



**St. PBN Public School**  
**Business Studies**  
**Class XII**  
**UNIT TEST- I**  
**Sample Paper**

**GENERAL INSTRUCTIONS:**

- **All the questions are mandatory.**
- **Read the questions carefully before attempting.**

**Questions**

1. Read the following statements: Assertion and Reason. Choose one of the correct alternatives given below: (1)

Assertion (A): Efficiency aims at performing tasks with the least wastage of time and effort.

Reason (R): Efficiency is about doing the job in a cost-effective manner, i.e., getting maximum output with minimum input.

Alternatives:

a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).

b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A)

c) Assertion (A) is true but Reason (R) is False

d) Assertion (A) is False but Reason (R) is True. (1)

2. Which level of management is responsible for the welfare and survival of the organisation?

(a) Top level of management

(b) Middle level of management

(c) Supervisory level

(d) Both (b) and (c) (1)

3. India has launched its most advanced Geo-imaging satellite which will allow better monitoring of the subcontinent, including its borders with neighboring countries, by imaging the country 4-5 times a day. The satellite is capable of near real time monitoring of floods and cyclones. The factor constituting the Business Environment being discussed above is \_\_\_\_\_

(1)

4. "What distinguishes a successful manager from a less successful one is the ability to put the principles into practice." Which aspect of the nature of management is highlighted in the above statement?

a) Management as a science

- b) Management as an art
- c) Management as a profession
- d) Management is an intangible force. (1)

5. A brand or part of the brand that is given legal protection is called \_\_\_\_\_

- (a) Brand Mark
- (b) Trademark
- (c) Brand
- (d) Brand name (1)

6. "A manager in a conscious manner has to ensure that even where members of a department willingly cooperate, coordination gives direction to the willing spirit." Which characteristic of coordination is being highlighted above? (1)

7. Name the principle of management given by Fayol which when applied would mean that the workers and management both honour their commitments without any prejudice towards one another.

- (a) Discipline
- (b) Mental Revolution
- (c) Remuneration of employees
- (d) Scalar chain (1)

8. Identify the dimension of the characteristic of management- "it is multidimensional", which specifies that the task of management is to make the strengths of human resources effective and their weaknesses irrelevant towards achieving the organisation's objectives.

- (a) Management of work
- (b) Management of people
- (c) Management of operations
- (d) Management of goals (1)

9. The sum total of all individuals, institutions and other forces that are outside the control of a business enterprise but that may affect its performance is known as \_\_\_\_\_

(1)

10. Sanchit, after completing his entrepreneurship course from Sweden returned to India and started a coffee shop 'Aroma Coffee Can' in a famous mall in New Delhi. The specialty of the coffee shop was the special aroma of coffee and a wide variety of flavors to choose from. Somehow, the business was neither profitable nor popular. Sanchit was keen to find out the reason. He appointed Sandhya, an MBA from a reputed college, as a manager to find out the causes for the same.

Sandhya took feedback from the clients and found out that though they loved the special unique aroma of coffee but were not happy with the long waiting time being taken to process the order. She analysed and found out that there were many unnecessary obstructions in between which could be eliminated. She fixed a standard time for processing the order.

She also realised that there were some flavors whose demand was not enough. So, she also decided to stop the sale of such flavors. As a result, with in a short period Sandhya was able to attract the customers.

Identify and explain any two techniques of scientific management used by Sandhya to solve the problem. (3)

**11.** The principles of Taylor and Fayol are mutually complementary. One believed that management should share the gains with the workers while the other suggested that employees' compensation should depend on the earning capacity of the company and should give them a reasonable standard of living. Identify and explain the principles of Favol and Taylor referred to in the above paragraph.

(3)

**12.** Coordination is the essence of management. Do you agree? Give reasons.

(3)

**13.** Mega Ltd. manufactured 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 behind the less revenues. After analysis, the company decided:

1. to reduce the labour costs by shifting the manufacturing unit to a backward area where labour was available at a very low rate.
2. 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.

a) Identify and explain the objectives of management discussed above.

b) State any two values which the company wanted to communicate to society.

(4)

**14.** Explain briefly 'discipline' and 'scalar chain' as principles of general management.

(4)

**15.** Explain 'Science-not rule of thumb' as a principle and 'Time-Study' as a technique of Scientific management.

(4)

**16.** After completing her MBA, Beni took up a job with a multinational company named Fortio. The company paid good salaries and perks to its employees. The wages were within the paying capacity of the company that provided the employees with a reasonable standard of living. The company also had a good work-culture and the behavior of superiors was very good towards their subordinates. Beni was very happy in this organisation but due to long working hours, she did not have time to cook her meals. She had to depend upon outside food which was deteriorating her health. She observed that this problem was faced by many of her colleagues, not only in her company but also in many other companies. This was because of increase in the number of working women and non-availability of hygienic home-cooked food. She identified this as a great opportunity and decided to give up her job to supply packaged home-cooked food to office-goers at a reasonable price. At the end of the day, she also distributed the leftover food to the nearby night-shelters.

a) State the dimension of business environment being discussed above.

b) State the principle of management being followed by Fortio.

c) Identify any two values being communicated by the company to society in above case.

