



PRAGATI PUBLIC SCHOOL

HOLIDAY HOME WORK

2017-2018

CLASS :XI

SUBJECT- ENGLISH

Q 1. A recent survey showed that there are still many communities in India which don't welcome the birth of a girl child. Can a country which does not give equal rights to all its citizens, ever dream of becoming great? Write an article in 150 words giving your views on the subject and the steps we should take to solve the problem. You are Yusuf, a concerned citizen of Hyderabad.

Q2. On Teacher's Day, your Principal asked you to deliver a speech in the morning assembly on "The role of a teacher in society". Write a speech in 150-200 words. You are Navin/Navita.

Q3. Your school is organizing an educational tour to Ajanta and Ellora Caves. Put up a notice on the school notice board in not more than 50 words giving detailed information and inviting the names of those who wish to go. You are Raghav, Secretary, Cultural Society of Todar Mal Public School, Jaipur.

Q4. Write a debate in favour of bilateral talks between India and Pakistan in wake of the growing unrest on the borders. You are Namrata of class XI, Presidium School, Bengaluru.

Q5. Make a Power Point Presentation covering the salient aspects of The Portrait of a Lady OR the poem A Photograph. The soft copies can be recorded on to a CD and submitted to the teacher.

PHYSICS

(A) Make an investigatory project and give a complete report for the same by using the following concepts of physics:

- (i) Bernoulli' theorem (ii) Surface tension (iii) Projectile Motion
(iv) Elastic Collision

You can also make model related to your standard

(B) WORK SHEET

Q1 What is retardation and instantaneous acceleration of a body.

Q2 Describe in each case whether the motion is one two or three dimensional

- (i) A moving car on a straight highway
(ii) A piece of paper flying in air
(iii) A ant crawling on a large sphere
(iv) The earth revolving around the sun

Q3 Define :-

- (i) relative velocity
(ii) average velocity
(iii) instantaneous velocity

Q4 Can an object be accelerated without speeding up or slowing down ? Explain.

Q5 Can speed of a body change if its velocity is constant?

Q6 Is it possible that velocity of an object be in a direction other than the direction of acceleration.

Q7 If instantaneous velocity of a particle is zero, will its instantaneous acceleration be necessarily be zero.

Q8 Explain ,when can an object in motion be considered as a point object.

Q9 Draw position time graph (x-t) graph of

- (a) position acceleration
- (b) negative acceleration
- (c) zero acceleration

Q10 What is acceleration of a particle if position of a particle at any instant of time t is given by $x=t^3$.

Q11 A stone is dropped from top of the tower 50m high, simultaneously another stone is thrown upward with a speed of 20m/s. Calculate the time at which both the stone cross each other.

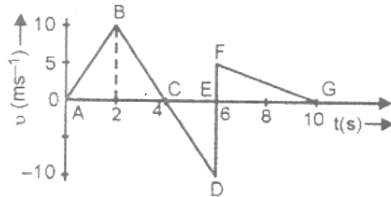
Q12 A car travels at a rate of 30km/h for 5 min and then 40km/h for 10 min find

- (i) the total distance traveled by the car
- (ii) average speed of the car

Q13 A train is moving with the speed of 50km/h on a straight track and B train is moving with a speed of 40 km/h on the parallel straight track in the same direction. What is the velocity of A train relative to B train and velocity of B train relative to A train?

Q14 Brakes are applied to a car traveling at 30m/s its velocity is reduced to 20m/s in 5 second calculate the retardation applied by the brakes also find the distance covered in 5seconds

Q15 The velocity time graph of a particle moving in a straight line is shown in figure . Find the distance traveled by the particle in timeperiod of t=0 and t=10s



Q16 A car covers 1/3 part of the total distance with the speed of 20km/h and the remaining distance with the speed of 44km/h .Find the average speed of the car.

Q17 Find the ratio of the distances traveled by a freely falling body in first second and third seconds of its fall.

Q18 The displacement of a particle starting from rest (t=0) is given by $x=6t^2 - t^3$. Calculate the time at which the particle will attain the zero velocity again.

Q19 A particle is located at x =0, t =0 starts moving along positive x direction with the velocity v that varies as $v=\alpha(x)^{1/2}$.How does the displacement of the particle vary with time.

