

BAL BHARATI PUBLIC SCHOOL

HOLIDAYS HOMEWORK – (2009-2010)

CLASS - XI

It's holiday time once again. We want you to enjoy your vacation so that in July you come back to school refreshed and rejuvenated. At the same time we want you to remain in touch with your studies. For this we have designed an interesting and activity based holiday homework, which if taken in the right spirit, will not be a burden but a pleasure to all of you. We wish you all the best and hope you enjoy yourself.

ENGLISH

Q 1. Collect 5 articles each from Newspapers and Magazines on the following topics. Paste them in a file and write your views on them.

- (i) Westernization of India
- (ii) Language and Culture
- (iii) Female Infanticide
- (iv) Domestic Violence
- (v) Road Rage

Q 2. Collect two Box advertisements each for the following and paste them in a file:

- (i) Food Stuff
- (ii) Shampoo
- (iii) Soap
- (iv) Tooth Paste
- (v) Hair Oil

Q3. Collect the classified advertisements each and paste them in a file.

- (i) To-let
- (ii) Matrimonial
- (iii) Educational
- (iv) Travel & Tours
- (v) Lost & Found
- (vi) Missing
- (vii) For Sale (Property)
- (viii) For Sale (any other)
- (ix) Exhibition cum sale
- (x) Situations Vacant

Q4. Collect 2 posters each for the following and paste them in a file

- (i) Environment
- (ii) Health
- (iii) Road Safety

MATHS

Q.1. Find the domain and range of the following functions: -

a) $f(x) = \frac{1}{\sqrt{4+3\cos x}}$

b) $f(x) = \sin \left[\log \left\{ \frac{\sqrt{4-x^2}}{1-x} \right\} \right]$

$$c) f(x) = \frac{x^2}{x^2 - 1}$$

$$d) f(x) = \frac{1}{1 - 2\sin x}$$

$$e) 2^x + 2^y = 2$$

$$f) f(x) = \frac{x^2 + 2x + 1}{x^2 - 8x + 12}$$

$$g) f(x) = [x] - x$$

$$h) f(x) = \log_2 \left(\frac{x}{x-1} \right)$$

$$i) f(x) = \sqrt{\log \left(\frac{5x - x^2}{6} \right)}$$

Q.2. Solve for x: -

$$a) y = \sqrt{\frac{x-2}{x+3}} \quad b) y = \frac{x^2}{x^2-1} \quad c) \frac{x+1}{x-3} \geq 0$$

Q.3. Draw the graph of the equations: -

$$a) y = \left| \frac{x-1}{x+2} \right|$$

$$b) y = |2 - |x + 3||$$

$$c) y = 3\cos 2x$$

$$d) y = \frac{1}{\sqrt{2}} (\sin x + \cos x) \text{ from } x = -\frac{\pi}{2} \text{ to } \frac{\pi}{2}$$

Q.4. Write all trigonometric formulae 10 times.

PHYSICS

EARTH HOUR: Vote earth: The world's first global election.

This was one of the headlines in the media as the world celebrated the Earth Hour. Find out more about this global event and compile the information in a folder. Also roughly estimate how much energy will your family save if electricity was turned off for an hour daily. Calculate hence the energy saved by your colony and finally the city of Delhi.

Word limit: 1000 words. You can substantiate your hand written report with pictures and graphics.

CHEMISTRY

1. Study the characteristic properties of alkali and alkaline earth metals and make a comparative study (in tabular form) eg

	Alkali Metal	Alkaline Earth Metals	Reason for difference
Ionization Enthalpy	IE1 low IE2 High	IE1 High IE2 Low	Alkaline earth metals have a high nuclear charge and small size After the loss of one e^- Alkali metal acquires noble gas configuration hence it is difficult to lose another e^-

Note: Write all the characteristic properties mentioned in NCERT.

2. Give reasons for the anomalous behavior of lithium. Explain diagonal relationship of lithium and magnesium. Give all common characteristics of lithium and magnesium.