(4)

**17.** The organic food market in India is growing at 25-30 per cent which reflects a clear shift in consumer tastes and preferences. The current growth in the organic food market is driven by multiplicity of factors like rising health consciousness, changing lifestyles, increase in disposable income and growing availability of organic food products in shopping malls, retail outlets and online.

In context of the above case:

- a) Identify and explain the features of business environment being referred to here.
  - b) By quoting phrases from the paragraph identify the various components of general forces which have led to a growth in the organic food market. (5)
18. Rajat is working as a Regional Manager in Tifco Ltd. Name the level at which he is working. State any four functions he will perform as the Regional Manager in this company. (5)
19. What is meant by brand name? State any five characteristics of good brand name. (6)



**ST PBN PUBLIC SCHOOL**  
**Unit Test - 1**  
**PHYSICAL EDUCATION**  
**Class – XII**  
**SAMPLE PAPER**

**Time: 2 hours**

**MM: 50**

**GENERAL INSTRUCTIONS:-**

- 1. All questions are compulsory.**
- 2. Question 1-5 carry 1 mark each and are Multiple choice questions.**
- 3. Question 6-10 carry 2 marks each and should not exceed 40-60 words.**
- 4. Question 11 -15 carry 3 marks each and should not exceed 80-100 words.**
- 5. Question 16 -20 carry 5 marks each and should not exceed 150-200 words.**

1. Effective Planning can help in :

- |                          |                                  |
|--------------------------|----------------------------------|
| (a) Improving Efficiency | (c) Reducing chances of mistakes |
| (b) Proper Coordination  | (d) All the above                |

2. Pre-tournament tasks are done :

- |                           |                              |
|---------------------------|------------------------------|
| (a) During the tournament | (c) After the tournament     |
| (b) Before the tournament | (d) After the award ceremony |

3. Sunlight is a source of --

- |               |               |
|---------------|---------------|
| (a) Vitamin A | (c) Vitamin B |
| (b) Vitamin C | (d) Vitamin D |

4. They are called as building blocks of body:

- |                   |              |
|-------------------|--------------|
| (a) Carbohydrates | (c) Vitamins |
| (b) Proteins      | (d) Fats     |

5. Which asana is known as Mountain pose?

- |                |                  |
|----------------|------------------|
| (a) Matsyasana | (c) Parvatasana  |
| (b) Tadasana   | (d) Shalabhasana |

6. What is knock-out tournament?

7. What do you understand by seeding?

8. What do you mean by nutrition?

9. Define balance diet.
10. Briefly mention the benefits of Shavasana.
11. Briefly explain about types of league tournament.
12. What is roughage? Explain in brief.
13. What do you mean by colour compounds?
14. Discuss the procedure of Pawanmuktasana.
15. Mention the benefits of Gomukhasana.
16. What do you mean by planning? Elucidate the objectives of planning in sports in detail.
17. Define and classify 'fixtures'. Draw a league fixture of 16 teams.
18. What do you mean by nutritive components of diet? Explain about any three of them in brief.
19. Vitamins are very essential for the normal working of the body and are divided into two groups. Explain about them.



**St. PBN PUBLIC SCHOOL**  
**UT1 EXAMINATION**  
**CLASS XII**  
**COMPUTER SCIENCE (OBJECTIVE & SUBJECTIVE)**  
**(SUBJECT CODE-083)**  
**SAMPLE PAPER**

**Time: 3 Hours**

**M.M:50**

**INSTRUCTIONS:**

- All questions are mandatory
  - Read the questions carefully before attempting.
- 

**Part A- OBJECTIVE**

**I. Choose the correct option**

**(1×10=10)**

1. What will be the data type of L where L =[1,2,3] ?

- (a) string
- (b) tuple
- (c) list
- (d) none of above

2. Which function is used to display the message ?

- (a) Print()
- (b) Float()
- (c) Input()
- (d) None of these

3. Which of the following is identifier?

- (a) a
- (b) 'X'
- (c) ##
- (d) 23

4. Which operator is used to concatenate string?

- (a) \*
- (b) +
- (c) +=
- (d) ^

5. Which of the following statement is a function declaration?

- (a) call msg()
- (b) def msg()
- (c) msg()
- (d) function msg()