Q20 Derive all three equations of motion for uniformly accelerated motion along the straight line by

- (a)graphical method
- (b)calculus method

COMPUTER SCIENCE

➤ Write a program in C++ for the following:

1. Calculate Total, Average and grade of a student on the basis of marks entered in 5 subjects.
2. Swapping of two numbers using third variable
3. Swapping of two numbers without using third variable
4. Calculate Simple Interest and Compound interest.
5. Area of a triangle.

6. Area of circle.
7. Check whether the number is positive or negative.
8. Check whether the number is odd or even.
9. Greater number among three numbers.
10. Conversion from Celsius to Fahrenheit.
11. Accept number of days and convert into Years weeks and days.
12. Accept number and find its first four multiples.
13. To find sum, difference, product, division and remainder of two numbers.
14. To find cube and square of a number.

INFORMATIC PRACTICES

1. Create a hand written practical file on the following programs
2. Create a GUI to input 2 numbers and find the sum, subtract, multiplication and division of the same
3. Create a GUI to find the S.I
4. Create a GUI to convert the temperature from Celsius to Fahrenheit.
5. Create a GUI to display a message on clicking of a button
6. Create a GUI to find the Area of a triangle.
7. create a GUI to find area and perimeter of a circle.
8. Create a GUI to print Total and Percentage of a student in 5 different subjects.
9. Create a GUI to enter age of a student and display a message, the age of student in 2020.
10. Create a GUI to find largest of the two numbers.
11. Create a GUI to swap two numbers using third variable and without using third variable.

CHEMISTRY

Prepare your project Report according to your project heading project should cover these headings

- 1 HEADING
- 2 CERTIFICATE
- 3 ACKNOWLEDGEMENT
- 4 INDEX
- 5 INTRODUCTION
- 6 EXPERIMENT (OBSERVATION TABLE , PROCESS, USES)
- 7 RESULT
- 8 CONCLUSION
- 9 BIBLOGRAPHY

Write or make 500 chemical formula from the given list of cations and anions and learn them.

CATION	SYMBOL	ANION	SYMBOL
SODIUM	Na ⁺	CARBONATE	CO ₃ ⁻²
POTASSIUM	K ⁺	BICARBONATE	HCO ₃ ⁻²
LITHIUM	Li ⁺	SULPHATE	SO ₄ ⁻²
SILVER	Ag ⁺	SULPHIDE	S ⁻²
MERCUROUS	Hg ⁺	SULPHITE	SO ₃ ⁻²
CUPROUS	Cu ⁺	BISULPHATE	HSO ₄ ⁻²
AMMONIUM	NH ₄ ⁺	BISULPHITE	HSO ₃ ⁻²
MERCURIC	Hg ⁺²	ACETATE	CH ₃ COO ⁻
LEAD	Pb ⁺²	CHLORIDE	Cl ⁻
CADMIUM	Cd ⁺²	BROMIDE	Br ⁻
ARSENIC	As ⁺³	IODIDE	I ⁻
ALUMINIUM	Al ⁺³	HYDROXIDE	OH ⁻
FERROUS	Fe ⁺²	PHOSPHATE	PO ₄ ⁻³
FERRIC	Fe ⁺³	BORATE	BO ₃ ⁻
CUPRIC	Cu ⁺²	NITRATE	NO ₃ ⁻
CHROMIUM	Cr ⁺³	NITRITE	NO ₂ ⁻
ZINC	Zn ⁺²	NITRIDE	N ⁻³
MANGANESE	Mn ⁺²	CHLORATE	ClO ₃ ⁻
NICKEL	Ni ⁺²	PERCHLORATE	HClO ₃ ⁻
BARRIUM	Ba ⁺²	SILICATE	SiO ₃ ⁻²
STRONTIUM	Sr ⁺²	FLUORIDE	F ⁻
CALCIUM	Ca ⁺²		
MAGNESIUM	Mg ⁺²		
BISMUTH	Bi ⁺²		
STANNOUS	Sn ⁺²		

BIOLOGY

- A. Make and submit the outline draft of the investigatory project selected by you. Try to perform the activities selected by you and make a list of follow up activities. Make your report in this format.**

