



DAV PUBLIC SCHOOL, JAMTARA

Summer Vacation Assignment (2024-25)

Class:- XII(COMMERCE)

ENGLISH

1. Answer at least 5 unseen passages collecting from different sources.
2. Draft Notices on the topics – Tour & Travel, Cultural Events, Sports & school competitions (1 each). (words -50)
3. Draft advertisements on – Situations Vacant, Situation Wanted, Sale & Purchase, Lost & Found. (1 each)
4. Write Formal Letters of compliant, Letter to Editor , Letter of Placing Order & Application for job inventing details. (1 each)
5. Draft News Paper Report & School Report (1 each) following proper format collecting necessary details. (Word Limit -150)
6. Describe your everyday schedule of living during the vacation including any travel experiences if.
7. Reading Assignment
Go through the Biography of the authors – Anes Jung & Jack Finney.
N.B. Do answer the assignment in separate copies.

Business Studies

Project on principles of management and marketing management

Accountancy

Solve the following questions of fundamentals of partnership:

1. Sita and Gita are partners in a firm. Balances of their capital accounts as on 1st April, 2018 were as follows; Sita Rs. 40,000, Gita Rs. 30,000. Sita introduced Rs. 5,000 as an additional capital on 1st October 2018 and Gita introduced Rs. 7,500 as additional capital on 1st November, 2018. Sita drew capital amounting to Rs. 7,500 on 1st January 2019 and Gita withdrew capital amounting Rs. 2,500 on 1st February, 2019. They have further agreed to allow interest on capital @12% per annum. Books of the accounts of the firm are to be closed on 31st March 2019. Calculate interest to be allowed on partner's capital.

2. Calculate the interest on drawings of X @ 10% p.a. for the year ended 31st March, 2018 in each of the following cases:-

If his drawings during the year were Rs. 12,000

If he withdrew Rs. 1,000 p.m. at the beginning of every month.

If he withdrew Rs. 1,000 p.m. at the end of every month.

If he withdrew Rs. 1,000 p.m. In the middle of each month.

In he withdrew the following amounts; April 30th Rs. 3,000, June 30th Rs. 2,000, October 1st Rs. 4,000 , December 31st Rs. 1,500, February 1st 2,500

If he withdrew Rs. 3,000 at the beginning of each quarter

If he withdrew Rs. 3,000 at the end of each quarter.

3. X, Y and Z are partners in a firm sharing profits in the ratio of 2 : 2 : 1. According to the terms of the partnership agreement, Z has to get a minimum of Rs. 12,000 irrespective of the profits of the firm. Any excess payable to Z account of such a guarantee shall be borne by X.

Prepare the profit or loss appropriation account showing the distribution of profits among the partners in case the profits for the year 2017-2018 are Rs. 50,000 and

Rs. 80,000

4. Ram and Shyam with capitals of Rs. 60,000 and 20,000 respectively on 1st April, 2018. Net profit (before provisions of deed) for the year ended 31st March, 2019 was Rs. 24,000. The provision Deed provides:-

B is entitled to a salary of 6,000 p.a.

Interest on capital is to be allowed @ 6% p.a.

Interest on drawings is to be charged @ 5% p.a.

The drawings of the partners A and B were Rs 6000 and 4000 respectively and interest on drawings for A being Rs. 200 and B Rs. 100.

Pass the journal entries for the above and show profit will be divided between A and B and also show the capital accounts of the partners along with their Drawings Accounts;

If they are fixed

If they are fluctuating

5. Jaspal and Rosy were partners with a capital contribution of ₹ 10,00,000 and ₹ 5,00,000, respectively. They do not have a Partnership Deed. Jaspal wants that profits of the firm should be shared in their capital ratio. Rosy convinced Jaspal that profits should be shared equally. Explain how Rosy would have convinced Jaspal for sharing the profit equally.

