



# SHRI JAIN PUBLIC SCHOOL, BIKANER

## HOLIDAY HOMEWORK

(2017–18)

CLASS – X

### THE VICTOR

If you think you are beaten, you are.  
If you think you dare not, you don't.  
If you like to win but think you can't,  
It's almost a cinch you won't.  
If you think you'll lose, you're lost.  
For out in the world we find  
Success begins with a fellow's will.  
It's all in the state of mind.  
If you think you are out classed, you are.  
You've got to think high to rise.  
You've got to be sure of your-self before  
You can ever win the prize.  
Life's battles don't always go  
To the stronger or faster man.  
But sooner or later, the man who wins  
Is the man who thinks he can.

Summer Vacation is synonymous with fun, frolic, getting up late in the morning, playing for longer hours with friends, going for picnics, exploring new places and watching fun filled shows on television. But dear children, there is a lot more you can do to make your vacations more interesting, meaningful and full of fun. It will surely prepare you for a better and more fruitful year ahead.

We have planned some interesting activities for you. So get ready to enjoy your summer vacation!

#### **Note:–**

1. Read newspaper and listen to news-headlines to keep yourself updated.
2. Stay indoors in the afternoon.
3. Help your parents in household chores.
4. Go for morning and evening walk.
5. Be motivated as you go through the poem "THE VICTOR..



- All the Assignments for Summer Holidays should be done in Class work copy of the respective subject.
- Written work should be done with neat and clean handwriting as each assignment carries 5 marks as per CBSE instructions.

## **ENGLISH**

- A.** Read the first 10 chapters of the novel "The Diary of a Young Girl". Search out and write meanings of all the difficult & new words you come across. Attempt the character sketch of any 3 characters you like the most.
- B** Prepare and write a speech on the given topic: (Roll No. wise)
- C** Write two letters to the editor of newspaper on:
- (i) Poor sanitary condition in your locality.
  - (ii) Problem of stray animals.
- D** Write a creative story in a project file with a suitable moral for Story Narration Competition on 8 July '17
- (i) My Worst Nightmare
  - (ii) An Angry and Naughty Boy:

## **हिन्दी**

### **अनुच्छेद लेखन-**

- ग्लोबल वार्मिंग
- प्लास्टिक की दुनिया
- समाचार-पत्रों की भूमिका

### **संवाद लेखन**

- प्रदेश में फैल रहे डेंगू के बारे में दो मित्रों के बीच।
- 'जंक फूड स्वास्थ्य के लिए हानिकारक है।' इस विषय में माँ व बेटी के बीच।
- यातायात के नियमों के उल्लंघन से होने वाले खतरों के विषय में पिता व पुत्र के बीच।

### औपचारिक पत्र लेखन

- अपने क्षेत्र में फैली गंदगी की समस्या की ओर ध्यान आकर्षित करते हुए स्वास्थ्य अधिकारी को पत्र लिखिए।
- किसी प्रतिष्ठित दैनिक समाचार पत्र के संपादक को सड़क दुर्घटनाओं को रोकने के लिए सुझाव देते हुए पत्र लिखिए।
- आपके द्वारा खरीदे हुए कम्प्यूटर में एक महीने बाद ही खराबी आने के कारण दुकानदार ने आपकी शिकायत की कोई सुनवाई नहीं की। अतः कंपनी के मुख्य प्रबंधक को पत्र लिखकर न्याय की मांग करें।

### MATHS

- A. Solve the WORKSHEET given at the end.