Project Background, Objectives, Scope, Constraints, Assumptions, Title • Authors • Abstract • Table of contents • Introduction • Experimental techniques and methods • Results and discussion • Summary/conclusions • References • Appendices (if used)

- B. Revise the topics done in the class and attempt the revision test papers given in the worksheet.**

- C. Make a biology dictionary of the topics completed in the class. It should include diagrams of the chapters and important terms along with one line description.**

- D. Attempt the questions given in the worksheet in the biology register.**

ONE MARK QUESTIONS:

1. Name the type of granulocytes that play an important role in detoxification.
2. Name the type of granulocytes that play an important role in allergic reactions.
3. What is joint diastole?
4. What is the function of sinuatrial valve?
5. What cause the first heart sound?
6. Why do we consider blood as a connective tissue?
7. What is serum? What is blood?
8. Where are the RBCs form in humans? What are erythrocytes? Why are they red in colour?
9. Name the leucocytes that are phagocytic?
10. Name two chemicals secreted by basophils.
11. Due to developmental abnormality, the wall of the left ventricles of an infant heart is as thin as that of right ventricles. What would be the specific effect in the circulation of blood?
12. Where does the cardiac impulse originated
13. Why blood group 'O' is called universal donor?
14. Why blood group identification is not needed for serum transfusion?
15. Name the element involved in blood clotting
16. Where are pericardial fluids present?
17. What is an average number heart beat in man?
18. Name the cells that produce thrombocytes.
19. Why blood group 'AB' is called universal recipient?
20. What is full form of SA node? What is its function?
21. Name the animal whose heart always pumps deoxygenated blood?
22. Name the reptile that has two chambered heart.
23. Name the phase of cardiac cycle in which both ventricles are contracting.
24. Which heart sound is caused by the closure of AV valve at the start of ventricular systole?
25. Which heart sound is heard at the closure of semilunar valve in the beginning of ventricular systole?
26. What is the duration of one cardiac cycle?

27. Why do we call our heart myogenic?
28. Give the term used for coronary system in our circulation?
29. Name two vital organs that are effected by hypertension?
30. What is the main symptom of heart failure?
31. Name the vein or veins that opens into larger vein or heart but do / does not ends in capillaries?
32. What are purkinjee fibers?
33. Name the double layered membranous covering of the heart.
34. Where does the left atrium of frog receive oxygenated blood from?

TWO MARKS QUESTIONS

35. Can all the chambers of human heart experience systole simultaneously? What produce them?
36. What are echocardiograms? what do P and T waves represent
37. What are different types of granulocytes? Give their functions
38. Define portal vein. Explain the role of such vein in our digestive system.
39. What is meant by systole? What happens to the mitral valve and realted blood flow during ventricular systole?.
40. What is meant by diastole? What happens to the valve and blood flow during ventricular daistole?
41. What are formed elements? What percentage of blood do they constitute?
42. Write an average number of thrombocytes in human. Write there function as well.
43. Why Blood group identification is necessary for the blood transfusion?
44. What do you mean by open circulatory system? Give two example.
45. Name the animals having closed circulatory system. Define closed circulatory system
46. What is meant by single circulation? Give examples.
47. Which part of circulatory system is considered as pace maker? Why is it so called?
48. Write difference between systole and diastole.
49. What do you mean by stroke volume and cardiac output? Give their values

THREE MARKS QUESTIONS

50. What is systemic circulation? Describe its importance. Why are the walls of the ventricle more muscular than atria?
51. What is pulmonary circulation? Describe its importance. Why muscular walls of left ventricles thicker than right ventricles?.
52. Draw a labeled diagram to show the impulse conducting system in human heart.
53. Why does lymph contain much less protein than blood plasma? Name two main blood vessels.
54. Plasma contains three classes of proteins. What are these? Give their function.
55. What and from where do platelets originates? What is their life span?how do they act when blood vessel get injured?
56. Name four types of blood groups. What is the base of this grouping?
57. Define portal system. How is hepatic portal system useful for our body?
58. Why is it necessary to check Rh factor of the blood of a pregnant woman??

