

**St. Mary's School, Dwarka**  
**Holiday Homework**  
**Class XII**  
**Week 1**  
**Worksheet 1**

**Subject: English**

**M.M: 25**

**Q1. Read the following passage carefully.**

1. Every profession or trade, every art and every science has its technical vocabulary, the function of which is partly to designate things or processes which have no names in ordinary English partly to secure greater exactness in nomenclature. Such special dialects or jargons are necessary in technical discussions of any kind. Being universally understood by the devotees of the particular science or art, they have the precision of the mathematical formula. Besides, they save time, for it is much more economical to name a process than to describe it. Thousands of these technical terms are properly included in very large dictionary, yet, as a whole, they are rather on the outskirts of the English language than actually within its borders.
2. Different occupations, however, differ widely in the character of their special vocabularies. In trades and handicrafts and other vocations like farming and fishing that have occupied great numbers of men from remote times, the technical vocabulary is very old. An average man now uses these in his own vocabulary. The special dialects of law, medicine, divinity and philosophy have become familiar to cultivated persons.

**Based on the understanding of the passage, answer the questions given below.** (1x5=5)

- i) What is the passage about?
- ii) What is the role of technical vocabulary?
- iii) State 2 advantages of using it.
- iv) The writer of the passage is probably a.....
- v) Who does the phrase 'cultivated persons' refer to?

**Q2.** The literary club of your school is putting up the play 'Waiting for Godot'. As secretary of the club, draft an invitation inviting the Senior journalist, Pranoy Roy to be the guest of honour at the function. Write the invitation in not more than 50 words. You are Sujit/ Ajita. (3)

**Q3.** Girls in many parts of India are still discouraged from going to school. Consequently, a sizable section of the population is deprived of education. Schemes like Sarva Shiksha Abhiyan, CBSE scholarship to the single girl child and the Government's policy of giving free education to girls have come as a boon to our society. Write an article in 150-200 words on the education of the girl child in the country. (5)

**Q4.** Read the given extracts and answer the questions that follow. (1x6=6)

**I.** 'Driving from my parent's  
home to Cochin last Friday  
morning, I saw my mother,  
beside me,  
doze, open-mouthed, her face  
ashen like that  
of a corpse....'

- (a) What did the narrator notice about her mother?
- (b) Why did her mother's face look like that of a corpse?
- (c) Name the literary device used in the line 'her face ashen like of a corpse.'

**II.** I started for school very late that morning and was in great dread of scolding, especially because M. Hamel had said that he would question us on participles, and I did not know the first word about them. For a moment I thought of running away and spending the day out of doors. It was so warm, so bright! The birds were chirping at the edge of the woods; and in the open field back of the sawmill the Prussian soldiers were drilling. It was all much more tempting than the rule for participles, but I had the strength to resist, and hurried off to school.

- (a) Why was the speaker dread going to school?
- (b) What temptations did the speaker have?
- (c) Explain 'I had the strength to resist'.

**Q5. Answer the questions briefly:** (2x3=6)

- (a) What usual noises could be heard in the street when the school began? How was the scene in the school in the morning of the last lesson different from that on other days?
- (b) What is Saheb looking for in the garbage dumps?
- (c) Why does the writer feel that it is not tradition but poverty that children do not wear shoes?