### SCIENCE

1. Write [EXPERIMENT NO. 1 TO 10] from Lab manual in practical copy

### SOCIAL SCIENCE

**Procure outline maps of India (Political) and do the given exercises:**

- Q.1 On an outline map of India (Political Map) Mark the following Dams of India  
Salal Dam, Bhakra Nangal Dam, Hirakud Dam, Tehri Dam, Rana Pratap Sagar Dam, Sardar Sarovar Dam, Tungabhadra Dam and Nagarjuna Sagar Dam
- Q.2 On an outline map of India (Political map) mark five points for each of following:  
Iron ore mines, Coal mines, Oil fields and Iron and steel plants of India.
- Q.3 On an outline map of India (Political map) mark five points for each of following:  
Nuclear power plants, Thermal power plants, Software Technology parks, Major seaports and International Airport of India.
- Q.4 Questions and answer of worksheet to be solved for:
- |     |                   |              |
|-----|-------------------|--------------|
| (a) | Political science | Lesson no. 1 |
| (b) | Economics         | Lesson no. 1 |

### **LEARN TO BE SAFE:**

- \* Do not go out alone without an elder to accompany you.
- \* Never talk to strangers.
- \* Do not accept gifts/eatables from strangers.
- \* Play in a fenced areas and not on streets.
- \* Scream for help in case you feel you are in danger.
- \* Memorise your parents phone numbers.
- \* If you find yourself lost in a market ask for some one to give a call to your parents.

### **LEARN TO BE RESPONSIBLE AND DEVELOP PERSONAL SKILLS:**

- \* Take up one task everyday and figure out how you will complete this task. For example
- \* Keep things in their proper places so as to keep your bedroom clean
- \* Help your mother in laundry
- \* Water the plants.
- \* Dust and clean your room.
- \* Look after your younger brother or sister
- \* Set the dining table for your family
- \* Feed your pet if you have one

### **DEVELOP SOME SOCIAL SKILL:**

- \* Give respect to the elders and love to the young ones.
- \* Four magic words that are basics of good manners– Please, Thank you, Excuse me and Sorry. Make these four words a habit and see the difference.
- \* Wish and welcome the guests
- \* Converse with your grandparents
- \* Go for a heritage walk

### **DEVELOP PERSONAL HYGIENE:**

- \* Keep your surroundings clean
- \* Trim your nails once a week
- \* Early to bed, early to rise, Plenty of sleep helps you concentrate.
- \* Wash your hands before and after meals.
- \* Wash your hair and keep it neat by combing
- \* Bath or shower daily. Wash hands after using the toilet.
- \* Eat a healthy and balanced diet.

# SHRI JAIN PUBLIC SCHOOL

Class -X

HOLIDAY HOMEWORK

Sub- Maths

NAME \_\_\_\_\_

Q.1 If  $\theta$  is an acute angle and  $\tan \theta + \cot \theta = 2$ , find the value of  $\tan^5 \theta + \cot^5 \theta$ .

Q.2 Prove that:  $\frac{\sin \theta}{\cos \theta + \operatorname{cosec} \theta} = 2 + \frac{\sin \theta}{\cot \theta - \operatorname{cosec} \theta}$

Q.3 Two persons are  $x$  metres apart and height of one is double that of the other. If from the middle point of the line joining their feet, an observer finds the angular elevation of their tops to be complementary, then find the height of the short person.

Q.4 A fire at a building B is reported by two men on telephone to two fire stations  $F_1$  and  $F_2$ , 10 km apart from each other on a straight road.  $F_1$  observes that the fire is at an angle of  $60^\circ$  to the road and  $F_2$  observes that it is at an angle of  $45^\circ$  from it:

(i) How much distance will  $F_1$  travel? (ii) How much distance will  $F_2$  travel?

Q.5 If the mean of the following data is 18.75, find the value of  $p$ .

$x_1$	10	15	$p$	25	30
$f_1$	5	10	7	8	2

Q.6 Find the mode of the following data:

Class	3-6	6-9	9-12	12-15	15-18	18-21	21-24
Frequency	2	5	10	23	21	12	3

Q.7 For the data given below, draw the more than ogive and find the value of median.

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	8	18	23	37	47	26	16	7

Q.8 Compute the median of the following data: [By using step. deviation method]

Marks	80-90	90-100	100-110	110-120	120-130	130-140	140-150
No. of Students	9	17	19	45	33	15	12

Q.9 The median of the following data is 525. Find the value of  $x$  and  $y$ , if the sum of the frequencies is 100.

