoting good health through 'Health Mela'.
2. Write a letter to The Times of India editor expressing your strong resentment against the noise pollution caused by the playing of loudspeakers, music, marriages because of this liberty being misused.
3. Write an article on 'Evils of Dowry'.
4. Write a speech on - 'The Future of Information Technology'.
5. Your watch has been lost in the school playground. Write a notice for the lost watch to be put up on school notice board.
6. Write the summary of the lesson 'Portrait of a Lady'.
7. Write the summary of the poem 'The Photograph'. (Present it in a CD on a word file / ppt with pictures).

ECONOMICS

1. You have unlimited wants and limited resources to satisfy them. Explain by giving two examples.

2. What are your resources for studying Economics?
3. "Economics is a study of scarcity". Discuss.
4. Discuss the importance and limitation of statistics.
5. "British rule adversely hampered the industrial sector of India". Do you agree with this view?
6. Discuss the main reasons for India's agricultural stagnation during the colonial period.
7. Briefly discuss "Growth" as an important goal of five year plans.
8. Explain "modernization" as a goal of five year plans.
9. How were the industries classified according to the industrial policy resolution 1956?
10. Discuss the risks involved under green revolution. Also state the steps taken by the government to overcome these risks.

MATHS

1. In a group of 65 people, 40 like cricket, 10 like both cricket and tennis. How many like tennis only and not cricket? How many like tennis?
2. In a survey of 60 people, it was found that 25 people read newspaper H, 26 read newspaper T, 26 read newspaper I, 9 read both H and I, 11 read both H and T, 8 read both T and I, 3 read all the three newspapers. Find:
 - (a) The number of people who read at least one of the newspapers.
 - (b) The number of people who read exactly one newspaper.
3. In a survey, it was found that 21 people liked product A, 26 liked product B and 29 liked product C. If 14 people liked products A and B, 12 liked products C and A, 14 people liked products B and C and 8 liked all the three products. Find how many liked product C only.
4. Find the domain of the function :

$$f(x) = \frac{x^2 + 2x + 1}{x^2 - 8x + 12}$$
5. Find the domain and range of the real function f defined by $f(x) = \sqrt{(x - 1)}$
6. Let $f = \left\{ \left(x, \frac{x^2}{1+x^2} \right) : x \in \mathbb{R} \right\}$ be a function from \mathbb{R} to \mathbb{R} . Determine the range of f.
7. Find the values of the following trigonometric functions:
 - (a) $\operatorname{Cosec}(-1410)$
 - (b) $\sin\left(\frac{-11\pi}{3}\right)$
8. Show that :

$$\tan 3x \tan 2x \tan x = \tan 3x - \tan 2x - \tan x$$
9. Find the value of $\tan\left(\frac{-13\pi}{12}\right)$
10. Find $\sin\frac{x}{2}$, $\cos\frac{x}{2}$ and $\tan\frac{x}{2}$ in each of the following :
 - (a) $\tan x = \frac{-4}{3}$, x is in II quadrant
 - (b) $\cos x = \frac{-1}{3}$, x is in III quadrant
 - (c) $\sin x = \frac{1}{4}$, x is in II quadrant

BUSINESS STUDIES

1. State the different types of economic activities and why business is considered an economic activity? Explain.
2. Explain with examples the various types of industries.
3. What are the branches of commerce? Explain.
4. Mention any two hindrances removed by commerce. Explain.
5. Mention any two social objectives of the business. Explain.

6. Explain the term 'minimum subscriber'.
7. Compare the status of a minor in a JHF with that of a partnership firm.
8. How does a comparative society exemplify democracy and secularism. Explain.
9. Why is it important to choose an appropriate form of organization?
10. Explain the steps taken by promoters in the promotion of a company.

ACCOUNTANCY

1. Do practice at least 15 questions of Accounting equation.
2. Define the following terms:

(a) Expenditure	(b) Outstanding expenses
(c) Fixed Assets	(d) Accrued Incomes
(e) Capital	(f) Debtor
(g) Long term liability	(h) Bills payable
(i) Drawings	(j) Voucher

BIOLOGY

1. Make a project on any topic related to chapters of syllabus (2017-18) and submit it inside a folder.
2. Write down Experiment - 1 to 10 in practical notebooks from science lab manual(Objective, Apparatus and Chemicals required, Procedure, Diagrams and Precautions).
3. Learn CH - 1,2,3,4,5 for test and read CH-16,17 and 18 of human physiology.