6. A and B are partners from 1st April 2018, without a Partnership Deed and they introduced capitals of ₹ 35,000 and ₹ 20,000 respectively. On 1st October 2018, A advanced loan of ₹ 8,000 to the firm without any agreement as to interest. The profit and Loss Account for the year ended 31st March 2019 shows a profit of ₹ 15,000 but the partners cannot agree on payment of interest and on the basis of division of profits.

You are required to divide the profits between them giving reasons for your method.

SUBJECT – ECONOMICS

1. Define national income?
2. What is the difference between national and domestic income?
3. Define the following:-
 - a. Gross Domestic Product at Factor Cost
 - b. Net Domestic Product at Market Price
 - c. Net domestic Product at Factor Cost
 - d. Gross National Product at Market Price
4. Write the difference between gross domestic product at market price and national income?
5. Mention the situations in which the following equations will hold true:
 - a. National income = Domestic income
 - b. $GDP_{FC} > GDP_{MP}$
 - c. $NNP_{FC} < NDP_{FC}$
 - d. $GDP_{FC} = GDP_{MP}$
6. Discuss the concepts of:
 - a. NDP at MP
 - b. GNP at FC
 - c. GDP at MP
7. Define private income? Explain the types of private income
8. Write the steps to calculate private income?
9. Define the following:-
 - a. Personal Disposable Income
 - b. National Disposable Income
 - c. Gross National Disposable Income

10. Calculate GNP at FC.

Particulars	Rs. in Crores
NDP at MP	80,000
Net Factor Income From Abroad	-200
Depreciation	4,950
Subsidies	1,770
Indirect Tax	10,600

11. Calculate Domestic income:-

Particulars	Rs. in Crores
GNP at FC	2,700
Indirect Taxes	60
Factor Income From Abroad	150
Factor Income to Abroad	180
Replacement of fixed capital	150

12. Calculate Indirect Taxes from the following data:-

Particulars	Rs. in crores
NDP at FC	55,915
Subsidies	1,540
Factor Income from abroad	625
Consumption of fixed capital	1,625
Factor Income to abroad	865
Subsidies	58,350

PROJECT WORK

1. Make in India - the way ahead :-
2. Livestock back bone of rural India.

3. Micro and small scale industries.

Prepare any one topic in a channel file

Physical Education

Case Study Question

1.

Clubs.	Matches	Won.	Drawn.	Lost	Points
ATK Mohun Bagan.	20	10.	7.	3.	37
Bengaluru FC	20.	8	5.	7	29
Chennaiyin FC	20	. 5	5	10.	20
FC Goa.	20	4	7	9	19
Hyderabad FC.	20	11	5	4	38
Jamshedpur FC	20	13	4	3	43
Kerala Blasters FC.	20	9	7	4	34
Mumbai City FC.	20	9	4	7	31
NorthEast UFC	20	3	5	12	14
Odisha FC	20	6	5	9	23
SC East Bengal	20	1	8	11	11

- Based on the table given above place the teams according to their ranking
- List down two advantages of this kind of tournament
- Write down the formula for calculating points

2. XYZ School is conducting an invitation tournament in which 25 teams have sent their entries. Matches have to be conducted on a knockout basis.

- How many total matches will be played?
- How many matches will be played in the first round of the tournament?
- How many rounds will be played?
- Which team will get 4th bye of the tournament?

Art Integration

- Prepare a report on the Annual Sports Day of your school for publishing in a National daily.
- Your School is hosting CBSE Regional Sports Meet. Plan and present a Folk Dance for the Opening Ceremony.