C.I.	0-100	100-200	200-300	300-400	400-500	500-600	600-700	700-800	800-900	900-1000
Frequency	2	5	$x$	12	17	20	$y$	9	7	4

Q.10 If  $\sqrt{3} \tan \theta = 1$ , then find the value of  $\sin^2 \theta - \cos^2 \theta$ .

- Q.11 Find the value of p, if the mean of the following distribution is 18.

$x$	13	15	17	19	20+p	23
$f$	8	2	3	4	5p	6

- Q.12 What does the abscissa of the point of intersection of 'more than ogive' and 'less than ogive' of a data represent?

- Q.13 If  $7\sin^2\theta + 3\cos^2\theta = 4$ , show that  $\tan\theta = \frac{1}{\sqrt{3}}$

- Q.14 Find mean of the following frequency distribution, using step-deviation method:

Class Intervals	0-10	10-20	20-30	30-40	40-50
Frequency	7	12	13	10	8

- Q.15 Prove that  $\frac{\sec\theta + \tan\theta - 1}{\tan\theta - \sec\theta + 1} = \frac{\cos\theta}{1 - \sin\theta}$

- Q.16 A survey was conducted by a group of students as a part of their Health Awareness Programme. They collected the weights of 30 students and presented as below:

Weight (in kg)	40-45	45-50	50-55	55-60	60-65	65-70	70-75
Number of students	2	3	8	6	6	3	2

- Q.17 The angle of elevation of the top of a vertical tower from a point on the ground is  $60^\circ$ . From another point 10m vertically above the first, its angle of elevation is  $30^\circ$ . Find the height of the tower.

- Q.18 Given that  $\tan\theta = \frac{1}{\sqrt{3}}$ , find the value of  $\frac{\cos^2\theta - \sec^2\theta}{\cos^2\theta + \sec^2\theta}$

- Q.19 To find out the concentration of SO<sub>2</sub> in the air [in parts per million (ppm)], the data was collected for 30 localities in a certain city and is presented below:

Concentration of SO <sub>2</sub> (in ppm)	0.00-0.04	0.04-0.08	0.08-0.12	0.12-0.16	0.16-0.20	0.20-0.24
Frequency	4	9	9	2	4	2

- (i) Find the mean concentration of SO<sub>2</sub> in the air.  
(ii) Suggest some measures to be taken to reduce the air pollution.
- Q.20 A round balloon of radius r subtends an angle  $\alpha$  at the eye of the observer while the angle of elevation of its centre is  $\beta$ . Prove that the height of the centre of the balloon is  $r \sin\beta \operatorname{cosec}\frac{\alpha}{2}$ .
- Q.21 An aeroplane flying horizontally, 1 km above the ground, is observed at an elevation of  $60^\circ$ . After 10 seconds, its elevation is observed to be  $30^\circ$ . Find the speed of the aeroplane in km/hr.
- Q.22 Prove the following:  
 $\sin\theta (1 + \tan\theta) + \cos\theta (1 + \cot\theta) = \sec\theta + \operatorname{cosec}\theta$



Q.23 Calculate the mode from the following data:

Monthly salary (in ₹)	No. of employees
less than 5000	90
less than 10000	240
less than 15000	340
less than 20000	420
less than 25000	490
less than 30000	500

Q.24 If  $x = 3 \sec^2 \theta - 1$  and  $y = \tan^2 \theta - 2$ , find  $x - 3y$ .

Q.25 Prove that:  $(\sin \theta + \sec \theta)^2 + (\cos \theta + \csc \theta)^2 = (1 + \sec \theta \csc \theta)^2$

Q.26 An aeroplane at an altitude of 100 m observes the angles of depression of two opposite points on two banks of the river to be  $45^\circ$  and  $60^\circ$ . Find, in metres, the width of the river.