PHYSICS

1. Write the fundamental forces in nature? Write name, relative strength and operate among?
2. Differentiate between macro and micro scopic domains. Give atleast two example of each.
3. A student measures the thickness of a human hair by looking at it through a microscope of magnification 100. He make 20 observations and finds that the average width of the hair is 3.5mm. What is the estimate on the thickness of hair?
4. What is displacement? Draw graph of
 - (a) Stationary object
 - (b) An object in Uniform Motion
5. What are SI units? Write Si base quantities and unit?

Model: Draw graph on relative velocity

- (a) Position - time graphs of two objects with equal velocities
- (b) Position - time graphs of two objects with unequal velocities, showing the time
- (c) Position - time graphs of two objects with velocities in opposite directions, showing time of meeting.

OR

Make a model on laws of motion.

CHEMISTRY

1. Explain Dalton's Atomic Theory.
2. Calculate the molecular mass of the following :

(a) $C_6H_{12}O_6$	(b) $C_{12}H_{22}O_{11}$	(c) $MgSO_4 \cdot 7H_2O$	(d) $K_4[Fe(CN)_6]$
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3. What do you mean by significant figures? How many significant figures are present in the following:
 (a) 0.0025 (b) 208 (c) 5005 (d) 126,000 (e) 500,0
 (f) 2.0034
4. Explain with diagram Rutherford's Nuclear model of atom.
5. What is the basic difference in approach between the Mendeleev's periodic law and Modern periodic law.

Model : Make a model of :

- (a) Thomson Model
OR
- (b) Bohr's Model
OR
- (c) Model of periodic table

POLITICAL SCIENCE

1. Make a chart on the preamble of the constitution.
2. How India is sovereign, democratic and republic? Discuss.
3. Do written practice of all Ques/Ans of Chapter -1 & 2 in notebooks.
4. Make a poster showing equality in society.
5. Make a powerpoint presentation on the topic 'Constitution'.

HISTORY

1. On the map of Africa, mark and locate Chad, Sudan, Ethiopia, Diekeldess, Red Sea, Tanzania, Kenya and Uganda
2. Make a chart on Punch Blade Technique and write its features.
3. Make a project on 'Evolution of Early Societies'.
4. Do written practice of all the ques/ans of Chapter - 1 & 2 in notebooks.
5. Make a chart on 'Evolution of the hand'.

PHYSICAL EDUCATION

1. Give two quotations of physical education and explain them.
2. What is the vision of special Olympics Bharat?
3. Explain the aim and objectives of physical education.
4. Explain the career options in the field of physical education.
5. Describe the avenues for career preparation.
6. Explain the principle of integrated physical education.
7. Explain the role of central advisory board of physical education and Recreation.
8. Write about Rajkumari Coaching Scheme.

IP

Based on the given table, write SQL statements for the following queries:

ITEMS

ICODE	NAME	CATEGORY	RATE
1001	Masala Dosa	South Indian	60
1002	VadaSambhar	South Indian	40

1003	IdliSambhar	South Indian	40
2001	Chowmein	Chinese	80
2002	Dimsum	Chinese	60
2003	Soup	Chinese	50
3001	Pizza	Italian	240
3002	Pasta	Italian	125

1. To display all the details of items.
2. To display names and rate of all the items.
3. To display names of “Chinese” items.
4. To display different categories of the items.
5. To display all the details of items whose rate is in the range 60 and 125.
6. To display the codes and names of those items whose name starts with letter ‘D’.
7. To display the rate and names of those items whose name contains letter ‘m’.
8. To display the details of items whose name ends with letter ‘a’
9. Find the degree and cardinality of the table.
10. Identify the primary key of the table. Give reason.

COMPUTER SCIENCE

1. Add the following :
 - (a) $1100101011 + 1000111011$
 - (b) $111110011 + 1110111111$
 - (c) $1010110101 + 1000011101$
2. Write the 1’s complement of the following :
 - (a) 1010110111011
 - (b) 10000001101001
 - (c) 10101010111
3. Differentiate between data and information.
4. Explain the types of computers.
5. Give an overview of the generations of computers.
6. “A computer follows IPO cycle”. Justify the statement.
7. Explain the functions of an operating system.
8. Explain the types of an operating system.
9. Explain the concept of virtual memory.