

# St. Mary's School, Dwarka Holiday Homework Std. XII Week 1 Worksheet 1

**Subject: English** 

#### **General Instructions:**

- 1) The work should be done neatly and in a systematic way.
- 2) The given questions are to be done in the English notebook.
- 3) Attempt questions based on specific instructions for each section.

#### Q1. Read the following passage carefully.

- 1. Faith in progress is deep within our culture. We have been taught to believe that our lives are better than the lives of those who came before us. The ideology of modern economics suggests that material progress has yielded enhanced satisfaction and well-being. But much of our confidence about our own well-being comes from the assumption that our lives are easier than those of earlier generations.
- 2. The lives of the so-called primitive peoples are thought to have been harsh-their existence was dominated by the incessant quest for food. In fact, primitives did very little work. By contemporary standards, we'd have to judge them as very lazy.
- 3. The key to understanding why these 'stone-age people' failed to act like us-increasing their work effort to get more things-is that they had limited desires. In the race between wanting and having, they had kept their wanting low and, in this way, ensured their own kind of satisfaction. They were materially poor by contemporary standards, but in at least one dimension-time- we have to count them richer.

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

- a) What is the basis for progress and growth according to the writer?
- **b)** What does the writer attribute to modern economics?
- i. Our lives are better than our ancestors.
- ii. The material progress leads to higher satisfaction and well-being
- iii. The lives of earlier generations were easier and simple.

| iv. The primitive people were lazy.   |               |  |
|---|---------------|--|
| <ul> <li>c) The primitive people lived a life of</li> <li>d) What is the key to understanding the primitive peoples' behaviour according to the e) How does the writer appreciate the primitives?</li> </ul>  | e passage?    |  |
| Q2. You need a software engineer for your organisation. Look for an advertisement public  | ished in the  |  |
| newspaper under the classified column, cut and paste.   | (2)           |  |
| Q3. Sun View Public School, Delhi is organizing a one-act play competition in the month of June, in the school auditorium. You have decided to invite noted stage artiste, Saran Marar, B- 20, Hauz Khaz, New Delhi, to grace the occasion and be the chief Guest. Write a formal invitation(letter) to her in 50 |               |  |
| words. You are Kavita/Kanav, the Cultural Secretary of your School.   | (3)           |  |
| Q4. Write a letter to the Editor of National Herald, New Delhi about water scarcity in  | your locality |  |
| suggesting ways to improve the position of water supply. You are Ramnath/ Reema   | of Ghaziabad. |  |
| Word limit: 150-200.  | (5)           |  |
| Answer the following questions in 30-40 words each.   | (2x3=6)       |  |
| Q5. Discuss the significance of the tigers as symbols in "The Tiger King.   |               |  |
| Q6. What does the phrase 'familiar ache' mean? (My Mother at Sixty Six)   |               |  |
| Q7. How does M. Hamel pay tribute to the French language?   |               |  |
|   |               |  |
| Answer the following question in 120- 150 words:  | (4x1=4)       |  |
| Q8. How does "The Tiger King" explore the tension between tradition and progress?   |               |  |
|   |               |  |
|   |               |  |

# **Subject: Informatics Practices**

#### **General Instructions:**

- Neatly write all the answers in your notebook.
- Attempt the questions keeping in mind the weightage of each question.
- Q1 Why is Python interpreted?

1

Q2 Can sequence operations such as slicing and concatenation be applied to dictionaries? Why?

Q3 Write the most appropriate list method to perform the following tasks and justify with the help of an example.

- (a) Delete a given element from the list.
- (b) Delete 3rd element from the list.
- (c)Add an element in the end of the list.
- (d) Add an element in the beginning of the list.
- (e) Add elements of a list in the end of a list.
- 2 Q4 Find errors, underline them and rewrite the same after correcting the following code:-

```
d1 = dict[]
```

i = 1

n = input ("Enter number of entries:")

while  $i \le n$ :

```
a = input ("Enter name:")
```

b = input ("Enter age:")

$$d1(a) = b$$

$$i = i + 1$$

l = d1.key

for i in 1:

Q5 The following code is not giving desired output. We want to input value as 20 and obtain output as

40. Could you pinpoint the problem?

2

Number = input ( "Enter Number")

DoubleTheNumber = Number \* 2

Print (DoubleTheNumber)

Q6 Figure out the problem with following code fragment. Correct the code and then print the output.