[Use  $\sqrt{3} = 1.732$ ]

Q.27 Compute the mode for the following frequency distribution:

Size of items	0-4	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-36	36-40
Frequency	5	7	9	17	12	10	6	3	1	0

Q.28 At the foot of a mountain, the elevation of its summit is  $45^\circ$ . After ascending 1000 m towards the top of the mountain at an angle of  $30^\circ$ , the elevation is found to be  $60^\circ$ . Find the height of the mountain.

Q.29 The table below shows the percentage distribution of female teachers in the primary schools of rural areas of various state and Union Territories (UT) of India:

Percentage of female teachers	15-25	25-35	35-45	45-55	55-65	65-75	75-85
Number of states/UT	6	11	7	4	4	2	1

(i) Find the mean percentage of female teachers.

(ii) Suggest some measures that should be taken to increase the percentage of female teachers.

Q.30 Two poles of equal heights are standing opposite to each other on either side of a road, which is 100 metres wide. From a point between them on the road, the angles of elevation of their tops are  $30^\circ$  and  $60^\circ$ . Find the position of the point and also, the heights of the poles.

Q.31 If  $x = 2 \sin^2 \theta$  and  $y = \cos^2 \theta + 1$ , then find the value of  $x + y$

Q.32 If  $x = \sec \theta + \tan \theta$ , then find  $\tan \theta$ .

Q.33 The angle of elevation of the top of a building from the foot of a tower is  $30^\circ$  and the angle of elevation of the top of the tower from the foot of the building is  $60^\circ$ . If the tower is 60 m high, find the height of the building.

# SHRI JAIN PUBLIC SCHOOL

Class-X

Sub: S.St.

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## ECONOMICS

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### LESSON 1: DEVELOPMENT

**A. Very short answer type questions.**

- Q.1 Can you imagine one developmental goal of a landless rural labour?
- Q.2 Give one example how rich and poor have conflicting goals of development.
- Q.3 Write any one indicator of human development Index. [CCE 2015]
- Q.4 Mention one non-material benefit that increases welfare of population.
- Q.5 Name the basic criterion that is used by world bank for comparison of countries on the basis of development. [CCE 2015]
- Q.6 Why is per capita income counted in dollar rather than our rupee?
- Q.7 State the difference between literacy rate and "Net attendance ratio".
- Q.8 Mention one single major reason for more dropout ratio in Bihar.
- Q.9 Why does Kerala have a low infant mortality rate (IMR)? [CCE 2014]
- Q.10 Give the reason for which lesser girl children of age group 10-14 in comparison to boys in rural areas are attending school.
- Q.11 What is Body Mass Index (BMI)? [CCE 2015]
- Q.12 What are the factors important for development other than income? [CCE 2015]
- Q.13 Name the international organisation that publishes Human Development Report.
- Q.14 How many countries are included in HDI ranking? [CCE2015]
- Q.15 Which region of the world has the maximum amount of crude oil reserve? [CCE 2015]
- Q.16 Define the terms:  
(a) Purchasing power parity (b) Per capita Income  
(c) Life expectancy (d) Human development Index  
(e) Infant mortality rate (f) Literacy rate  
(g) Net Attendance ratio
- Q.17 Mention two non-material things that people need to live besides seeking more income or any other material good.
- Q.18 What do you mean by the income of a country?
- Q.19 What is meant by "Sustainable development"?
- Q.20 Name the state of India where the overuse of ground water resources is found.
- Q.21 What may be development for one may not be development for other" Explain with a suitable example. [CBSE 2010, 2012]
- Q.22 Why is total income of countries not used to make comparisons between them?
- Q.23 Define the term 'Gross domestic Product' (GDP)?