APPLIED MATHEMATICS

NUMBERS, QUANTIFICATION AND NUMERICAL APPLICATIONS

1. Find the remainder when $672+541+383+295+101+86$ is divided by 3.
2. It is 7:00 P.M. currently. What time (in A.M. or P.M.) will be in next 1500 hours?
3. A retailer has 250 kg of rice a part of which he sales at 10% profit. The remaining quantity of rice is of low quality and he sold it at 5% loss. Overall, he made a profit of 7% Find the quantity of rice sold at 5% loss.
4. A container contains 50 litres of milk. From this container 10 litres of milk was taken out and replaced by water. This process is repeated two more times. How much milk is now left in the container?
5. The speed of a boat in still water is 12 km/h. It takes twice as long as to go upstream to a point as to return downstream to the starting point. What is the speed of the stream?
6. In a 500 m race, the ratio of the speeds of two participants A and B is 3: 4 respectively. If A has a start of 140 m, then find the distance by which A wins.
7. Two vessels A and B contain milk and water in the ratio 7:5 and 17:7 respectively. In what ratio mixtures from two vessels should be mixed to get a new mixture containing milk and water in the ratio 5:3?
8. A container contains 50 litres of milk. From this container 10 litres of milk was taken out and replaced by water. This process is repeated two more times. How much milk is now left in the container?
9. A motor boat can row at the speed of 8km/h in still water. If the river is flowing at 4km/h and it takes 16 hours for a round trip, find the distance between two places.
10. Rakesh and Suresh invest in a business in the ratio 4:5. If 10% of the profit goes for charity purpose and Rakesh's share of profit is Rs 18000. Find the total profit.
11. A pipe can fill the tank in 3 hours and another pipe can empty the full tank in 4 hours. If both the pipes are opened together, then find how much time will they take to fill the tank?
12. A runs 3 times as fast as B. If A gives B a start of 50 m. Find how far must be the finish point on the race course so that A and B reach the goal at the same time?
13. In a flat race, A beats B by 15 m and C by 29 m. When B and C run over the course together B wins by 15 m. Find the length of the race course.

MATRICES

1. If a matrix has 18 elements, what are the possible orders it can have? What, if it has 5 elements?

2. Construct a 3×4 matrix, whose elements are given by

(i) $a_{ij} = \frac{1}{2}|-3i + j|$ (ii) $\frac{(i+j)^2}{2}$

3. Compute the indicated product $\begin{pmatrix} 2 & 3 & 4 \\ 3 & 4 & 5 \\ 4 & 5 & 6 \end{pmatrix} \begin{pmatrix} 1 & -3 & 5 \\ 0 & 2 & 4 \\ 3 & 0 & 5 \end{pmatrix}$

4. Find X and Y, if

$$2X + 3Y = \begin{bmatrix} 2 & 3 \\ 4 & 0 \end{bmatrix} \text{ and } 3X + 2Y = \begin{bmatrix} 2 & -2 \\ -1 & 5 \end{bmatrix}$$

5. If $A = \begin{bmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{bmatrix}$, prove that $A^3 - 6A^2 + 7A + 2I = 0$

6. The bookshop of a particular school has 10 dozen chemistry books, 8 dozen physics books, 10 dozen economics books. Their selling prices are Rs80, Rs60 and Rs40 each respectively. Find the total amount the bookshop will receive from selling all the books using matrix algebra.

7. Express the following matrices as the sum of a symmetric and a skew symmetric

matrix: $\begin{bmatrix} 6 & -2 & 2 \\ -2 & 3 & -1 \\ 2 & -1 & 3 \end{bmatrix}$

8. The number of all possible matrices of order 3×3 with each entry 0 or 1 is:

- (a) 27 (b) 18 (c) 81 (d) 512

9. If A and B are symmetric matrices of same order, then $AB - BA$ is a

- (a) Skew-symmetric matrix (b) Symmetric matrix (c) Zero matrix (d) Identity

10. Assume X, Y, Z, W and P are matrices of order $2 \times n$, $3 \times k$, $2 \times p$, $n \times 3$ and $p \times k$, respectively. Choose the correct answer

The restriction on n , k and p so that $PY + WY$ will be defined are:

(A) $k = 3, p = n$	(B) k is arbitrary, $p = 2$
(C) p is arbitrary, $k = 3$	(D) $k = 2, p = 3$

11. Solve the following system of linear equations by cramer's rule:

$$6x + y - 3z - 5 = 0$$

$$x + 3y - 2z - 5 = 0$$

$$2x + y + 4z - 8 = 0$$

PROJECT: Each day newspaper tells us about the maximum temperature, minimum temperature, and humidity. Collect the data for a period of 30 days and represent it graphically. Compare it with the data available for the same time period for the previous year.