2

```
1. s1 = 'must'
```

2. 
$$s2 = 'try'$$

$$3. n1 = 10$$

$$4. n2 = 3$$

5. print (s1 + s2)

6. print 
$$(s2 * n2)$$

7. print 
$$(s1 + n1)$$

Q7 If the addition of a new key:value pair causes the size of the dictionary to grow beyond its original size, an error occurs. True or false? (1x10=10)**Q8 MCQ** 1. Which of the following is an invalid variable? (a) my\_day\_2 (b) 2nd\_day (c)Day\_two  $(d)_{2}$ 2. Which of the following is not a keyword? (a) eval (b) assert (c) nonlocal (d) pass 3. Which of the following cannot be a variable? (a) \_\_init\_\_ (b) in (c) it (d) on 4. Which of these is not a core data type? (a) Lists (b) Dictionary (c) Tuples (d) Class 5. How would you write xy in Python as an expression? (a) x^y (b)  $x^{**}y$ (c) x^^y (d) none of these 6. What will be the value of the expression? 14 +13 % 15 (a) 14 (b) 27(c) 12 (d) 07. Evaluate the expression given below if A = 16 and B = 15. A%B//A(a) 0.0(b) 0(c) 1.0(d) 18. What is the value of x? x = int(13.25 4/2)

(a) 17(b) 14

| (c) 15 (d) 23 9. The expression 8/4/2 will evaluate equivalent to which of the following expressions: (a) 8/(4/2) (b) (8/4)/2 (c) 8//4//2 (d) (((8//4)/4)/2)) 10. Which among the following list of operators has the highest precedence? + -,-**,%,/,<< ,>> ,   (a) <<, >> (b) ** (c)   (d) %  |                  |
|---|------------------|
| Q9 Fill in the Blanks: a) In Python, the non-zero value is treated as and zero value is treated as b) Keys of a dictionary must be  | ½ x5=2.5         |
| <ul> <li>c) In, the adjoining values in a sequence are compared and exchanged repeatedly array is sorted.</li> <li>d) Logical operators are used to combine two or more expressions.</li> <li>e) The function returns the length of a specified list.</li> </ul>  | until the entire |
| Q10 State True or False a) For any index n, s [: n] + s [n :] will give you original string s. b) A dictionary can contain keys of any valid Python types. c) The two statements x int(22.0/7) and x = int(22/7.0) yield the same results. d) The given statement: x + 1 = x is a valid statement. e) List slice is a list in itself. | ½ x5=2.5         |

# **Subject: Economics**

#### **General Instructions:**

- Neatly write all the answers in your notebook.
- Attempt the questions keeping in mind the weightage of each question.
- Q1. What are externalities? Give an example of a positive externality and its impact on welfare of the people. (2) Q2. Explain the expenditure method of estimating National Income. (2) Q3. Explain how 'distribution of Gross Domestic Product' is a limitation in taking Gross Domestic Product as an index of welfare. (2) Q4. Give the meaning of factor income to abroad and factor income from abroad. Also give an example of each. (2)Q5. Explain how 'non-monetary exchanges' are a limitation in taking domestic product as an index of welfare? (2) Q6. Distinguish between domestic product and national product. When can domestic product be more than the national product? (3) Q7. Explain why subsidies are added to and indirect taxes deducted from domestic product at market price to arrive at domestic product at factor cost? (3) Q8. How will you treat the following while estimating domestic product of India? Give reasons. (3)i. Rent received by a resident Indian from his property in Singapore. Profits earned by a branch of an American Bank in India. ii. iii Salaries paid to Koreans working in Indian embassy in Korea Q9. Is net export a part of NFIA? Explain. (3)Q10 Distinguish between Real Gross Domestic Product and Nominal Gross Domestic Product. Which of these is a better index of welfare of the people and why? (3)

# **Subject: Mathematics**

# **General Instructions:**

- Neatly write all the answers in your notebook.
- Attempt the questions keeping in mind the weightage of each question.