FIVE MARKS QUESTIONS

59. Draw diagram of human heart, circulation of blood.
60. What is cardiac cycle?explain steps involved in it..

61. Explain the sequence of events that take place in a cardiac cycle.
62. Name the components of blood and mention one major function of each of them
63. Draw all the diagram given in the related chapter of your text book.
64. Describe the evolutionary changes in the pattern of heart among the vertebrates.
65. Describe the structure of human heart.
66. Describe the conducting system of our heart
67. How does the blood transported in our body ?

MATHEMATICS

Note: HHW has been divided in two parts one is project and other is worksheet of trigonometry.

Part 1 :- Project: Hand written project will be accepted on A4 sheet only. Project is related to contribution of Indian Mathematicians in Trigonometry. One student will write about only one mathematician. Project should contain following points (i) Photograph(s) (ii) Brief introduction (iii) contribution related to Trigonometry.

Part 2 :-

Worksheet

Topic: Chapter 3 (Trigonometry)

For 1 mark

1. Evaluate $\tan \frac{13\pi}{4}$
2. Evaluate $\sin \frac{17\pi}{4}$
3. Evaluate $\cos(-1710^\circ)$
4. Evaluate $\operatorname{cosec}(-\frac{7\pi}{4})$
5. Find the value of $\frac{2\tan 15^\circ}{1+\tan^2 15^\circ}$
6. Find $\operatorname{cosec}(\frac{x}{2})$ if $\cos x = \frac{-12}{13}$ and x lies in 3rd quadrant.
7. Find $\cot(-\frac{21\pi}{4})$.
8. Find the value of $\operatorname{cosec}(-\frac{11\pi}{3})$
9. If $\cot x = -\frac{12}{5}$, x lies in 2nd quadrant then find $\sin x$.
10. Find the principal solution(s) of $\tan x = \frac{-1}{\sqrt{3}}$

For 4 marks

1. Prove that $\frac{\cos 4x + \cos 3x + \cos 2x}{\sin 4x + \sin 3x + \sin 2x} = \cot 3x$
2. Prove that $\tan 4x = \frac{4\tan x(1-\tan^2 x)}{1-6\tan^2 x + \tan^4 x}$.
3. Prove that $\frac{(\sin 7x + \sin 5x) + (\sin 9x + \sin 3x)}{(\cos 7x + \cos 5x) + (\cos 9x + \cos 3x)} = \tan 6x$

4. $\frac{\sin 3A \cos 4A - \sin A \cos 2A}{\sin 4A \sin A + \cos 6A \cos A} = \tan 2A$
5. Prove that $\frac{\sin 5x - 2 \sin 3x + \sin x}{\cos 5x - \cos x} = \tan x$
6. Find the value of $\tan\left(\frac{\pi}{8}\right)$
7. Find $\sin\left(\frac{x}{2}\right)$, $\cos\left(\frac{x}{2}\right)$ and $\tan\left(\frac{x}{2}\right)$ if $\cot x = -\frac{3}{4}$, x in 2nd quadrant.
8. Solve for x : $2 \cos^2 x + 3 \sin x = 0$.
9. Solve for x : $\sin 2x - \sin 4x + \sin 6x = 0$
10. Solve for θ the equation $\cos \theta + \cos 3\theta - 2 \cos 2\theta = 0$.
11. Solve for x : $2 \cos^2 x + 3 \sin x = 0$
12. Solve $\sqrt{3} \cos x + \sin x = \sqrt{2}$
13. Solve $\sin 2x + \sin 4x + \sin 6x = 0$
14. Find the general solution $\cot^2 x + \frac{3}{\sin x} + 3 = 0$
15. Solve: $\operatorname{cosec} x = \cot x + \sqrt{3}$
16. Prove that $\sin 20^\circ \sin 40^\circ \sin 60^\circ \sin 80^\circ = 3/16$.
17. Prove that $\sin 10^\circ \sin 30^\circ \sin 50^\circ \sin 70^\circ = \frac{1}{16}$.
18. Prove that $\cos 20^\circ \cos 30^\circ \cos 40^\circ \cos 80^\circ = \frac{\sqrt{3}}{16}$
19. Prove that $\cos 12^\circ \cos 24^\circ \cos 48^\circ \cos 96^\circ = -\frac{1}{16}$
20. Prove that $\cos 20^\circ \cos 40^\circ \cos 60^\circ \cos 80^\circ = \frac{1}{16}$.
21. Prove that $\tan 20^\circ \tan 40^\circ \tan 60^\circ \tan 80^\circ = 3$
22. Prove that $\sin 18^\circ = \frac{\sqrt{5}-1}{4}$.
23. Prove that $\cot 7\frac{1}{2}^\circ = \sqrt{2} + \sqrt{3} + \sqrt{4} + \sqrt{6}$
24. Prove that $2 \cos \theta = \sqrt{2 + \sqrt{2 + \sqrt{2 + 2 \cos 8\theta}}}$
25. Prove that $\tan 3x \tan 2x \tan x = \tan 3x - \tan 2x - \tan x$
26. Prove that $\cot 3x \cdot \cot 2x - \cot 3x \cdot \cot 5x - \cot 5x \cdot \cot 2x = 1$.
27. Prove that $\cot x \cot 2x - \cot 2x \cot 3x - \cot 3x \cot x = 1$
28. Prove that $\sin x + \sin 3x + \sin 5x + \sin 7x = 4 \cos x \cos 2x \sin 4x$
29. $\frac{1}{\sin 10^\circ} - \frac{\sqrt{3}}{\cos 10^\circ} = 4$
30. Prove $\frac{\sin(B-C)}{\sin(B+C)} = \frac{b^2 - c^2}{a^2}$