**B. Short answer type questions:**

- Q.1 Mention any four characteristics of development. [CCE 2013,2014]
- Q.2 'Money cannot buy all the goods and services that one needs to live well'. Explain. [CCE 2014]
- Q.3 What do you mean by per capita income of a country? How can it be used to compare two countries?
- Q.4 Why countries of the Middle. East are not called developed in spite of high per capita income?
- Q.5 What are the major attributes of development considered by UNDP in making the human development report? Explain the importance of each of these attributes.
- OR
- Explain any three criteria used by Human Development- Report to classify various countries. [CCE 2015]
- Q.6 Explain inferences which have been drawn by comparing the development levels of Maharashtra, Kerala and Bihar. [CCE 2015]
- Q.7 What does sustainability of development mean? How can sustainable development be achieved? [CCE 2014]
- Q.8 How is the developmental report published by the World Bank and UNDP different?
- Q.9 What consequences would we face if non-renewable resources get exhausted in the world? [V.IMP]
- Q.10 Compare India and Sri Lanka on the basis of any three indicators of Human Development Index for 2004. [AI CBSE 2009]
- Q.11 Why has Kerala has a higher Human Development Index than Punjab in spite of low per capita income? [CBSE 2009, 2011]
- Q.12 Why do we use averages? Are there any limitations to their use? Illustrate with your own examples related to development?
- Q.13 Describe any three public facilities needed for the development of a country.

**C. Long answer type questions:**

- Q.1 Why do you mean by public facilities? Explain any four public facilities. [CCE 2011, 2012]
- Q.2 Give examples to prove that there are other important developmental goals than income.
- Q.3 Distinguish between developed countries and developing countries.
- Q.4 What should India do to become a developed country?

# SHRI JAIN PUBLIC SCHOOL

Class-X

Sub: S.St.

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## POLITICAL SCIENCE

### LESSON 1: POWER SHARING

**A. Very short answer type questions.**

- Q.1 Which two languages are generally spoken in Belgium?  
Q.2 What is majoritarianism?  
Q.3 Why power sharing is essential for democracy.  
Q.4 Which system of power sharing is called "checks and balances"?  
Q.5 Which type of power does the community government of Belgium enjoy?  
Q.6 What is the prudential reason behind power- sharing?

**B. Short answer type questions:**

- Q.1 What were the two main causes of resentment in Belgium in 1960? How was the conflicts solved.  
[2010]  
Q.2 What is meant by 'Tamil Elam'?  
Q.3 Mention one majoritarian measure to establish Sinhala supremacy in Sri-Lanka.  
Q.4 Criticize the majoritarian measures adopted by the Sri Lankan. government to establish Sinhala supremacy.  
Q.5 Evaluate the steps which turned out to be the milestone to establish majoritarianism in Sri-Lanka.  
[2014]  
Q.6 State any three demands of the Sri-Lanka Tamils which can settle the ethnic conflict in Sri-lanka for good, if accepted by the government of Sri-Lanka.  
[2014]  
Q.7 Existence of Dutch and French speaking people in Belgium, Created an Ethnic tension' Elaborate the statement.  
[2014]  
Q.8 "Power sharing is the very spirit of democracy" Justify this statement with five suitable points.  
Q.9 Why did Belgians amend their constitution four times? Explain.  
[2014]  
Q.10 Explain any two important differences between the power sharing model accepted by Belgium and Sri-Lanka.  
[2013]  
Q.11 Highlight any three measures adopted by the Belgian government to accommodate regional and Cultural diversities.  
[2012,13]  
Q.12 What is the meant by the system of 'Checks and balances'?

Q.13 Explain the different forms of power sharing in modern democracies. Which forms have been adopted in India. [2014]

Q.14 Horizontal distribution and checks and balances are synonymous. Explain with suitable example.

Q.15 States in India mostly ask for more autonomy or more power should they be given more power or not? Support your answer with two arguments.

**C. Long Answer type questions**

Q.1 "Attempts at forced integration often sow the seeds of disintegration". Explain.

Q.2 "For a successful democracy it is a must that there exists some sort of power sharing mechanism". Explain.

Q.3 In which three ways is the political system in Belgium different and innovative from other countries? Explain.

Q.4 How has power sharing been promoted in India? Explain.

Q.5 Why did Belgium shift from a unitary to a federal form of government?