# (INVERSE TRIGONOMETRIC FUNCTIONS)

Each question carries 4 marks.

| Lacii | Each question carries 4 marks.   |  |  |  |  |
|-------|--|--|--|--|--|
| 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:  |  |  |  |  |
|       | $\sin^{-1}(\sin 10)$ (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: $\sec^2(\tan^{-1} 2) + \csc^2(\cot^{-1} 3) = 15$                          |
|-----|---|
| 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: Business Studies**

#### **General Instructions:**

- Neatly write all the answers in your notebook.
- Attempt the questions keeping in mind the weightage of each question.

#### **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) or Stock Exchange (students need to invest Rs.50,000 in imaginary portfolio of 5 companies and check whether profit is earned or loss is incurred after 10 days)

# **Assignment:**

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

No. of questions: 10 M.M: 25

- Q.1 Hero Ltd.'s target is to produce 10,000 shirts per month at a cost of Rs.150 per shirt. The production manager could achieve this target at a cost of Rs.160 per shirt. Is the production manager effective or efficient? Give reason.
- Q.2 "Management helps in achieving group goal." How?
- Q.3 Principles of management are guidelines to action but do not provide readymade solutions to all managerial problems. Why?
- Q.4 'Planning eliminates uncertainties.' Do you agree? Give reasons in support of your answer. 1
- Q.5 'Principles of management help in thoughtful decision making.' How?
- Q.6 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.

- Q.7 Mega Ltd.' was manufacturing water-heaters. In the first year of its operations, the revenue earned by the company was just sufficient to meet its costs. To increase the revenue, the company analysed the reasons of less revenue. After analysis the company decided:
  - (i) To reduce the labour cost by shifting the manufacturing unit to a backward area where labour was available at a very low rate. (ii) To start manufacturing solar water-heaters and reduce the production of electric water heaters slowly. This will not only help in covering the risks, but also help in meeting other objectives too.
  - (a) Identify and explain the objectives of management discussed above.
- 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).
- 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.

# **Subject: Accountancy**

#### **General Instructions:**

- Neatly write all the answers in your notebook.
- Attempt the questions keeping in mind the weightage of each question.

#### **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.

#### **Assignment:**

Inventory.

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: 25 Q.1 List any three items that can be shown as contingent Liabilities in a company's Balance sheet. Q.2 Give example each of Non-Current Assets and Non-Current Liabilities. 1 Q.3 What is Horizontal Analysis? Q.4 State one transaction which will result in an increase in 'liquid ratio 'and no change in 'current ratio'. Q.5 Under which type of activity will you classify "Corporate dividend tax paid by company" while preparing the Cash Flow Statement? 0.6 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. **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

- Q.8 Under which major head of the statement of profit and loss of a company following items will be shown:
  - (i) Bonus (ii) Material Purchased
  - (iii) Wages (iv) Purchase of stock in trade
- Q.9 Give major heads under which the following items will be shown in a company's Balance Sheet as per Schedule III, Part I of the Companies Act, 2013:

- (i) Trade Payables,
- (ii) Provision for Tax,
- (iii) Surplus, i.e., Balance in Statement of Profit and Loss (Dr.) and
- (iv) Surplus, i.e., Balance in Statement of Profit and Loss.
- Q.10 I) From the following information, calculate cash flow from financing activities:

|                              | 31.03.2021 | 31.03.2022 |
|------------------------------|------------|------------|
| 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 31st 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:

|                              | Current Year (Rs.) | Previous Year (Rs |
|------------------------------|--------------------|-------------------|
| 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%.

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