6. Which of the following file in python is fastest in terms of processing

- (a) binary
- (b) text
- (c) csv
- (d) None of the above

7. What will be the output of `print("Amita" > "amit")`

- (a) True
- (b) False
- (c) Error
- (d) none of above

8. What is the ASCII value of "A"

- (a) 65
- (b) 97
- (c) 87
- (d) 32

9. What will be the output of the following code : `print("Str"[1:2])`

- (a) t
- (b) no output
- (c) error
- (d) none of above

10. Which of the following is not a String built in functions?

- (a) isupper()
- (b) parition
- (c) swapcases()
- (d) lower()

## Part B- SUBJECTIVE

## II. Programming Based Questions.

( 1×10=10)

1. What will be the output of : `2 + '3'` in python.
2. Index value of tuple should be of which data type?
3. What is the index of `i` in string "teaching"?
4. Write the output of given python code :

```
a = "Blog"
a = 'a'
print(a)
```

5. What are the two ways of creating a list in python?
6. Write the output of the following code :

```
sound()
def sound():
    print("sound" * 2)
```

7. Write a python statement to write in csv file
8. Write a python statement to create a list of 5 elements.
9. A function which do not returns any value is called?
10. Write the output of the following code :

```
from math import factorial
print(math.factorial(5))
```

## III. Fill in the Blanks :

( 1×4=4)

- i. Python passes parameters by \_\_\_\_\_
- ii. Function name must be followed by \_\_\_\_\_ and \_\_\_\_\_.
- iii. The \_\_\_\_\_ function returns the length of a specified list.
- iv. A python \_\_\_\_\_ is a directory of Python module(s).

## IV. Answer the following questions very briefly.

(2×3=6)

1. What is the significance of using functions in python?
2. Differentiate between local variable and global variable.
3. Differentiate between 'a' mode and 'r' mode.

**V. Answer the following questions in details.**

**(3×4=12)**

1. Why is the use of import \* statement not recommended?
2. Write a method write1() in python to write multiple lines of text contents into a text file 'daynote.txt'.
3. Write a program to print the sum of even numbers of elements of a list.
4. Write a program to print the elements of list in descending order using the insertion sort technique.

**VI. Application Based Questions**

**(8)**

1. Write a program to generate Fibonacci series in a tuple. (3)
2. What is the output of the following code?

```
fl=open("test1.txt", "r")
size = len(fl.read())
print(fl.read(5))|
```

**(2)**

3. Write the term suitable for the following descriptions:

- (a) A name inside the parenthesis of a function header that can receive a value.
- (b) A argument passed to a specific parameter using the parameter name.
- (c) A value passed to a function parameter.
- (d) A value assigned to a parameter name in the function call.
- (e) A name defined outside all function definitions.
- (f) A variable created inside a function body.

**(3)**



**St. PBN Public School**  
**Economics**  
**Class XII**  
**Sample Paper**  
**UNIT TEST - I**

**Time: 2hrs**

**M.M. 50**

**GENERAL INSTRUCTIONS:**

- All the questions are mandatory.
- Read the questions carefully before attempting.

**Questions**

1. Name some notable economists who estimated India's per capita income during the colonial period?

(1)

2. Match the situations given in Column I with their respective implications given in Column II:

(1)

Column I	Column II
a) Land ceiling	(i) Increased in production of food grains using HYV seeds
b) Land reforms	(ii) Portion of agricultural produce sold in the market
c) Green Revolution	(iii) Fixing the maximum limit of land holding for an individual
d) Marketed Surplus	(iv) Change in the ownership of land

3. Read the following statements - Assertion (A) and Reason (R). Choose one of the correct alternatives given below:

**Assertion (A):** The major policy initiatives i.e. land reforms and green revolution helped India to become self-sufficient in food grains production.

**Reason (R):** The proportion of people depending on agriculture did not decline as expected.

Alternatives:

- a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
- b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A).
- c) Assertion (A) is true but Reason (R) is False
- d) Assertion (A) is False but Reason (R) is true.

4. Which year is described as the year of great divide?

(1)

- a) 1931
- b) 1921
- c) 1941
- d) 1911

5. Which industry was adversely affected due to partition? (1)

- a) Silk
- b) Cotton
- c) Jute
- d) Nylon

6. British rule introduced railway in the year: (1)

- a) 1849
- b) 1850
- c) 1851
- d) 1852

7. Primary motive of de-industrialisation was to promote India economy. (1)

- a) True
- b) False

8. What is the term used for the policy which promote setting up of an upper limit of the land that could be owned by a landowner?