**Subject – Mathematics****(INVERSE TRIGONOMETRIC FUNCTIONS)**

Q1	Find the principal value of $\sin^{-1}\left(\frac{1}{2}\right)$ and $\sin^{-1}\left(\frac{-1}{\sqrt{2}}\right)$ .
Q2	Find the principal values of $\cos^{-1} \frac{\sqrt{3}}{2}$ and $\cos^{-1} \left(-\frac{1}{2}\right)$ .
Q3	Find the principal values of $\cot^{-1} \sqrt{3}$ and $\cot^{-1} (-1)$ .
Q4	Evaluate each of the following : (i) $\sin^{-1}\left(\sin \frac{\pi}{3}\right)$ (ii) $\cos^{-1}\left(\cos \frac{2\pi}{3}\right)$ (iii) $\tan^{-1}\left(\tan \frac{\pi}{4}\right)$ (iv) $\sin^{-1}\left(\sin \frac{2\pi}{3}\right)$ (v) $\cos^{-1}\left(\cos \frac{7\pi}{6}\right)$ (vi) $\tan^{-1}\left(\tan \frac{3\pi}{4}\right)$
Q5	Prove that : $\sin^{-1} \frac{12}{13} + \cos^{-1} \frac{4}{5} + \tan^{-1} \frac{63}{16} = \pi$
Q6	Prove that $\sin^{-1} \frac{3}{5} - \sin^{-1} \frac{8}{17} = \cos^{-1} \frac{84}{85}$
Q7	Evaluate the following : (i) $\sin^{-1}(\sin 10)$ (ii) $\sin^{-1}(\sin 5)$ (iii) $\cos^{-1}(\cos 10)$ (iv) $\tan^{-1}\{\tan(-6)\}$
Q8	Simplify each of the following : (i) $\sin^{-1}\left(\frac{\sin x + \cos x}{\sqrt{2}}\right), -\frac{\pi}{4} < x < \frac{\pi}{4}$ (ii) $\cos^{-1}\left(\frac{\sin x + \cos x}{\sqrt{2}}\right), \frac{\pi}{4} < x < \frac{5\pi}{4}$
Q9	Prove that : $\sec^2(\tan^{-1} 2) + \operatorname{cosec}^2(\cot^{-1} 3) = 15$
Q10	Prove that : (i) $\sin[\cot^{-1}\{\cos(\tan^{-1} x)\}] = \sqrt{\frac{x^2 + 1}{x^2 + 2}}$ (ii) $\cos[\tan^{-1}\{\sin(\cot^{-1} x)\}] = \sqrt{\frac{x^2 + 1}{x^2 + 2}}$

## **Subject – Economics**

- Q1. Is the following a revenue receipt or a capital receipt in the context of government budget and why? (2)
- (i) Tax receipts
  - (ii) Disinvestment
- Q2. Giving reason, state whether the following is a revenue expenditure or a capital expenditure in a government budget: (2)
- (i) Expenditure on scholarships
  - (ii) Expenditure on building a bridge
- Q3. State three sources each of revenue receipts and capital receipts in government budget. (2)
- Q4. Explain any one objective of government budget. (2)
- Q5. How can budgetary policy be used to reduce inequalities of income? (3)
- Q6. Distinguish between revenue expenditure and capital expenditure in a government budget. Give an example. (3)
- Q7. Distinguish between revenue receipts and capital receipts in a government budget. (3)
- Q8. Explain the role of government in allocation of resources. (3)
- Q9. Classify the following receipts into revenue receipts and capital receipts. Give reasons in support of your answer. (5)
- (i) Recovery of loans.
  - (ii) Interest received on loans.
  - (iii) Dividend received from public enterprises.
  - (iv) Grants from foreign government.
- Q10. Explain the objectives of resource allocation and income distribution in a government budget. (5)

## **Subject – Informatics Practices**

- Q1. What do you mean by Pandas in Python? (2)
- Q2. What do you mean by Series in Python? (2)
- Q3. Name a method which is used to create Series in Python. Explain all the parameters of the Series function. (2)
- Q4. Write a program in Python to create a series of first five even numbers. (2)
- Q5. Write a program in Python to create a Series in Python from the given dictionary.  
D = {"Jan" : 31, "Feb" : 28, "Mar" : 31} (2)
- Q6. Write the output of the following : (2)
- ```
import pandas as pd  
  
S1 = pd.Series(range(1,15,3), index=[x for x in "super"])  
  
print(S1)
```
- Q7. Name any two attributes of Series in Python. (2)
- Q8. Write the output of the following : (2)
- ```
import pandas as pd  
  
L1 = list("My name is Ravi Kumar")  
  
S1 = pd.Series(L1)  
  
print(S1[0])  
  
print(S1[5])
```
- Q9. Complete the code to get the required output : (2)
- ```
import _____ as pd  
  
_____ = pd.Series([31, 28, 31], index = ["Jan", "Feb", "Mar"] )  
  
print(S1["_____"])
```
- OUTPUT :
- 28
- Q10. Write a program to modify the value 5000 to 7000 in the following Series "S1" (2)
- A 25000
- B 12000
- C 8000
- D 5000

Q11 Write the output of the following code :

(2 +2 =4)

```
import pandas as pd  
S1 = pd.Series([2, 5, 7, 10])  
print(S1 + 2)  
print(S1 * 2)  
print(S1 ** 2)  
print(S1 - 2)  
print(S1 > 2)
```

Q12. Write a program to display the following Series “S1” in descending order.

(2)

```
0    300  
1    100  
2   1200  
3   1700
```

Q13. Write a program to display multiple of 5 from the given Pandas Series.

