



# SARALA BIRLA PUBLIC SCHOOL

## SUMMER ASSIGNMENT (2019-20)

### STD – XII [Commerce]

Name : \_\_\_\_\_ Class and Section : \_\_\_\_\_ UID No. : \_\_\_\_\_

#### ENGLISH

1. The astrologer's prediction about the death of the Tiger King came to be true. Do you agree with this statement?
2. Why should child labour be eliminated and how?
3. "When a people are enslaved, as long as they hold fast to their language it is as if they have the keys to their prison." What could this mean?
4. 'Lost Spring' by Anees Jung brings out the condition of children in India. Even after sixty five years of independence we have children who do not go to school, work in inhuman conditions and live in slums. As a nation we have somewhere failed in our duty. What values do we need to inculcate among the people of this nation in order to bring back the 'spring' in the lives of these children?
5. Design a poster for your school library on the values of books and good reading habits. You may use slogans.

#### MATHEMATICS

1. If  $A = \begin{bmatrix} x & -2 \\ 3 & 7 \end{bmatrix}$  and  $A^{-1} = \begin{bmatrix} \frac{7}{34} & \frac{1}{17} \\ -\frac{3}{34} & \frac{2}{17} \end{bmatrix}$ , then find the value of  $x$ .
2. Given  $A = \begin{bmatrix} 2 & -3 \\ 0 & 1 \end{bmatrix}$ , find  $B$  such that  $4A^{-1} + B = A^2$ .
3. Write the value of  $\begin{vmatrix} x+y & y+z & z+x \\ z & x & y \\ -3 & -3 & -3 \end{vmatrix}$ .
4. If  $A = \begin{bmatrix} 1 & -2 & 3 \\ 0 & -1 & 4 \\ -2 & 2 & 1 \end{bmatrix}$ , find  $(A')^{-1}$ .
5. If  $f(x) = \begin{vmatrix} a & -1 & 0 \\ ax & a & -1 \\ ax^2 & ax & a \end{vmatrix}$ , using properties of determinants, find the value of  $f(2x) - f(x)$ .
6. Find the adjoint of the matrix  $A = \begin{bmatrix} -1 & -2 & -2 \\ 2 & 1 & -2 \\ 2 & -2 & 1 \end{bmatrix}$  and hence show that  $A \cdot (\text{adj } A) = |A|I_3$ .
7. Using properties of determinants, prove that the following :
 
$$\begin{vmatrix} a^2 & bc & ac+c^2 \\ a^2+ab & b^2 & ac^2 \\ ab & b^2+bc & c^2 \end{vmatrix} = 4a^2b^2c^2.$$
8. If  $A = \begin{bmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{bmatrix}$ , then prove that  $A^3 - 6A^2 + 7A + 2I = 0$ .
9. Use product  $\begin{vmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{vmatrix} \begin{vmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{vmatrix}$  to solve the system of the following equations :
 
$$x - y + 2z = 1; 2y - 3z = 1; 3x - 2y + 4z = 2.$$

10. Prove that :

$$\begin{vmatrix} -a(b^2 + c^2 - a^2) & 2b^3 & 2c^3 \\ 2a^3 & -b(c^2 + a^2 - b^2) & 2c^3 \\ 2a^3 & 2b^3 & -c(a^2 + b^2 - c^2) \end{vmatrix} = abc (a^2 + b^2 + c^2)^3.$$

11. Using matrices, solve the following system of equations :

$$x + y + z = 6, \quad x + 2z = 7, \quad 3x + y + z = 12.$$

12. Show that if  $x \neq y \neq z$  and  $\begin{vmatrix} x & x^2 & 1 + x^3 \\ y & y^2 & 1 + y^3 \\ z & z^2 & 1 + z^3 \end{vmatrix} = 0$ , then  $1 + xyz = 0 \Rightarrow xyz = -1$ .

## BUSINESS STUDIES

- Hindustan Entertainment Company is organizing circus shows internationally for the last thirty yrs. Their shows have been successful across the globe. Of late their shows are not as popular as they were in the past. They are thinking of bringing in necessary changes in their shows to gain the popularity. I. Identify which characteristics of the Management they reflect in their business management, Give reason. II. Suggest the necessary actions or decisions which should be taken at each level of management to improve business opportunities.
- Define scientific management, state any three of its principles.
- Sell well Ltd received a new order of 20000 toys. Mr. Pankaj the production Manager is expected to deliver goods in fifteen days otherwise the contract will be null and void. To retain the customer, Pankaj is planning to outsource the production of 10000 toys and deliver the order on time, but the outsourcing of the production will result in increase of the cost by 50%. Do you think Mr. Pankaj will be able to perform his responsibility effectively and efficiently ..? Give reasons
- Observe your school and decide what scientific organizational management principles they follow in the following situations. I. Deciding the duration of lessons. II. Arrangements in the science laboratories. III. Books are found in Library, Attendance register in Administrators office. IV. Principal leads the school but each department has its own head who is responsible for staff members working in the department preparing financial budgets ordering books etc. V. Students or parents can file their complaints or request to the respective class teacher and if needed class teacher may discuss the issue with head of the department followed by vice Principal and if the issue is extremely serious it may be taken to the Principal.
- Meditech services established a factory to manufacture blood pressure machine. The factory didn't have lighting or sanitation facilities. All the machines were kept in one room, Mr. Bansal the owner appointed unskilled worker so that he could not save labor cost. He laid down all the plans and procedure to be followed. The production incharge was asked to follow the plan to produce a target of 2000 machines a month. The owner told the production manager that if he fails to achieve the target he would lose the job. The production manager was confused as there was no proper setup of machines and even the workers were not trained to manufacture blood pressure Monitors.
  - Name the scientific Principles Meditech services should have followed before starting the Production.
  - State the Principles of Management Meditech services ignored.
  - State the values Management of Meditech services has ignored.

