

# Half Yearly Sample paper XI 2020-21

## Computer Science (Objective)

**Time : 1.5 hrs.**

**M. Marks : 50**

### General Instructions

Instructions:

All the questions are compulsory.

Read the questions carefully before attempting.

Q.no. 1 to 20 are very short answer questions (objective type) carry 1 mark each.

Q.no. 21 to 35 are short answer questions (objective type) and carry 2 marks each.

### 1. Multiple Choice Questions:

1.)What is output for –

$2 * 2 **3$

A - 12

B - 64

C - 16

D - 36

2.)Which can be an Identifier among them in Python?

A - 1abc

B - \$12a

C - xy1

D - @python

3.) How can we swap two numbers  $a = 10$ ,  $b = 20$  in python without using third variable?

1. A -  $a = b$   
 $b = a$
2. B -  $a, b = b, a$
3. C - both a & b
4. D -  $b = a$   
 $a = b$

4.) Is Python case sensitive when dealing with identifiers?

- a) yes
- b) no
- c) machine dependent
- d) none of the mentioned

5.) All keywords in Python are in \_\_\_\_\_

- a) lower case
- b) UPPER CASE
- c) Capitalized
- d) None of the mentioned

6.) What is the result of `cmp(3, 1)`?

- a) 1
- b) 0
- c) True
- d) False

7.) Evaluate the expression given below if  $A = 16$  and  $B = 15$ .

$A \% B // A$

- a) 0.0
- b) 0
- c) 1.0
- d) 1

8.) What will be the output of the following Python code?

```
>>>t = (1, 2, 4, 3, 8, 9)
>>>[t[i] for i in range(0, len(t), 2)]
```

a) [2, 3, 9]  
b) [1, 2, 4, 3, 8, 9]  
c) [1, 4, 8]  
d) (1, 4, 8)

9.) What is the base of decimal number system?

- a) 8
- b) 10
- c) 2
- d) 16

10.) Single line comment in Python begin with .....symbol.

- a) %
- b) "
- c) '''
- d) #

11.) Which is the correct operator for power(xy)?

- a) X<sup>y</sup>
- b) X\*\*y
- c) X^^y
- d) None of the mentioned

12.) The expression Int(x) implies that the variable x is converted to integer.

- a) True
- b) False

13.) Which of the following is not a complex number?

- a)  $k = 2 + 3j$
- b)  $k = \text{complex}(2, 3)$
- c)  $k = 2 + 3I$
- d)  $k = 2 + 3J$

14.) What will be the output of the following Python statement?

```
>>>"a"+"bc"
```

a) a  
b) bc  
c) bca

d) abc

15.) Which method removes all the trailing whitespaces from the right of the string

- a.) Tolower()
- b.) Upper()
- c.) Lstrip()
- d.) Rstrip()

16.) What arithmetic operators cannot be used with strings?

- a) +
- b) \*
- c) -
- d) All of the mentioned

17.) What will be the output of the following Python statement?

```
>>>print('new' 'line')
```

- a) Error
- b) Output equivalent to print 'new\nline'
- c) newline
- d) new line

18.) Which of the following commands will create a list?

- a) list1 = list()
- b) list1 = []
- c) list1 = list([1, 2, 3])
- d) all of the mentioned

19.) What will be the output of the following Python code snippet?

```
d = {"john":40, "peter":45}  
"john" in d
```

- a) True
- b) False
- c) None
- d) Error

20.) What will be the output of the following Python expression?

`round(4.576)`

- a) 4.5
- b) 5
- c) 4
- d) 4.6

21.) What will be the output of the following Python code snippet?

```
d = {"john":40, "peter":45}
```

```
print(list(d.keys()))
```

- a) ["john", "peter"]
- b) [{"john":40, "peter":45}]
- c) ("john", "peter")
- d) ("john":40, "peter":45)

22.) What will be the output of the following Python code?

```
x = 123
```

```
for i in x:
```

```
    print(i)
```

- a) 1 2 3
- b) 123
- c) error
- d) none of the mentioned

23.) What will be the output of the following Python function?

```
sum(2,4,6)
```

```
sum([1,2,3])
```

- a) Error, 6
- b) 12, Error
- c) 12, 6
- d) Error, Error

24.) What will be the output of the following Python code snippet?

```
print('abef'.replace('cd', '12'))
```

- a) abef
- b) 12
- c) error
- d) none of the mentioned

25.)What will be the output of the following Python function?

```
min(max(False,-3,-4), 2,7)
```

- a) 2
- b) False
- c) -3
- d) -4

26.)What will be the output of the following Python code snippet?

```
test = {1:'A', 2:'B', 3:'C'}  
test = {}  
print(len(test))
```

- a) 0
- b) None
- c) 3
- d) An exception is thrown

27.)What will be the output of the following Python code snippet?

```
for i in "":  
    print (i)
```

- a) None
- b) (nothing is printed)
- c) error
- d) none of the mentioned

28.)What does ~~~~~5 evaluate to?