(2)

```
0    15  
1     2  
2     8  
3     4  
4     1  
5    25  
6    30
```

Q14. Differentiate between Pandas Series and NumPy Arrays.

(2)

## **Subject – Business Studies**

### **Project work:**

#### **Objectives:**

- i) To inculcate a spirit of inquiry and research.
- ii) To develop skills of analysis and critical thinking.
- iii) To develop an understanding of the changes taking place in the business environment.

#### **Activity:**

Choose one topic either from Principles of Management (to check the status of Fayol principles in a particular organization) or Business Environment (say child labour, women empowerment etc.) or Marketing Management (to develop a product and ascertaining its demand by treating yourself as a producer/ manufacturer)

#### **Assignment:**

Collect the information, analyze and interpret the results in a file.

Q.1 Identify the feature of profession which is not applicable here - “Sagar, just a graduate in humanities is appointed as the Plant superintendent in the company.” (1)

- a) Well defined body of knowledge
- b) Restricted Entry
- c) Ethical code of conduct
- d) Service Motive

Q.2 A. R. Rehman is the first Indian to win the Oscar award for his composition ‘Jai Ho’. His composition of music is different as he has used the singing notes in a manner that is entirely his own interpretation. Which nature of management is highlighted above? (1)

- a) Management as a science
- b) Management as a Profession
- c) Management as an art
- d) Management both as an art and science

Q.3 “ Panchayats in our country have been given more powers to decide and spend funds granted to them by the government for welfare of villages. Identify the principle of management highlighted in the statement. (1)

- a) Equity
- b) Centralisation and decentralization
- c) Authority and Responsibility
- d) Espirit De corps

Q.4 The attitude of the government officials towards business may have either positive or negative impact upon business. Which factor of the general environment of business is highlighted by this statement? (1)

- a) Technological Environment
- b) Political Environment
- c) Social Environment
- d) Legal Environment.

Q.5 ABC Ltd. is engaged in producing electricity from domestic garbage. There is almost equal division of work and responsibilities between workers and the management. The management even takes workers into confidence before taking important decisions. All the workers are satisfied as the behaviour of the management is very good. State the principle of management described in the above paragraph. (3)

Q.6 Ashutosh Goenka was working in 'Axe Ltd.', a company manufacturing air purifiers. He found that the profits had started declining from the last six months. Profit has an implication for the survival of the firm, so he analysed the business environment to find out the reasons for this decline.

(a) Identify the level of management at which Ashutosh Goenka was working.

(b) State two other function being performed by Ashutosh Goenka. (3)

Q.7 After finishing her BBA degree course, Tanya gets a job of Assistant Manager in a retail company through the reference of her cousin Taruna who works in the same company as a Senior Manager. Taruna decides to guide Tanya through her experience by making her aware of the important facts about management in practice. She tells her that neither the principles of management provide any readymade, straitjacket solutions to all managerial problems nor they are not rigid prescriptions, which have to be followed absolutely. In context of the above case:

a. Identify the two features of principles of management mentioned in the above paragraph by quoting lines from the paragraph.

b. Why do the principles of management not provide readymade, straitjacket solutions to all managerial problems? (4)

Q.8 After completing a diploma in Bakery and Patisserie, Payal sets up a small outlet at Goa Airport to provide a healthy food option to the travellers. To begin with, she has decided to sell five types of patties, three types of pizzas and low sugar muffins in four flavours. Thus, by deciding in advance what to do and how to do, she is able to reduce the risk of uncertainty and avoid overlapping and wasteful activities. But sometimes her planning does not work due to some unavoidable circumstances like cancellation of flights due to bad weather conditions, government alert, etc. which adversely affects her clientele. In the context of the above case:

a. Identify and explain the points highlighting the importance of planning mentioned in the above paragraph.

b. Describe briefly the limitation of planning which adversely affects Payal's business. (4)

Q.9 Yash Ltd. is facing a lot of problems these days. It manufactures electronic goods like washing machines, microwave ovens, refrigeration and air-conditioners. The company's margins are under pressure and the profits and market marketing department blames production department for producing goods, which are not of good quality to meet customer's expectations. The finance department blames both production and marketing departments for declining return on investment and bad marketing.

1. What quality of management do you think the company is lacking? Justify your answer.

2. State the importance of the concept identified in (a). (6)

Q.10 "If the project is important then more alternatives should be generated and thoroughly discussed amongst the members of the organisation." Identify and explain the step in the process of planning being discussed above. Also explain the remaining steps which will have to be carried out to complete the process.