## ECONOMICS:

- Distinguish between Intermediate goods and final goods?
- Distinguish between stock and flow?
- What are the precautions to be taken for estimation of national income by expenditure method?
- Discuss the five year plan in details.
- What was the condition of Indian economy at the time of Independence?

## ENTREPRENEURSHIP:

1. Explain why entrepreneurs do not prefer cooperative form of business organisation?
2. T Ltd. Company dealing in car manufacturing intends to manufacture a car with dual operating concept that is to run both by fuel and solar energy for which it would be placing solar plates at the top of car body .To manufacture this innovative energy fuel efficient car they were looking into various options and have finally narrowed it down to one option. They understand that the entire idea would have to follow a process. Identify and explain the process.
3. Describe various elements of operation plan?
4. Explain in detail Idea Fields.
5. What is a business opportunity? What factors are involved in the process of sensing an entrepreneurial opportunity?

## ACCOUNTANCY

1. On 1<sup>st</sup>April ,2018,Brij and Nandan entered into partnership to construct toilets in government girls schools in the remote areas of Uttarakhand. They contributed capitals of Rs.10,00,000 and Rs.15,00,000 respectively. Their profit-sharing ratio was 2:3 and interest allowed on capital as provided in the partnership deed was 12% p.a. During the year ended 31<sup>st</sup> March, 2018, the firm earned a profit of Rs.2,00,000.Prepare profit and loss appropriation account of Brij and Nandan for the year ended 31<sup>st</sup>, March, 2019.
2. A,B and C were partners sharing profits in the ratio of 6:4:5.Their capital were A Rs.1,00,000 , B Rs.80,000, C Rs.60,000. On 1<sup>st</sup> April 2018, B retires from the firm and new profit sharing ratio between A and C was decided as 11:4. On B's retirement the goodwill of the firm was valued at Rs.1,80,000. Showing your calculations clearly pass necessary journal entry for the treatment of goodwill on B's retirement.
3. A, B and C were partners in a firm sharing profits in the ratio of 3: 2: 1. Their Balance sheet as at 31-3-2018 was as follows :

Liabilities	Rs.	Assets	Rs.
Creditors	1,00,000	Land	1,00,000
Bills payable	40,000	Building	1,00,000
General Reserve	60,000	Plant	2,00,000
Capitals :		Stock	80,000
A 2,00,000		Debtors	60,000
B 1,00,000		Bank	10,000
C 50,000	3,50,000		
	5,50,000		5,50,000

- A, B and C decided to share the future profits equally ,w.e.f. , April 1 , 2018.For this it was agreed that :
- (i) Goodwill of the firm be valued at Rs. 3,00,000.
  - (ii) Land be valued at Rs.1,60,000 and building be depreciated by 6%.
  - (iii) Creditors of Rs.12,000 were not likely to be claimed and hence be written off. Prepare Revaluation Account , Partners' capital Accounts and Balance sheet of the Reconstituted firm.
5. Given below is the Balance Sheet of A and B, who are carrying on partnership business as on March 31,2017. A and B share profits in the ratio of 2:1.

Balance Sheet of A and B as at March 31, 2017

Liabilities	Amount	Assets	Amount
(Rs.)( Rs.)			
Bills Payable	10,000	Cash in hand	10,000
Sundry creditors	58,000	Cast at bank	40,000
Outstanding expenses	2,000	Sundry debtors	60,000
Capitals		Stock	40,000
A 1,80,000		Plant and machinery	1,00,000
B 1,50,000	3,30,000	Building	1,50,000

C is admitted as a partner on the date of the balance sheet on the following terms:

- i. C will bring in Rs 1,00,000 as his capital and Rs 60,000 as his share of goodwill for 1/4 share in profits.
- ii. Plant is to be appreciated to Rs 1,20,000 and the value of buildings is to be appreciated by 10%.
- iii. Stock is found overvalued by Rs 4,000.
- iv. A provision for doubtful debts is to be created at 5% of debtors.
- v. Creditors were unrecorded to the extent of Rs 1,000.

Record revaluation Account, partners' capital accounts, and the Balance Sheet of the constituted firm after admission of the new partner.

## PHYSICAL EDUCATION

1. Enlist aims and objectives of Intramurals.
2. What is a Bye?
3. Define Planning in Games and Sports.
4. What role an individual can play in improvement of sport environment?
5. Being sports captain of the school, prepare five important committees with their responsibilities to conduct annual sports day.
6. What is an eating disorder, mention its type and explain each.
7. 'Games and sports are the best means for attaining fitness.' Justify.
8. What is the role of various elements of diet on performance of an athlete?