- a) +5
- b) -11
- c) +11
- d) -5

29.)What will be the output of the following Python code snippet if  
x=1?

```
x<<2
```

- a) 8
- b) 1
- c) 2

d) 4

30.)What will be the output of the following Python expression if x=15 and y=12?

x & y

- a) b1101
- b) 0b1101
- c) 12
- d) 1101

31.)What will be the output of the following Python code?

```
print("abc DEF".capitalize())
```

- a) abc def
- b) ABC DEF
- c) Abc def
- d) Abc Def

32.)Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is list1 after list1.reverse()?

- a) [3, 4, 5, 20, 5, 25, 1, 3]
- b) [1, 3, 3, 4, 5, 5, 20, 25]
- c) [25, 20, 5, 5, 4, 3, 3, 1]
- d) [3, 1, 25, 5, 20, 5, 4, 3]

33.)What will be the output of the following Python code?

```
>>>"Welcome to Python".split()
```

- a) ["Welcome", "to", "Python"]
- b) ("Welcome", "to", "Python")
- c) {"Welcome", "to", "Python"}
- d) "Welcome", "to", "Python"

34.)Given a function that does not return any value, What value is thrown by default when executed in shell.

- a) int
- b) bool
- c) void
- d) None

35.) Which of the following will run without errors?

- a) `round(45.8)`
- b) `round(6352.898,2,5)`
- c) `round()`
- d) `round(7463.123,2,1)`

# Half Yearly Sample paper XI 2020-21

## Computer Science (Subjective)

**Time : 1.5 hrs.**

**M. Marks : 50**

### General Instructions

Instructions:

- a. All the questions are compulsory.
- b. Read the questions carefully before attempting.
- c. There are 16 questions in the question paper. All questions are compulsory.
- d. Very Short answer type questions, carrying 2 marks each. Answer to these questions should not exceed 20 to 30 words.
- e. Short answer type questions, carrying 3 marks each. Answer to these questions should not exceed 50 to 60 words.
- f. Long answer type questions, carrying 5 marks each. Answer to these questions should not exceed 80 to 90 words.

Subjective Type paper

Very Short Answer types questions:

1. Explain logic gates
2. What is Unicode?
3. What are the two parts of main memory?
4. Write difference between compiler and interpreter.
5. What is a function? How it is useful?
6. Explain creating lists in python using example.

### Short answer type questions:

1. What is Slicing in python? Explain using example.
2. WAP to check whether the string is a palindrome or not?
3. WAP that reads a line, then counts words and displays how many words are there in the line.
4. Write difference between pop() and remove() methods.
5. Explain the usage of the smart card reader.
6. Give examples of application software.

### Long answer type questions

1. Explain secondary storage devices with examples.
2. Verify the following using truth table:
  - a.  $X.X'=0$
  - b.  $X+1=1$
3. What are variable-naming conventions?
4. Explain different types of loops in python using example.

**HALF YEARLY EXAMINATION**  
**CLASS XI**  
**SUBJECT – POLITICAL SCIENCE (OBJECTIVE)(SAMPLE PAPER)**

**TIME: 1hr30 min**

**MM – 30**

Q1. The \_\_\_\_\_ right is considered as the heart and soul of the Indian Constitution.

Q2. There are \_\_\_\_\_ Fundamental Rights guaranteed by Indian Constitution to its citizens

Q3. By \_\_\_\_\_ we mean every person above the age of maturity (18 years and above) is entitled to enjoy the right to vote in elections irrespective of caste, creed, colour, race, language, religion, etc.

Q4. \_\_\_\_\_ is the head of government and head of country in the Presidential form of the government.

Q5. Identify the Fundamental right of the Indian Constitution under which All citizens are equal before law.

Q6. In which country, we find

i) Parliamentary Executive \_\_\_\_\_

ii) one party rule \_\_\_\_\_

Q7. The \_\_\_\_\_ represents the people of India.