Informatics Practices

Write all the questions in practical copy

Q1. Write the code in python to create an empty Series.

Ans.

```
import pandas as pd
S1 = pd.Series( )
print(S1)
```

OR

```
import pandas as pd
S1 = pd.Series( None)
print(S1)
```

OUTPUT : Series([], dtype: float64)

Q2. Write a program in Python to create a series of first five even numbers.

Ans.

```
import pandas as pd
S1 = pd.Series([2, 4, 6, 8, 10])
print(S1)
```

OUTPUT :

```
0    2
1    4
2    6
3    8
4   10
dtype: int64
```

Q3. Write a program in Python to create a Series in Python from the given dictionary. D = {"Jan" : 31, "Feb" : 28, "Mar" : 31}

Ans.

```
import pandas as pd
D = {"Jan" : 31, "Feb" : 28, "Mar" : 31}
S1 = pd.Series(D)
print(S1)
```

OUTPUT :

```
Jan    31
Feb    28
Mar    31
dtype: int64
```

Q4. Write the output of the following :

```
import pandas as pd
L1=[1,"A",21]
```

```
S1 = pd.Series(data=2*L1)
```

```
print(S1)
```

Ans.

```
0    1
```

```
1    A
```

```
2   21
```

```
3    1
```

```
4    A
```

```
5   21
```

```
dtype: object
```

Q5. Write the output of the following :

```
import numpy as num
```

```
import pandas as pd
```

```
arr=num.array([31,47,121])
```

```
S1 = pd.Series(arr)
```

```
print(S1[0])
```

Ans. 31

Q6. Complete the code to get the required output :

```
import _____ as pd
```

```
_____ = pd.Series([31, 28, 31], index = ["Jan", "Feb", "Mar"])
```

```
print(S1["_____"])
```

OUTPUT :

28

Ans.

```
import pandas as pd
```

```
S1 = pd.Series([31,28,31], index = ["Jan","Feb","Mar"])
```

```
print(S1["Feb"])
```

Q7. Write the output of the following code :

```
import pandas as pd
```

```
S1 = pd.Series([31, 28, 31, 30, 31], index = ["Jan", "Feb", "Mar", "Apr", "May"])
```

```
print("-----")
```

```
print(S1[1:3])
```

```
print("-----")
```

```
print(S1[:5])
```

```
print("-----")
```

```
print(S1[3:3])
```

```
print("-----")
```

```
print(S1["Jan":"May"])
```

Ans.

```
-----
```

```
Feb 28
```

```
Mar 31
```

```
dtype: int64
```



```
-----  
Jan 31  
Feb 28  
Mar 31  
Apr 30  
May 31  
dtype: int64
```

```
-----  
Series([ ], dtype: int64)
```

```
-----  
Jan 31  
Feb 28  
Mar 31  
Apr 30  
May 31  
dtype: int64
```

Q8. Write the code in python to create dataframe from given list.

```
L1 = ["Anil", "Ruby", "Raman", "Suman"]  
L2 = [35, 56, 48, 85]
```

Ans.

```
import pandas as pd  
L1 = ["Anil", "Ruby", "Raman", "Suman"]  
L2 = [35, 56, 48, 85]  
DF = pd.DataFrame([L1, L2])  
print(DF)
```

Q9. Complete the following code to get the Output given below:

```
import pandas as _____  
L1 = [{"Aman", 45}, {"Ankit", 56}, [{"_____"}, 67]]  
DF = pd._____(L1, _____=["Name", "Marks"], index=[_____])  
print(DF)
```

OUTPUT :

