

**SUMMER BREAK HOLIDAYS HOME WORK**  
**CLASS : XI ( Commerce & Science)**

**ACCOUNTANCY**

NOTE : DO HOLIDAYS HOMEWORK NEATLY IN A SEPARATE NOTE BOOK.

Q.1 Learn and write following questions :

- ( a ) What is accounting ? Explain its objectives and limitations.
- ( b ) Explain the concept of accounting cycle.
- ( c ) Define book keeping. Differentiate between accounting and book keeping.

Q.2 Do question no. 21 to 33 of Journal from book and also prepare Ledger of question no. 29 to 33.

**ENGLISH**

1. Pick five difficult words each day from the chapters you have read & use them in your own sentences (at least 50 words).
2. Write the newspaper reports for the following:-  
Any Accident  
Report on 'seminar against Female feoticide'  
Blood donation Camp  
Seminar on Global Warming  
Celebration of Van Mahotsava
3. Write a Letter to the Editor of ' The Hindustan Times on the evil of poaching.
4. You are Sidhu/ Suman resident of New Delhi. Write a letter to the police Commissioner of your city complaining about the nuisance of loud speakers in your city.
5. You are Secretary of Ashok Nagar, Welfare Society, Kanpur. Write a Letter to the chairman, Kanpur Electricity Supply Undertaking, complaining about frequent power failures in your area. Sign your Self as XYZ
6. Learn the whole syllabus covered in class for first unit test. Do Regular practice of Reading & Grammar Sections in B.B.C.

## BUSINESS STUDIES

- Q 1. Visit any Bank near your home and collect following documents used by customer a) Pay in Slip (b) Withdrawal Slip (c) Demand Draft  
Paste these documents in a Project file and write about them.
- Q2. How one can open a Bank Account? Collect an account opening form and paste it in your project file.
- Q3. Visit an ATM and write about its working.
- Q4 Write any five names of Sole Proprietor, Partnership Firms, Company Form of Organization, Co operative Societies.

## LEARNING WORK

- Q1. What is the role of profit in business?
- Q2. Explain with example various types of industries?
- Q3. “ One man control is best in the world if that man is big enough to manage the whole show.” Comment.
- Q4. If registration is optional, why do partnership firms willingly go through these legal formalities and get themselves registered? Explain.
- Q5. What do you mean by company? Describe its characteristics

## PHYSICS

1. Is the measure of angle dependent on the units of length? Explain
2. Is there any quantitative or qualitative difference between inertial and gravitational mass?
3. If the velocity of light in vacuum is taken as the unit of velocity & one year as the unit of time, then what must be the unit of length?
4. What is the differentiation of  $y+xy+xyz$  w.r.t  $x$  ?
5. It is claimed that two cesium clocks, if allowed to run for 100 years may differ by 0.02 s. What does this imply for accuracy of standard cesium clock in measuring a time interval of 1 s?
6. The nearest star of the solar system is 4.29 light years away. Express this in terms of parsec.
7. Show that the following pair of quantities have same dimensions  
(a) momentum & impulse                      (b) pressure & stress
8. Name the physical quantity whose dimensional formula is same as that of acceleration.
9. If 500 g be the units of mass, 50 s the unit of time & acceleration due to gravity be the units of acceleration, what will be the new units of energy?

10. The velocity  $v$  of a particle is given

$$v = at + b/t + c$$

find dimensions of  $a, b, c$ .

11. The density of the material in CGS system is 8. In the system in which unit of length is 5 cm & unit of mass is 20 g, what is the density of the material?

12. If the velocity is 20, the acceleration is 40, the force is 30 in CGS, what are the units of length, mass & time in SI system?

13. How do you calculate the error in the powers of different quantities?

14. Is it possible that the displacement of a moving particle is zero but not the distance?

15. Can the speed of the body change if its velocity is constant? Give explanation.

16. Can the velocity of a body vary if its speed is constant? Give explanation.

17. Can a body have uniform speed & still have an acceleration? Explain with an example.

18. Draw the position time graphs for two objects initially occupying different positions but having zero relative velocity.

19. A ball is thrown upwards with a velocity 20 m/s. It takes 4 s to return to original position. Draw v-t graph for this motion.

20. Is the rate of change of acceleration with time important to describe the motion of the body?

### Mathematics

Do all the questions of Complex Numbers, Quadratic Equations & Linear In-equations from NCERT thoroughly with examples in a separate note book along with the assignment given below:-

Q1. Express  $(1 - 2i)^{-3}$  in the standard form  $a + ib$ .

Q2. Express  $1 / (1 - \cos\theta + 2i \sin\theta)$  in the standard form  $a + ib$ .

