



SARALA BIRLA PUBLIC SCHOOL

Mahilong, Ranchi

Assignment-3 (2019-20)

Class: XII

ENGLISH

1. Fireworks and crackers are known to create pollution during festivals. As an environmentalist design a poster in around 50 words to create awareness of their ill- effects.
2. Write a letter to Lightways Sports, Amrapali, placing an order for sports articles to be supplied to your school. Sign as Ravina/ Rahul, sports Secretary.
3. You have lost your wrist watch in a public park. Write a suitable advertisement for the 'Lost and Found' column of a local daily.
4. Write a speech on the topic 'each one Teach one'.

MATHS

Lab activity : 12,15,18,21,27

PHYSICS

SECTION A

1. To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
2. To assemble the components of a given electrical circuit.
3. To draw the diagram of a given open circuit comprising at least a Battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.

SECTION B

1. To observe polarization of light using two Polaroids.
2. To observe diffraction of light due to a thin slit.
3. To study the nature and size of the image formed by a (i) convex lens (ii) concave mirror, on a screen by using a candle and screen (for different distances of the candle from the lens/mirror).

CHEMISTRY

For the complex $[\text{Fe}(\text{en})_2\text{Cl}_2]\text{Cl}$, identify the following:

- i) Oxidation number of iron
- ii) Hybrid orbitals and shape of complex
- iii) Magnetic behaviour of complex

- iv) Number of its geometrical isomers
- v) Whether there may be optical isomer also
- vi) Name the complex

1. How are the following compounds prepared from XeF_6 ?
(i) XeOF_4 (ii) XeO_3
2. Explain why

- i) Electron gain enthalpy with negative sign for fluorine is less than that for chlorine ?
- ii) H_2S is less acidic than H_2Te ?
- iii) Fluorine does not exhibit any positive oxidation state ?
- iv) The halogens are coloured ?

3. Describe the principle behind each of the following processes

- i) Vapour phase refining of a metal
- ii) Electrolytic refining of a metal
- iii) Recovery of silver after silver ore was leached with NaCN .

4. Account for the following

- i) The transition metals and their compounds act as a good catalyst
- ii) The lowest oxide of transition metal is basic, the highest is amphoteric or acidic
- iii) A transition metal exhibits higher oxidation states in oxides and fluorides
- iv) Describe the reactions involved in the preparation $\text{K}_2\text{Cr}_2\text{O}_7$ from chromite ore

BIOLOGY

- 1) Draw Carbon and Sulphur cycle in the biosphere.
- 2) What is immunity. Explain various kinds of immunities.

BUSINESS STUDIES

1. Explain briefly various methods of sales promotion.
2. Explain the role of 'Public Relations' in marketing management.
3. 'Advertising' and 'Personal Selling' both are communication tools used by the marketers to promote their products. Yet they differ in their approach. Differentiate between the two by giving any six differences.
4. What is Labelling? State any five functions of labelling.
5. Discuss the scope of Consumer Protection Act, 1986.

ACCOUNTANCY

1 Following information is given by a company from its books of accounts as on March 31, 2015:

Particulars	Rs.
Inventory	50,000
Total Current Assets	80,000
Shareholders' funds	2,00,000

13% Debentures	1,50,000
Current liabilities	50,000
Net Profit Before Tax	3,51,000
Cost of revenue from operations	150,000

Calculate:

- Current Ratio
- Liquid Ratio
- Debt Equity Ratio

Q2. Calculate following ratios from the following information:

(i) Current ratio (ii) Liquid ratio (iii) Operating Ratio (iv) Gross profit ratio

Current Assets	Rs. 35,000
Current Liabilities	Rs. 17,500
Inventory	Rs. 15,000
Operating Expenses	Rs. 20,000
Revenue from Operations	Rs. 60,000
Cost of Revenue from operation	Rs. 30,000

Q3. From the following, calculate (a) Debt-Equity Ratio (b) Total Assets to Debt Ratio (c)

Proprietary Ratio.

Equity Share Capital	Rs. 75,000
Preference Share Capital	Rs. 25,000
General Reserve	Rs. 45,000
Balance in the Statement of Profit & Loss	Rs. 30,000
Debentures	Rs. 75,000
Trade Payables	Rs. 40,000
Outstanding Expenses	Rs. 10,000

Q4. Virani Industries Ltd. issued 1,00,000, 10% Debentures of Rs. 10 each at a discount of 9% on April 1st, 2001 redeemable as follows:

31 st March 2003	-	20,000 Debentures
31 st March 2004	-	30,000 Debentures
31 st March 2005	-	20,000 Debentures
31 st March 2006	-	Remaining Debentures

Calculate the amount of discount to be written off each year and prepare discount on issue of debentures account.

Q5. X Ltd. invited applications for 11,000 shares of Rs. 10 each issued at 10% premium payable as:

On application	Rs. 3 (including Rs. 1 premium)
On allotment	Rs. 4 (including Rs. 1 premium)
On 1 st Call	Rs. 3

On 2nd & final call Rs. 2

Application were received for 24000 shares.

Category I : One fourth of the shares applied for allotted 2000 shares.

Category II: Three fourth the shares applied for allotted 9000 shares.

Remaining applicants were rejected. Mr. Mohan holding 300 shares out of category II failed to pay allotment and two calls and his shares were re issued @ Rs. 11 fully paid-up. Pass necessary journal entries.

ECONOMICS:

- Q1. What is foreign exchange? Explain with the help of a diagram how foreign exchange rate is determined under a flexible exchange rate regime?
- Q2. Explain the meaning of inflationary gap with the help of a diagram. State two measures by which this can be corrected.
- Q3. Explain the relationship between revenue deficit and fiscal deficit. Can there be fiscal deficit without a revenue deficit?
- Q4. Give two sources of demand for foreign exchange. Giving reason, explain the relation between foreign exchange rate and supply of foreign exchange.
- Q5. Explain the role the government can play through the budget in influencing allocation of resources.

ENTERPRENEURSHIP

- Q1. What is meant by primary market? Briefly explain the concept of Right Issue for existing companies?
- Q2. While there are benefits to going public, at the same time additional obligations and reporting requirements on the companies and its directors means disadvantages too what are they? Explain.
- Q3. Explain the characteristics of angel investors.
- Q4. Explain the two dominant forms of budgeting process.
- Q5. What is working capital? What is the need for a working capital?

INFORMATICS PRACTICES

Prepare a Powerpoint presentation on "Structured Query Language (SQL)".

COMPUTER SCIENCE

Project Work