- a) Land Fragmentation
- b) Land Ceiling
- c) Land cultivation
- d) Land Tilling

9. What percent of GDP was invested in education in the year 1952?

- a) 7.92 percent
- b) 11.7 percent
- c) 0.64 percent
- d) 3.31 percent

10. The most important sources of plan finance to cover up gap between intended expenditure and available resource is in:

- (a) Direct taxes
- (b) Indirect taxes
- (c) Deficit financing
- (d) Foreign aid

11. Prior to the establishment of British rule, which of the following was True for the Indian economy: –

- a) India had an independent economy and flourishing market.
- b) Livelihood of Indian people was mainly based on agriculture
- c) Indian Handicrafts, textile industries and metallic work enjoyed a worldwide market
- d) All of the above

12. Direct tax is a tax whose: (1)

- a) The liability to pay and incidence do not lie on the same person
  - b) The liability to pay lies on one and incidence lies on the other person
  - c) The liability to pay and incidence do lie on the same person
  - d) The liability to pay and incidence do lie on the government
13. In which year India adopted the HYV programme for the first time? (1)
- a) 1977
  - b) 1966
  - c) 1986
  - d) 1956
14. In the present COVID-19 times, many economists have raised their concerns that Indian economy may have to face a deflationary situation, due to reduced economic activities in the country. Suppose you are a member of the high-powered committee constituted by the Reserve Bank of India (RBI). You have suggested that as the supervisor of commercial banks, ..... of the money supply be ensured, by the Reserve Bank of India (RBI)
- a) Restriction
  - b) Release
15. Explain the role of SLR in increasing money supply in the economy? (3)
16. Revenue deficit can be managed through borrowing or disinvestment. But fiscal deficit can be managed only through borrowing. Do you agree? State reason in support of your answer. (3)
17. Briefly discuss roads and railways during the British rule. (3)
18. Explain any one problem faced in the barter system. How has money solved this problem? (3)
19. Critically appraise some of the shortfalls of the industrial policy pursued by the British colonial administration. (4)
20. How has the decline in the price of crude oil in the international market help the government to reduce fiscal deficit? (4)
21. State the meaning of import substitution. Explain how import substitution can protect the domestic industries. (4)
22. Briefly discuss the progress of Indian economy during the first seven plans in the agriculture, industrial and trade sector? (6)
23. "Commercial bank create money in the economy." Explain. (6)



**ST. PBN PUBLIC SCHOOL**  
**UNIT TEST - I**  
**SAMPLE PAPER**  
**CLASS – XII**  
**SUBJECT – ENGLISH**

**TIME – 2 HRS**

**MM. 50**

**GENERAL INSTRUCTIONS:**

1. All questions are compulsory.
2. Your answer should be to the point, and strictly adhere to the prescribed word limit.

**SECTION – A (READING)**

**(20M)**

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

1. The novel corona virus has given rise to a global pandemic that has destabilized most institutional settings. While we live in times when humankind possesses the most advanced science and technology, a virus invisible to the naked eye has massively disrupted our lives, economies, healthcare, and education systems worldwide.
2. Given the corona virus's current situation, some households have also had time to introspect on gender roles and stereotypes. For instance, women are expected to carry out household chores like cooking, cleaning, and looking after the family. With men sharing household chores responsibilities during the lockdown period, it gives hope that they will realize the burden that women have been bearing and will continue sharing such responsibilities.
3. This tough period also gave people some time to reflect on the importance of keeping themselves fit. With sufficient time in hand, people started investing their time learning new ways to exercise. Those who never exercised before, giving excuses of busy lives, too developed some new habits of Yoga, Pranayam and exercises during the lockdown period. These new habits and people's increased focus on their health, wellness and immunity will surely change the way we lead our lives even in future.
4. The nature too healed itself during the lockdown period. Restricted human movement led to better air quality, cleaner water bodies and joyful wildlife movements. The human beings, we hope, reflected during this time, how some of their unconscious activities cause disruption in nature and worked out ways to adopt environmental-friendly options for their activities in future.

5. This situation also affected the education sector to a great extent. It has forced us to shift from offline to online mode of teaching-learning process, almost immediately without prior preparation. Is it giving us a peek into the reality ahead? Technology-enabled teaching is definitely the future we are looking towards, but it is important to identify key challenges for students and teachers in the current scenario. Once identified, academic leadership and the government can address these through innovations in the focused areas to minimise the effect of pandemic on the education of the students.

6. The current scenario has also affected our economies to the extent wherein many businessmen had to bear heavy losses in their businesses. The governments and individuals need to take actions to mitigate risk and minimize transmission while maintaining social and economic activities. However, relaxed control measures, declining risk perception and the understandable desire to return to normalcy have led to reduced protective behavior and more social and workplace interactions, often in confined, close-contact settings, where the virus spreads really fast.