For 6 marks

1. Prove that: $\frac{1 + \sin \theta - \cos \theta}{1 + \sin \theta + \cos \theta} = \tan\left(\frac{\theta}{2}\right)$.
2. Prove that: $4(\cos^3 20^\circ + \cos^3 40^\circ) = 3(\cos 20^\circ + \cos 40^\circ)$.
3. Prove that $\sin x + \sin 2x + \sin 4x + \sin 5x = 4 \cos\left(\frac{x}{2}\right) \cos\left(\frac{3x}{2}\right) \sin 3x$
4. Evaluate $\sin 36^\circ$.
5. Prove that $\cos^2 x + \cos^2\left(x + \frac{2\pi}{3}\right) + \cos^2\left(x - \frac{2\pi}{3}\right) = \frac{3}{2}$
6. Evaluate $\cos^3 x + \cos^3\left(x + \frac{\pi}{3}\right) + \cos^3\left(x - \frac{\pi}{3}\right)$
7. If $\tan\left(\frac{\pi}{4} + \frac{\theta}{2}\right) = \tan^3\left(\frac{\pi}{4} + \frac{\alpha}{2}\right)$, prove that $\sin \theta = \frac{3 \sin \alpha + \sin^3 \alpha}{1 + 3 \sin^2 \alpha}$

BUSINESS STUDIES

(Any three of the following may be done)

1. Visit a nearby bank and observe their way of working. How many counters are there, what work each counter perform note it down. Try to speak to the manager and enquire about the different functions that their bank performs, about schemes and programmes also.
2. Make a newspaper on a full catridge sheet folded into two labels. It should include the following topics:
 - 1) Current business news.
 - 2) Stock market news
 - 3) Write up on rupee fluctuation.
3. Visit website of a company doing business through internet (for example: ebay,etc.). Study the products/services offered by the company, mode of payment, choice available to customers, method of delivery of products, details of the product available on website, any special offers or discounts available, etc. prepare a report.
4. Visit a departmental store and pick up five products manufactured by multinational corporations. Prepare a brief profile of the concerned multinational corporations.
5. Prepare a write up on any one consumer protection case and the ruling given therein from the newspaper or internet.

Instructions :

- (a) Project must be including Cover Page, Page of contents
- (b) Project should have 25-30 pages and it should be handwritten

ACCOUNTANCY

General Instructions:

- i) The holiday homework of Accountancy contains chapter wise short answer, long answer & HOTS questions.
- ii) The students are required to attempt them in a separate register.

Chapter: Introduction to Accounting

- Q1) What do you understand by Double Entry System?
- Q2) Why is a resignation by a Finance Manager not recorded in the books of accounts ?
- Q3) List the steps involved in the accounting process.