Q3. Find the real values of  $x$  &  $y$  if

$$(x - 1) / (3 + i) + (y - 1) / (3 - i) = i$$

Q4. If  $a + ib = (c + i) / (c - i)$ , where  $c$  is real, Prove that  $a^2 + b^2 = 1$  and  $b/a = 2c / (c^2 - 1)$ .

Q5. Find real values of  $x$  and  $y$  for which the complex numbers  $-3 + x^2 y$  and  $(x^2 + y + 4i)$  are complex conjugate of each other.

Q6. If  $(a + i)^2 / (2a - i) = p + iq$ : show that

$$p^2 + q^2 = (a^2 + 1)^2 / (4a^2 + 1)$$

Q7. If  $z = x + iy$  and  $w = (1 - iz) / (z - i)$ , show that mode of  $w = 1$  and  $z$  is purely real.

Q8. Find all non zero complex numbers of  $z$  satisfying the condition

$$\bar{z} = iz^2$$

Q9. If  $iz^2 + z^2 - z + i = 0$ , then show that mode of  $z$  is unity.

Q10. Find the real values of  $\theta$  for which the complex number  $(1 + i \cos \theta) / (1 - 2i \cos \theta)$  is purely real.

Q11. Find the real values of  $x$  and  $y$  if  $[(1 + i)x - 2i] / (3 + i) + [(2 - 3i)y + i] / (3 - i) = i$ .

Q12. Express the following complex numbers in the polar form:

$$(2 + i6\sqrt{3}) / (5 + i\sqrt{3})$$

Q13. Express the following complex numbers in the polar form:

$$\sin 120^\circ - i \cos 120^\circ$$

Q14. Express the following complex number in the polar form:  $1 + i \tan \alpha$

Q15. Find the argument and modulus of the following complex number:

$$(1 - i) / (1 + i)$$

Q16. Solve the quadratic equation  $2x^2 - 4x + 3 = 0$  by using general expressions for the roots of a quadratic equation.

Q17. Solve the quadratic equation  $25x^2 - 30x + 11 = 0$  by using the general expression for the roots of a quadratic equation.

Q18. Solve the following equation by the factorization method:

$$3x^2 + i7x + 6 = 0$$

Q19. Solve  $2x^2 - (3 + 7i)x - (3 - i9) = 0$  by using the general expression for the roots of a quadratic equation.

Q20. Solve the equation  $x^2 - 4x + 13 = 0$  by the factorization method only.

Q21. Solve the equation  $9x^2 - 12x + 20 = 0$  by the factorization method only.

Q22. Solve the equation  $6x^2 - i17x - 12 = 0$  by the factorization method only.

Q23. Solve the following system of equations in 'R':

$$(7x - 1) / 2 < (-3); \quad (3x + 8) / 5 + 11 < 0$$

Q24. Show that the solution set of the following linear in-equations is an unbounded set:

$$x + y \geq 9; \quad 3x + y \geq 12; \quad x \geq 0; \quad y \geq 0$$

Q25. Solve the following systems of linear in equations graphically:

$$2x + 3y \leq 35; \quad y \geq 3; \quad x \geq 0; \quad y \geq 0$$

## ECONOMICS

Prepare a project on “Consumer Awareness” using primary data

Hints

1. Prepare a questionnaire of 20 -25 question.(regarding brand name, MRP, ISI mark, bill, manufacturing date, expiry date, ingredients ,consumer courts, etc.).
2. Make 20 photocopies of original questionnaire & Collect information from 20 families.
3. Present data in tabular form
4. Present data in diagrammatic form ( Bar diagram, Pie chart etc.).
5. Draw conclusion.
6. Give Suggestions.
7. NOTE- you can take help from Chapter-14 of Stats in your book.

### Chemistry

Learn Unit 14 (Environmental Chemistry) and write all the questions at the end of the chapter from the NCERT in a separate notebook. There will be a class test of this unit on 13<sup>th</sup> July, 2009

### Biology

1. Explain sliding theory of Muscle Movement
2. Write a note on ear ossicles.
3. Give a detailed account of transport and exchange of respiratory gases in human body.
4. Explain cardiac cycle with the help of diagram.
5. How are fats digested and absorbed in human body?
6. How the amount of urine output is regulated in our body?
7. Draw following labeled diagrams on plain white sheet:-
  - i) Skull
  - ii) Vertebral column
  - iii) pectoral girdle
  - iv) pelvic girdle
  - v) fore limb
  - vi) hind limb
8. What are the types of the joints? Give details.

### PHY. EDU.

- 1) LEARN AND WRITE QUESTION ANSWERS OF UNIT 1  
“CONCEPT OF PHYSICAL EDUCATION.”
- 2) LEARN AND WRITE THE DETAILS OF MAJOR SPORTS AWARDS OF INDIA.

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