7. It is our responsibility that we take all necessary precautions through mask-wearing, physical distancing, hand hygiene as part of daily life. It is highly important to make these new behavior part of our everyday habits. Traveling to new places, casual café visits with a large bunch of friends, spending our weekends in shopping, window-shopping and casual strolls, large gatherings in birthday parties and other celebrations; will require some modifications and patience to fit into “New Normal” keeping all the safety norms in mind.

8. We are sure that regular communication from authorities, improved understanding of individual responsibility and, subsequently, a greater willingness to adopt infection prevention practices can be a stepping stone to a “new future”.

**On the basis of your understanding of the passage, answer ANY TEN questions from the twelve that follow. (1x10=10)**

1. The outbreak of COVID-19 is called a pandemic because-

- (a) it has spread across the globe.
- (b) it has spread across India
- (c) it is invisible to naked eye
- (d) it has disrupted many institutional settings

2. According to the passage the lockdown period made people introspect on gender roles and stereotypes because –

- (a) Women started handling all the household responsibilities alone
- (b) Men started handling all the household responsibilities alone
- (c) People talked about gender stereotypes during lockdown period
- (d) Men started sharing responsibilities related to household chores

3. Choose the option that is NOT TRUE:

People, who never exercised before, started exercising during the lockdown period because-

- (a) they had sufficient time in hand
- (b) exercise was the only way to treat people from the novel corona virus.
- (c) people learnt new ways to exercise their body.
- (d) people understood the importance of health and wellness in the face of the pandemic

4. A positive change was seen in nature during lockdown period in terms of cleaner air and water bodies because \_\_\_\_\_

- (a) there was less human movement due to lockdown
- (b) the virus helped in cleaning air and water
- (c) the government made extra efforts to clean air and water
- (d) People got together to clean water bodies.

5. How did schools continued educating students during the pandemic?

- (a) Through offline mode of teaching
- (b) Through online mode of teaching
- (c) By calling students to school on weekly basis
- (d) Students were asked to study at home themselves.

6. Which of the following has NOT led to reduced protective behaviours amongst people?

- (a) relaxed control measures
- (b) declining risk perception
- (c) physical distancing
- (d) understandable desire to return to normalcy

7. Which of the following is OPPOSITE in meaning to the word 'mitigate' as used in the passage?

- (a) lessen
- (b) reduce
- (c) aggravate
- (d) weaken

8. Which of the following is NOT TRUE in the context of COVID Appropriate Behavior?

- (a) Wearing Mask
- (b) Being in crowded places
- (c) Washing hands
- (d) Maintaining physical distancing

9. The phrase "stepping stone" refers to:

- (a) Stones and pebbles lying on the road
- (b) Something used as a way to progress
- (c) The destination of our journey
- (d) Blocks and problems in your path

10. Which of the following statements is NOT TRUE in the context of the passage?

- (a) People started introspecting on gender roles and stereotypes.
- (b) People started realising the importance of keeping themselves fit.

(c) There was a boom in the economy.

(d) School started following Technology-enabled online teaching

**Q2.** You are the President of RWA Sector-17 Gurugram , the election of the office bearers of the association will be held on 28<sup>th</sup> June 2019 at community centre. Draft a notice inviting all members to take part in the election, secretary and treasurer and other posts for a new 3 year term. words limit 50. (5M)

**Q3.** The enforcement of strict discipline in schools and colleges has become a matter of great concern. As Madhur/Madhuri , write an article in 150-200 words about the problems and your views on punishment as a corrective measure. (10M)

**Q5. Read the extract given below and answer the questions that follow: (1x5=5M)**

But after the airports  
security check, standing a few yards  
away, I looked again at her, wan, pale  
as a winters moon and felt that old  
familiar ache, my childhoods fear,  
but all I said was see you soon,  
Amma,

1. Why did the poet compare her mother's face to a late winter's moon?
2. Name the poetic device in the above passage.
3. Name the Poem and the Poet.
4. Why does the poet say 'see you soon Amma?'
5. What was poet's childhood fear?

**Q6. Read the passage given below and answer the questions that follow: (1x5=5M)**

Tiny vestiges of the old terror would return. But now I could frown and say to that terror, "Trying to scare me, eh? Well, here's to you! Look!" And off I'd go for another length of the pool. This went on until July. But I was still not satisfied. I was not sure that all the terror had left. So, I went to Lake Wentworth in New Hampshire, dived off a dock at Triggs Island, and swam two miles across the lake to Stamp Act Island. I swam the crawl, breast stroke, side stroke, and back stroke. Only once did the terror return. When I was in the middle of the lake, I put my face under and saw nothing but bottomless water. The old sensation returned in miniature.