- Q4) Give any two objectives of Accounting.
- Q5) Explain any one limitation of Accounting with an example.
- Q6) State the nature of information required by the Investors.
- Q7) State the end product of Financial Accounting.
- Q8) Which of the following transactions will not be recorded in the books of accounts?
- Paid salaries & wages.
 - Purchased a machinery for the production of pens.
 - Purchased a machinery for resale.
- Q9) What are the functions of Accounting?
- Q10) A company suffered huge losses due to the strike by the employees of the factory. Will this be recorded in the books of accounts?
- Q11) Which qualitative characteristic of accounting information requires the use of common unit & common format of reporting?

Chapter: Basic Accounting Terms

- Q1) Godrej Ltd. imported from Germany one machinery for sale in India & machinery for production purpose. Will you treat them goods or fixed assets?
- Q2) Giving examples, explain each of the following terms:
- Capital Expenditure
 - Current Liability
 - Purchases
 - Sales
 - Debtor
 - Creditor
 - Drawings
 - Discount received
 - Stock
- Q3) Give any three differences between each of the following:
- Long Term Liability and Short Term Liability
 - Fixed Asset and Current Asset
 - Revenue and Income
 - Loss and Expense

Chapter: Theory Base of Accounting, Accounting Standards & IFRS

- Q1) Why Closing Stock is valued at cost price or realisable value whichever is lower?
- Q2) What is meant by GAAPs?
- Q3) "The basic yardstick of measurement in accounting is money." Identify and explain the Accounting Assumption.
- Q4) What do you mean by Accounting Standards? Explain its nature.
- Q5) "Revenue earned and cost of earning that revenue should be properly identified for a period." Explain this statement.
- Q6) Why is it necessary for accountants to assume that a business entity will remain a 'going concern'?
- Q7) Which Accounting Principle assumes that 'Capital is a liability for the business'?
- Q8) why do accounting principles emphasize the use of historical cost as a basis for measuring assets?
- Q9) Name and explain the principles of Accounting in the following cases:

- a) Value of an asset is not charged according to change in its market value.
 - b) Caliber or quality of management team is not directly disclosed in the Balance Sheet.
- Q10) Briefly explain the term IFRS.
- Q11) Distinguish between Cash basis and Accrual basis of Accounting.
- Q12) A customer of X Ltd. has discontinued his business. He used to purchase 30% of the total goods produced by X Ltd. Is it a relevant information in your opinion & should be disclosed by X Ltd.?

Chapter: Accounting Equation

Q1) "The Accounting transaction should be free from the bias of accountants & others." Identify the related Accounting Principle.

Q 2) Show the accounting equation on the basis of the following transactions:

- a) Shri Ganesh commenced business with cash `35,000, goods `8,000 and furniture `7,000.
- b) Bought furniture from M/s Mohan Furniture on credit for `3,000.
- c) Purchased goods from Sohan for cash `35,000.
- d) Sold goods to Shyam for cash `40,000 (costing `30,000).
- e) Bought goods worth `30,000 from Ramesh.
- f) Sold goods to Shyam costing `30,000 for `50,000.
- g) Received `49,500 from Shyam in full settlement.
- h) Paid `29,700 to Ramesh in full settlement.
- i) Paid half the amount owed to M/s Mohan.
- j) Withdrew `1,000 for personal use.
- k) Withdrew goods for personal use (cost `500, sale price `600).
- l) Paid cash `500 for loan and `300 for interest.
- m) Goods destroyed by fire (cost `500, sale price `600)
- n) Paid salary `500 and salary outstanding `100.
- o) Paid rent in advance `2,000.
- p) Accrued interest `500.

(The work may be done in the question bank register)

ECONOMICS

- Q1 Name the stages of statistical study and statistical tools for the presentation of data.
- Q2 what are the main features of Statistics as a numerical data? Describe any four.
- Q3 State the main limitations of Statistics.
- Q4 Complete the following observations:
 Statistics means _____.
 Statistics and Economics are _____.
 The term population refers to _____.
 Descriptive statistics means those methods _____.
- Q5 Make a list of activities that constitutes the ordinary business of life. Why are these called economic activities?
- Q6 `The government and policy makers use statistical data to formulate suitable policies of economic development`. Illustrate with two examples.
- Q7 you have unlimited wants and limited resources to satisfy them. Explain by giving two examples.
- Q8 Define Data. What are the main sources of data?
- Q9 Differentiate between primary data and secondary data?
- Q10 what are the main methods of collecting primary data?
- Q11 what is meant by direct personal investigation? Give its merit and demerits.
- Q12 what precautions are necessary to use secondary data?