(6)



**Subject – Accountancy**

## Project Work:

### Objectives:

- i) To develop an understanding of real life situations
- ii) To develop competence of reading, analyze and interpret the accounting data of the enterprise
- iii) To develop critical thinking and management skills

### Activity:

1. Collect the financial statements and cash flow statement of a company.
2. Choose any one enterprise for comprehensive study.

### Assignment:

1. Analyze the financial statements by using various ratios and interpret the results in a file.
2. Analyze the cash flow statement of a company and interpret the results in a file.

**No. of questions: 10**

**M.M: 30**

- Q.1 Share Capital of a company consists of 70,000 shares of Rs. 10 each, Rs.8 called up. All the shareholders have duly paid the called up amount. Share capital will be shown as: (1)
- a) Subscribed and fully paid                                              b) Subscribed but not yet fully paid
- c) Either (a) or (b)                                                          d) Neither(a) nor (b)
- Q.2 Claims against the company not acknowledged as debts is shown under: (1)
- a) Current Liabilities                                                        b) Contingent Liabilities
- c) Non-current Liabilities                                                      d) Capital Commitments
- Q.3 Plant and Machinery of Book Value of Rs. 5,00,000 at a loss of 5%. Inflow under Investing Activities will be..... (1)
- a) Rs. 4,75,000                                                                      b) Rs. 5,00,000
- c) Rs. 3,80,000                                                                      d) Rs. 3,60,000
- Q.4 Sale of current investment will be shown under.... (1)
- a) Operating Activity                                                              b) Financing Activity
- c) Investing Activity                                                                d) Cash and Cash Equivalents
- Q.5 Calculate Revenue from operation, other Income, and total revenue for a non- financial company from the following information: (3)

| Particulars                | ₹         |
|----------------------------|-----------|
| Sales                      | 21,00,000 |
| Sales return               | 90,000    |
| Sales of scrap             | 30,000    |
| Interest on fixed Deposits | 30,000    |
| Dividend received          | 10,000    |
| Refund of Income tax       | 15,000    |
| Sale of other items        | 7,000     |

Q.6 The ratio of current Assets (Rs. 9,00,000) to current liabilities is 1.5:1. The accountant of this firm is interested in maintaining a current ratio of 2:1 by paying some part of current liabilities. You are required to suggest him the amount of current liabilities which must be paid for the purpose.

(3)

Q.7 Rs.2,00,000 is the cost of Revenue from operations, inventory turnover 8 times, Inventory at the beginning is 1.5 times more than the Inventory at the end. Calculate the value of opening & closing Inventory.

(4)

Q.8 Under which major head of the statement of profit and loss of a company following items will be shown:

(4)

(i) Bonus

(ii) Material Purchased

(iii) Wages

(iv) Purchase of stock in trade

Q.9 Under which major heads of the statement of Profit and Loss of a company following items will be shown:

(6)

(i) Interest on public deposits

(ii) Entertainment Expenses

(iii) Discount on issue of debentures written off

(iv) Interest paid on debentures

Q.10 I) From the following information, calculate cash flow from financing activities:

|                              | <b>31.03.2021</b> | <b>31.03.2022</b> |
|------------------------------|-------------------|-------------------|
| Equity share capital         | 20,00,000         | 30,00,000         |
| 10% preference share capital | 2,00,000          | 1,00,000          |
| Securities premium reserve   | ----              | 95,000            |
| 10% Debentures               | 10,00,000         | 10,00,000         |

**Additional information:**

i) Interim dividend on equity shares at the end of current year was paid @ 8%.

ii) Fresh equity shares were issued on 31<sup>st</sup> March 2022 at a premium of 10%.

iii) Preference shares were redeemed on 31<sup>st</sup> March, 2022 at a premium of 5%. Premium on redemption was charged against premium on issue of fresh equity shares.

II) From the following information, calculate cash flow from financing activities:

|                              | <b>Current Year (Rs.)</b> | <b>Previous Year (Rs.)</b> |
|------------------------------|---------------------------|----------------------------|
| Equity share capital         | 9,00,000                  | 7,00,000                   |
| 12% preference share capital | 3,00,000                  | 5,00,000                   |
| Securities premium reserve   | 1,40,000                  | 1,00,000                   |
| 12% Debentures               | 4,00,000                  | 3,00,000                   |

**Additional information:**

i) Interim dividend on equity shares at the end of current year was paid @ 15%.

ii) Preference shares were redeemed at a premium of 5%.

(6)