1. Why did Douglas go to swim at Lake Wentworth?
2. What was the reason for the 'return' of terror?
3. Douglas mentions that the old sensation returned in miniature. What does he mean?
4. How did Douglas handle the 'old sensation'?
5. Name the chapter of the above extract and the writer.

**Q7. Answer the following questions in 30 – 40 words. (Any Five) (2x5=10m)**

1. What did Franz find much more tempting than the rule of participles? What did Franz do?
2. How is Mukesh's attitude to his situation different from that of his family?
3. How did the instructor make a swimmer out of Douglas?
4. Do you think that the third level was a medium of escape for Charley? Why?
5. What is the situation of the slum children? How can it be improved?
6. What picture of the slum children is depicted in the poem?

**Q8. Answer the following question in 100 – 120 words. (5x1=5m)**

'Garbage to them is gold'. How do rag pickers of Seemapuri survive? Explain.

**OR**

Roosevelt said "All we have to fear is fear". Do you agree? Take evidence from Deep Water and express your views in 100 – 125 words.



**St. PBN Public School**  
**UNIT TEST – I**  
**CLASS – XII**  
**SUBJECT – MATHEMATICS**  
**SAMPLE PAPER**

**TIME: 3 Hrs**

**M.M.50**

**General Instructions:**

- Section A consists of 10 questions of 1 mark each.
- Section B consists of 3 questions of 2 marks each.
- Section C consists of 4 questions of 4 marks each.
- Section D consists of 3 questions of 6 marks each.

**SECTION – A**

1. Let  $f: \mathbb{R} \rightarrow \mathbb{R}$  be defined as  $f(x) = x^2$ . Choose the correct answer.  
(i)  $f$  is one-one onto (iii)  $f$  is one-one but not onto  
(ii)  $f$  is many-one onto (iv)  $f$  is neither one-one nor onto
2. The number of all possible matrices of order  $3 \times 3$  with each entry 1 or 2 is:  
(i) 27 (iii) 81  
(ii) 18 (iv) 512
3.  $\sin\left(\frac{\pi}{3} - \sin^{-1}\left(-\frac{1}{2}\right)\right)$  is equal to  
(i) 1 (iii)  $\frac{1}{3}$   
(ii)  $\frac{1}{2}$  (iv)  $\frac{1}{4}$
4. Let  $A$  be a square matrix of order  $3 \times 3$ , then  $|kA|$  is equal to  
(i)  $k|A|$  (iii)  $k^3|A|$   
(ii)  $k^2|A|$  (iv)  $3k|A|$
5. If the matrix  $A$  is both symmetric and skew symmetric, then  
(i)  $A$  is diagonal matrix (iii)  $A$  is a square matrix  
(ii)  $A$  is a zero matrix (iv) None of these
6. Find the value of  $\cos^{-1}\frac{1}{2} + 2\sin^{-1}\frac{1}{2}$ .
7. Evaluate:  $\sin(\cos^{-1}\frac{1}{2})$ .
8. Find  $P^{-1}$ , if it exists, given  $P = \begin{bmatrix} 10 & -2 \\ -5 & 1 \end{bmatrix}$ .
9. Find the value of  $x$  from the matrix  $\begin{bmatrix} 2x - y & 5 \\ 3 & y \end{bmatrix} = \begin{bmatrix} 6 & 5 \\ 3 & -2 \end{bmatrix}$ . ?
10. Show that the Modulus function  $f: \mathbb{R} \rightarrow \mathbb{R}$ , given by  $f(x) = |x|$  is neither one-one

### SECTION – B

11. If  $f: \mathbb{R} \rightarrow \mathbb{R}$  given by  $f(x) = 4x+3$ . Show that  $f$  is invertible. Find the inverse of  $f$ .
12. Using determinants find the area of a triangle whose vertices are  $(1,4)$ ,  $(2,-3)$ ,  $(-5,-3)$
13. If  $A = \begin{bmatrix} -2 \\ 4 \\ 5 \end{bmatrix}$ ,  $B = \begin{bmatrix} 1 & 3 & -6 \end{bmatrix}$ , verify that  $(AB)' = B'A'$ .