BIOLOGY

Q 1. Prepare a powerpoint presentation on Comparative analysis of Air & Noise Pollution levels in the metropolitan cities of Australia and India.

The powerpoint should contain-

- a) Introduction
- b) Data and Graphs related to pollution level in any three metropolitan cities of each country (eg London, Melbourne & New Delhi)
- c) Metabolic disorders caused due to pollution.
- d) Measures taken by each city to control the pollution.
- e) Standardized pollution test conduction Frequency of conduction & feasibility of the measure taken.
- f) Conclusion (Which city has the highest pollution level)
- g) Suggestions.
- h) Bibliography.

Q 2. Prepare a synopsis (Summary of Projects) on an investigatory project. The project should contain the following parts-

- a) Acknowledgement
- b) Introduction
- c) Content
- d) Experiment
- e) Conclusion
- f) Bibliography

Content part should contain the theory behind the investigating project / topic. It should be well researched. Project should be hand written.

COMPUTER SCIENCE

1. Identify and draw the flow chart for the management of Search Engine /Community Site.
2. Blu-RayA replacement of DVD. Discuss
3. What is the difference between Computer Hackers and Crackers?
4. Write a report presenting and interpreting your finding about Computer Viruses.

PSYCHOLOGY

- Q1. With the film “Taare Zameen Par” , Dyslexia has become a very common term. Dyslexia is a type of learning disability. Prepare a brief report on learning disorders, their types, symptoms and strategies that can be used to help the children suffering from this disorder.
- Q2. Conduct a survey of 10 households in your locality. Prepare an interview schedule and ask the head of each households: What kinds of pollution do you experience? What are the effects of each kind on the health of the family members? Summarize the data and divide the health effects into physical and mental symptoms / diseases. Prepare a report and offer suggestions on how pollution can be reduced.
- Q3. Prepare a Powerpoint Presentation as per the topics assigned in the class.

ECONOMICS

In groups of 4, analyze any one of the following topics and prepare a 4 minute powerpoint presentation on the same. Each member of the group will speak for a minute each using the PPT in the class when the school reopens. Marks for the holiday homework will be awarded on the basis of presentation in the class.

- a) Discuss the measures adopted at the world level to tackle recession.
- b) How has the recession affected the Indian Economy? Elaborate.
- c) Has the recession indicated a bend towards socialistic policies away from the free market approach of the US Economy? Elaborate.
- d) Dissect stock market for a layman.
- e) Recently the inflation rate recorded a 44% growth rate, discuss the impact if any of such a low rate.
- f) How do FII's affect the stock market of India? Discuss their recent trends of movement.

BUSINESS STUDIES & ACCOUNTANCY

- Q1. What is the current income tax structure for salaried class in India? Explain various deductions and exemptions available to such assesseees under Income Tax Act.
- Q2. Explain different types of Mutual Fund. Compare the schemes offered by any two mutual fund companies operating in India.
- Q3. “Franchising is basically a specialized form of licensing in which the franchisor not only sells intangible property to the franchisee, but also insists that the franchisee agree to abide by the strict rules as to how it does business.” Keeping the above statement in mind explain the following:

Concept of franchising.

Difference between franchising and licensing.

Benefits of franchising to the franchisee & franchisor.

Q4. Make a project file on “ Satyam Computers - Rise, Downfall and

Q5. Prepare PPT as per the topics assigned in the class.

GEOGRAPHY & POLITICAL SCIENCE

Elections 2009 – Parties & Performance

- Illustrate the party performance of all states on maps of individual states as far as possible on by means of a tally.
- Statistical diagrams like Pie Charts and Bar Diagrams could also be drawn to represent the information.
- Photographs / Cartoons related to a particular party’s victory / loss could also be used.

ART

Make a collage on Interior of my room / house. Size full imperial cartridge sheet.
(use all kinds of paper, cloth etc)