Q13 Define the term:

- (i) Investigator**
- (ii) Enumerator**
- (iii) Respondent**

Q14 what are the main sources of errors in the collection of data?

Q15 what are primary data? Enumerate the various methods of collecting primary data. Discuss the merits and demerits of any one of them.

Q16 what are secondary data? Discuss the various sources of collecting secondary data.

Q17 Distinguish between primary and secondary data. Which of these two sets of data is more reliable and why?

Q18 Distinguish between primary and secondary data. State the relevant situations when primary and secondary data are to be used.

Q19 Does the lottery method always give you a random sample? Explain.

Q20 what is meant by census method? Give its merits and demerits.

Q21 Explain the meaning of sampling survey. What are its advantages and disadvantages?

Q22 Distinguish between Census and Sampling survey. List four types of sampling methods. Explain the reasons for preparing sample surveys in the collection of Statistics.

Q23 Describe the various methods of sampling. How is random sampling better than systematic sampling?

Q24 what are the kind of errors you would expect in the field of survey by census method?

Q25 Distinguish between `Random Sampling` and `Systematic Sampling`, clearly explaining the two in detail. Give examples of both.

Q26 what is meant by Statistical series? Give the names of the statistical series.

Q27 Mention two series from the point of view of their construction. Give an example of each.

Q28 Describe the concept of individual series. Give one example.

Q29 Convert the following data in a simple frequency distribution:

Q30 what is statistical table? Explain briefly the main characteristics of a good statistical table.

Q31 Define tabulation. Explain its merits.

Q32 Draw a flow chart showing different kind of tables. Also, explain the various kinds of tables.

GEOGRAPHY

Do any one of the following:

I. Make a PowerPoint presentation of about 15-20 slides on origin of the earth under the following points:

- * Information about the hypotheses given by different geographers.**
- * The Big Bang theory and the result of explosion in the nebula.**
- * Formation of the Earth.**

(Submit a hard copy of the presentation in a folder.)

II. Collect information about the earthquakes which have occurred around the world in the year 2012 and compile the information in the form of a report. Also, find out if the earthquakes occurred during the mentioned period have any similarity in terms of area where they have occurred. Analyse the possibility of their occurrence in future along with their effects.

(To be done on A4 size sheets.)

III. Collect information about the project 'Stardust' (Website: www.sci.edu/public.html and www.nasm.edu) along the following lines.

- * Which is the agency that has launched this project?
- * Why are the scientists interested in collecting Stardust?
- * Where from the Stardust is being collected?

(To be done on A4 size sheets.)

FINE ARTS

1. Visit museum and Art galleries and make report.
2. Collect reproduction of old masters (artist) and copy any one in A4 size sheet with colour.
3. Gain knowledge of art materials available in the market.
4. Study and make notes of terminologies-----perspective, eye level ,fixed point of view, vanishing point, ratio-proportion, sketching ,drawing light & shade, landscape, vertical, horizontal, two & three dimensional, transparent & opaque colour.
5. Draw four imaginative painting based on subject from life and or nature in water colour(½ sheet).
6. Draw two sketches daily in A4 size art file.

MASS MEDIA STUDIES

Write articles on the following topics

1 Electronic media is more powerful than print media

2 Print media has a social responsibility

3 Does media influence the culture

II Collect information on culture nuances if people from different parts of world ,
,y,our information may be focused on

1 Greeting a stranger

2 Going as a guest to a party

3 Saying goodbye

4 Expressing grieve over the death of a loved one

5 Participating in a formal interaction

III Write a newspaper article on some of the popular programs aired by akashwani. AIR since its inception . Your article can include writeup on some famous singer or musician who began their career in AIR.

POLITICAL SCIENCE

1. Write note on importance of Rights, citing examples from page no.27.
2. What would you order the government on the case given on page 33 'you are the Judge'.
3. View of SomnathLahiri on Fundamental Rights on page 36. Do you agree.
4. SardarHukam Singh views on Miniority Rights page no 40.
5. Write note on Right to Property.