### SECTION – C

14. Express the following matrix as the sum of symmetric and a skew symmetric matrix.

$$\begin{bmatrix} 3 & 5 \\ 1 & -1 \end{bmatrix}$$

15. If  $A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$ , show that  $A^2 - 5A + 7I = 0$ . Hence find  $A^{-1}$ .
16. Obtain the inverse of the following matrix

$$A = \begin{bmatrix} 0 & 1 & 2 \\ 1 & 2 & 3 \\ 3 & 1 & 1 \end{bmatrix}$$

17. Use product  $\begin{bmatrix} 1 & -1 & 2 \\ 0 & 2 & -3 \\ 3 & -2 & 4 \end{bmatrix} \begin{bmatrix} -2 & 0 & 1 \\ 9 & 2 & -3 \\ 6 & 1 & -2 \end{bmatrix}$  to solve the system of equations

$$x - y + 2z = 1$$

$$2y - 3z = 1$$

$$3x - 2y + 4z = 2$$

### SECTION – D

18. Solve the following system of equations by matrix method.

$$3x - 2y + 3z = 8$$

$$2x + y - z = 1$$

$$4x - 3y + 2z = 4$$

19. If  $A = \begin{bmatrix} \cos x & \sin x \\ -\sin x & \cos x \end{bmatrix}$ ;

$$\text{Prove that: } A^n = \begin{bmatrix} \cos nx & \sin nx \\ -\sin nx & \cos nx \end{bmatrix}, n \in \mathbb{N}.$$

20. Show that each of the relation  $R$  in the set  $A = \{x \in \mathbb{Z} : 0 \leq x \leq 12\}$  given by

- (i)  $R = \{(a, b) : |a - b| \text{ is a multiple of } 4\}$
- (ii)  $R = \{(a, b) : a = b\}$  is an equivalence Relation.



**St. PBN PUBLIC SCHOOL**  
**UNIT TEST – I**  
**CLASS – XII**  
**ACCOUNTANCY**  
**SAMPLE PAPER**

**TIME: 2HR.**

**MM: 50**

**General Instructions:**

- Each question carries marks indicated against it.
- Show working notes clearly

1. The relation of partner with the firm is that of:

- (a) An Owner
- (b) An Agent
- (c) An Owner and an Agent
- (d) Manager (1)

2. State the ratio in which the old partners share the amount of cash brought in by the new partner as premium for goodwill. (1)

3. Give the formula for calculating Gaining Ratio of a partner in partnership firm. (1)

4. A and B are partners in a firm sharing profits and losses in the ratio of 3:2. A new partner C is admitted. A surrenders  $\frac{1}{15}$ <sup>th</sup> share of his profit in favour of C and B surrenders  $\frac{2}{15}$ <sup>th</sup> of his share in favour of C. The new ratio will be:

- (a) 8 : 4 : 3
- (b) 42 : 26 : 7
- (c) 4 : 8 : 3
- (d) 26 : 42 : 7 (1)

5. State whether the statement is True or False (1)

Average Profit-Normal Profit= Super Profit.

6. In the absence of a partnership deed, the allowable rate of interest on partner's loan account will be:

- (a) 6% Simple Interest
- (b) 6% p.a. Simple Interest
- (c) 12% Simple Interest
- (d) 12% Compounded Annually (1)

7. State whether the statement is True or False (1)

Increase in the value of liabilities is loss on revaluation.

8. When there is change in profit sharing ratio amongst existing partners, should the assets and liabilities be revalued? (1)

9. Consent of \_\_\_\_\_ partners is required for the admission of a new partner. (1)

10. Ajay is a partner in a firm. He withdrew Rs. 2,000 per month on the last day of every month during the year ended 31<sup>st</sup> March, 2021. If interest on drawings is charged @ 9% p.a. the interest charged will be:

- (a) Rs. 990
- (b) Rs. 1,080
- (c) Rs. 1,170
- (d) Rs. 2,160 (1)

11. On April 1<sup>st</sup> 2020, an existing firm had assets of Rs. 5,00,000 including cash of Rs. 20,000. The firm had a General Reserve of Rs. 90,000, partner's capital accounts showed a balance of Rs. 3,80,000 and creditors amounted to Rs. 30,000. If the normal rate of return is 20% and the goodwill of the firm is valued at Rs. 64,000 at 4year's purchase of super profit, find the average profits of the firm. (3)

12. On 1-4-2020, 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% per annum. During the year ended 31.3.2021, the firm earned a profit of Rs. 2,00,000.

Prepare Profit and Loss Appropriation Account of Brij and Nandan for the year ended 31.3.2021. (3)

13. X and Y are partners sharing profit and losses in the ratio 2 : 1. They admit Z into partnership with 1/4<sup>th</sup> share in profits which he acquires equally from X and Y. Z bring in Rs. 1,65,000 as capital and Rs. 30,000 as goodwill in cash.

Pass entries and calculate new profit sharing ratios. (3)

14. A, B and C are partners sharing profits and losses in the ratio of 1: 2 : 3. They have omitted interest on capital @ 8% p.a. for two years ended 31<sup>st</sup> March, 2021. Their fixed capitals were Rs. 4,00,000, Rs. 6,00,000 and Rs. 8,00,000 respectively. Pass the necessary adjusting entry. (3)

15. A, B, C and D are partners in firm sharing profits and losses in the ratio of 2:2:1:1. They decided to share future profits and losses in the ratio 3:2:2:3. For this purpose goodwill of the firm valued at Rs. 1,50,000. There was also a reserve of Rs. 60,000 in the books of the firm.