	Name	Marks
1	Aman	45
2	Ankit	56
3	Sunita	67

Ans. import pandas as pd

```
L1 = [{"Aman", 45}, {"Ankit", 56}, [{"Sunita", 67}]  
DF = pd.DataFrame(L1, columns = ["Name", "Marks"], index = [1, 2, 3])  
print(DF)
```

Q10. Complete the following code to get the Output given below:

```
import pandas as pd  
L1 = {"Name" : ["Aman", "Ankit", "Sunita"], "Marks" : [45, 56, 67]}  
DF = pd.DataFrame(L1, columns = [_____], index = [1, 2, 3])
```

print(DF)

OUTPUT :

	Marks	Name
1	45	Aman
2	56	Ankit
3	67	Sunita

Ans.

import pandas as pd

L1 = {"Name" : ["Aman", "Ankit", "Sunita"], "Marks" : [45, 56, 67]}

DF = pd.DataFrame(L1, columns = ["Marks", "Name"], index = [1, 2, 3])

print(DF)

Q11. Consider the code given below and answer the following questions:

`Ld = [{'a' : 10, 'b' : 20}, {'a' : 5, 'b' : 10, 'c' : 20}]`

`DF = pd.DataFrame(Ld)`

`print(DF)`

- How many rows will be there in dataframe "DF"
- How many columns will be there in dataframe "DF"
- How many NaN will be there in dataframe "DF"
- Write the missing import statement in the above code.
- How many dictionaries are used in the above code.

Ans. a. There will be 2 rows in dataframe "DF".

b. There will be 3 columns in dataframe "DF".

c. There will be 1 NaN in dataframe "DF".

d. import pandas as pd

e. 2

12. What will be returned by the given query?

`SELECT ROUND(153.669,2);`

(a) 153.6 (b) 153.66 (c) 153.67 (d) 153.7

Ans. (c)ROUND() function will round off the decimal places up to 2 places.

13. What will be returned by the given query ? `SELECT INSTR('INDIA', 'DI');`

(a) 2 (b) 3 (c) -2 (d) -3

Ans. (b) INSTR function returns the starting index of the substring that is passed as second argument in the function.

14. Write the output of following MySQL queries:

(i) `SELECT ROUND(6.5675,2);`

(ii) `SELECT TRUNCATE(5.3456,2);`

(iii) `SELECT DAYOFMONTH(curdate());`

(iv) `SELECT MID('PRE_BOARDCLASS 12',4,6);`

Ans(i) 6.57

(ii) 5.34 (iii) based on current date day of the month will be displayed

(iv) _BOARD

15. Write commands in SQL for (i) to (iii) and output for (iv) and (v):

Table: Store

StoreId	Name	Location	City	NoOfEmp	DateOpen	SalesAmt
S101	Planet Fashion	Bandra	Mumbai	7	2015-10-16	40000
S102	Vogue	Karol Bagh	Delhi	8	2015-07-14	120000
S103	Trends	Powai	Mumbai	10	2015-06-24	30000
S104	Super Fashion	Thane	Mumbai	11	2015-02-06	45000
S105	Annabelle	South Extn.	Delhi	8	2015-04-09	60000
S106	Rage	Defence Colony	Delhi	5	2015-03-01	20000

- (i) To display names of stores along with Sales Amount of those stores that are located in Mumbai.
- (ii) To display the details of store in alphabetical order of name.
- (iii) To display the City and the number of stores located in that City, only if number of stores is more than 2.
- (iv) `SELECT MIN(DateOpen) FROM Store;` (v) `SELECT COUNT(StoreId), NoOfEmp FROM Store GROUP BY NoOfEmp HAVING MAX(SalesAmt)<60000;`

Ans. (i) `SELECT Name,SalesAmt FROM Store WHERE City='Mumbai';`

(ii) `SELECT * FROM Store ORDER BY Name;`

(iii) `SELECT City, COUNT(*) FROM Store GROUP BY Store HAVING COUNT(*)>2;`

(iv) 2015-02-06

(v) COUNT(StoreId)	NoOfEmp
1	10
1	11
1	5
1	7