6. Write Tajamal Hussain's view on Separate electorate page no 63.
7. Read the cartoon given on page no 52, 61, 67 & 71 & explain them.
8. Write note on article 324(1) page no 68.
9. Explain the functions of the constitution.
10. Explain the factors responsible for making a constitution effective,

PSYCHOLOGY

1. Q1. Choose any one eminent psychologist from the List given below and write the detailed theoretical perspectives with the historical background for them.

Some of the eminent Psychologists are

- 1.Pavlov
- 2.Skinner
- 3.Piaget
- 4.Kohlberg
- 5.Erick erickson
- 6.Wudnt
- 7.Thorndike
- 8.Watson

Q2. Use any one method of enquiry to collect data upon the early and late adolescents.

Your data collection should focus upon the areas like personal,emotional,developmental,social,and cultural aspects of the individual's life.

Based on your method of enquiry chosen, also talk about the advantages & limitations you faced during incorporating the method for your study.

HINDI MUSIC (Vocal)

1.) Prepare project on noted Indian musician :-

- (a) Pt.V.N.Bhatkande
- (b) Pt.Vishnu Digambar Paluskar

2.) Revise the work done before summer vacation.

3.) Listen to these raga and try to understand their structure with respect to the following :-

- i) Aroha ,Avaroha,Pakad ,Bandish of Raga(Chota khyal)
- ii) Bihag
- iii) Vrindavani Sarag
- iv) Jaunpuri
- v) Bhairavi

PHYSICAL EDUCATION

OLYMPIC MOVEMENT

Very short answer questions carrying 1 mark

1. What is Olympic Movement?
2. Mention about Olympic Flame?
3. What are Olympic Award?
4. Write down the Olympic Oath?
5. What is Olympic Motto?
6. What do you mean by CITIUS, ALTIUS and FORTIUS?
7. What is the aim of CBSE sports?

Short answer question carrying 3 marks

1. Write a short note on the Olympic flag?
2. Discuss about opening ceremony of Modern Olympic Games
3. Elucidate the objectives of Modern Olympic Games?

Long answer question carrying 5 marks

1. Write down a detailed note on Ancient Olympic Games?
2. Explain the origin of Modern Olympic Games.
3. Elucidate in detail about International Olympic Committee.
4. Write a note on Rajiv Gandhi Khel Ratna Award?
5. Write a note on Chacha Nehru Sports Award.
6. Discuss about the Paralympics Movement in detail.

YOGA

Very short answer questions carrying 1 mark

- 1) What is yoga?
- 2) What is meditation?
- 3) What is hypertension?
- 4) What do you mean by diabetes?
- 5) What do you mean by obesity?

Short answer question carrying 3 marks

- 1) What do mean by asanas? Discuss the types of asanas ?
- 2) What do you mean by pranayama ? Mention the types of pranayama ?
- 3) Discuss the measures to be taken to prevent hypertension?
- 4) Explain any three elements of yoga.
- 5) Explain the prevention and management of diabetes.
- 6) "Yoga is an Indian Heritage "elaborate this statement.

Long answer question carrying 5 marks

- 1) What do you mean by yoga? Explain its importance in daily life.
- 2) Discuss the elements of yoga.
- 3) What do you mean by common lifestyle diseases? Discuss the prevention and management of hypertension.
- 4) Discuss the prevention and management of obesity in detail.
- 5) Give detailed notes on any two of the following :
 - a) Yogic kriyas
 - b) Prevention and management of back pain.
 - c) Asanas

TEST AND MEASUREMENT IN SPORTS

Very short answer questions carrying 1 mark

1. What do you mean by test?
2. What do you mean by measurement?
3. What do you mean by somatotypes?

Short answer question carrying 3 marks

1. What do you mean by Waist –Hip Ratio?
2. What do you mean by Body Mass Index? Explain the categories of BMI?
3. What are the traits of endomorphs?
4. Explain in brief the traits of mesomorphs?
5. Discuss the traits of ectomorphs?
6. Enumerate the procedure of measuring the height of an individual?
7. Discuss the procedure of anthropometric measurement of weight?

Long answer question carrying 5 marks

1. Explain the importance of test and measurement in the field of sports?