Find out sacrifice ratio and gaining ratio and pass necessary journal entry assuming that reserve is not to be distributed. (4)

16. Read the following text and answer the given questions: (4)

A and B are partners having fixed capitals of Rs. 3,00,000 and Rs. 2,00,000 on 1<sup>st</sup> April 2020. They are allowed interest on capitals @ 8% p.a. and are charged interest on drawings @ 10% p.a.

During the year, A withdrew Rs. 5,000 per month in the beginning of every month, whereas B withdrew Rs. 15,000 per quarter at the end of every quarter.

The profits for the year ended 31<sup>st</sup> March, 2021, before the above mentioned adjustments were Rs. 1,34,500.

(i) Interest on Capital will be recorded

- (a) On the Credit side of Capital Accounts
- (b) On the Credit side of Profit & Loss Appropriation Account
- (c) On the Credit side of Current Accounts
- (d) On the Debit side of Current Accounts

(ii) Interest on Drawings will amount to:

- (a) A Rs. 3,250 and B Rs. 2,750
- (b) A Rs. 3,750 and B Rs. 2,250
- (c) A Rs. 3,250 and B Rs. 3,750
- (d) A Rs. 3,250 and B Rs. 2,250

(iii) Share of Profit will be:

- (a) A Rs. 60,000 and B Rs. 40,000
- (b) A Rs. 50,000 and B Rs. 50,000
- (c) A Rs. 50,250 and B Rs. 50,250
- (d) A Rs. 60,300 and B Rs. 40,200

(iv) Balance of Current Accounts will be:

- (a) A Rs. 20,750(Cr.) and B Rs. 6,250(Dr.)
- (b) A Rs. 20,750(Dr.) and B Rs. 6,250(Cr.)
- (c) A Rs. 10,750(Cr.) and B Rs. 3,750(Cr.)
- (d) A Rs. 10,750(Dr.) and B Rs. 3,750(Dr.)

17. A, B and C were partners. Their capitals were Rs. 30,000; Rs. 20,000 and Rs. 10,000 respectively on 1<sup>st</sup> April, 2021. According to the partnership deed they were entitled to an interest on capital at 5% p.a. In addition B was also entitled to draw a salary of Rs.500 per month. C was entitled to a commission of 5% on the profits after charging the interest on

capital, but before charging the salary payable to B. The net profits for the year ended 31<sup>st</sup> March, 2022 were Rs. 30,000, distributed in the ratio of their capitals without providing for any of the above adjustments. The profits were to be shared in the ratio of 2:2:1. Pass the necessary adjustment entry showing the workings clearly. (6)

18. A and B were partners in a firm sharing profits in the ratio of 4:1. They admitted C as a new partner on 1-3-2022 for 1/5<sup>th</sup> share. It was decided that A, B and C will share future profits in the ratio of 5 : 3 : 2. C brought Rs. 20,000 in cash and machinery worth Rs. 60,000 for his share of profit as premium for goodwill. Showing your calculations clearly, pass necessary journal entries in the books of the firm. (6)

19. X and Y are partners in a firm sharing profits and losses in the ratio of 5:3. On 31<sup>st</sup> March, 2022, their Balance Sheet was as under:

Liabilities	Rs.	Assets	Rs.
Capitals:		Bank	29,000
X                   2, 60,000		Debtors	1,80,000
Y <u>1,35,000</u>	3,95,000	Stock	1,25,000
Workmen's Compensation Res.	40,000	Premises	1,50,000
Provident Fund	15,000	Advertisement	
Creditors	50,000	Expenses	16,000
	5,00,000		5,00,000

On 1 April, 2022, Z is admitted as a partner. X surrenders 1/4<sup>th</sup> of his share and Y 1/3<sup>rd</sup> of his share in favour of Z. Goodwill is valued at Rs. 1,60,000. Z brings in only 2/5<sup>th</sup> of his share of goodwill in cash and Rs. 1,50,000 as his capital. Following terms are agreed upon:

- (i) Premises is to be increased to Rs. 2,00,000 and stock by Rs. 5,000.
- (ii) Creditors proved at Rs. 60,000, one bill for goods purchased having been omitted from the books.
- (iii) Outstanding rent amounted to Rs. 12,000 and prepaid salaries Rs. 2,000.
- (iv) Liability on account of provident fund was only Rs. 10,000
- (v) Liability for Workmen's Compensation Claim was Rs. 16,000.

Prepare Revaluation A/c, Capital A/cs and the opening Balance Sheet. Also calculate the new profit sharing ratios. (8)