Q8. The Governor of a state is appointed for \_\_\_\_\_ years.

Q9. \_\_\_\_\_ is the introductory part of the Constitution.

33

Q11 Select the correct option

The supreme commander of the defence forces in India is

i) Governor

ii) Prime Minister

iii) President

iv) Chief Minister

Q12. Select the correct option

It is issued by the higher court to a lower court on considering a case to go beyond its jurisdiction.

i) Quo Warranto

ii) Prohibition

iii) Mandamus

iv) Habeas corpus

Q13. \_\_\_\_\_ presides the meeting of Lok Sabha.

Q14. \_\_\_\_\_ is a statement in mutual negotiations.

Q15. Article \_\_\_\_ to \_\_\_\_\_ covers Right to Freedom.

Q16. Select the correct option-

Nelson Mandela belonged to which of the following countries-

- i) South Africa
- ii) Myanmar
- iii) Nepal
- iv) India

Q17. A political doctrine of equal rights for men and women is known as \_\_\_\_\_.

Q18. Right to livelihood is a \_\_\_\_\_ right.

Q19. The principles of justice promotes \_\_\_\_\_ for equals.

Q20. Identify the writer of the book "Republic".

Q21. Match the following-

3

- |                       |                 |
|-----------------------|-----------------|
| i) FPTP               | a) Rajya Sabha  |
| ii) PR                | b) Constituency |
| iii) Independent body | c) Lok ASabha   |

Q22. Match the following

4

- |                                       |                      |
|---------------------------------------|----------------------|
| i) Right to freedom                   | a) Article 23 and 24 |
| ii) Right against Exploitation        | b) Article 25-28     |
| iii) Right to Constitutional Remedies | c) Article 19-22     |
| iv) Right to freedom                  | d) Article 32        |

Q23. Match the following concepts of functions of the with appropriate instances 3

- |                      |  |
|----------------------|--|
| i) Financial powers  | a) To impeach against President and Judges |
| ii) Judicial power   | b) To elect the speaker                    |
| iii) Electoral power | c) To pass a budget                        |

**HALF YEARLY EXAMINATION  
CLASS XI**

**SUBJECT – POLITICAL SCIENCE (SUBJECTIVE)(SAMPLE PAPER)**

**TIME: 1hr30 min**

**MM – 70**

- |   |   |
|---|---|
| Q1. How can the President of India appointed? | 2 |
| Q2. What is a Writ?                           | 2 |
| Q3. What is Zero hour?                        | 2 |
| Q4. What is liberal view of Justice?          | 2 |
| Q5. What is Plato's concept of justice?       | 2 |

- Q6."Liberty means absence of restraints."Explain 4  
Q7. What is equality in its various dimensions? 4  
Q8. What is economic justice? Mention some features of economic justice. 4  
Q9. Mention the emergency powers of the President 4  
Q10. Read the passage given below carefully and answer the following questions:  
5

The superintendence, direction and control of the preparation of the electoral rolls for and conduct of, all elections to parliament and to the legislature of every state and of elections to the offices of President and Vice President held under this Constitution shall be vested in a commission.

- i) In which section of the Indian constitution was this statement said?
- ii) What has been called to this commission in Indian constitution?
- iii) What are the main functions of this commission?

- Q11. Read the passage given below carefully and answer the following questions:  
5

Economic inequality is gaining a strong ground in modern democracies. Unequal distribution of wealth and resources, low wages and denial of right to work has increased the gulf between the rich and the poor leading to glaring economic inequality. Economic equality does not mean that all people should get equal wages. But by providing adequate distribution of wealth and basic necessities to all, the government should provide adequate opportunities for reducing economic inequalities.

- a) What are the causes of economic equalities? 2
- b) How can we promote economic equality? Give examples from India.3

- Q12. Read the passage given below carefully and answer the following questions-  
(1+2+2)

The Indian Constitution is based on a delicate principle of limited separation of powers and checks and balances. This means that each organ of the government has a clear area of functioning. Thus, the Parliament is supreme in making laws and amending the Constitution, the executive is Supreme in implementing them while the judiciary is supreme in settling disputes and deciding whether the laws that have been made are in accordance with the provisions of the Constitution. Despite such clear cut division of power the conflict between the Parliament and Judiciary and executive and the Judiciary has remained a recurrent theme in Indian politics.

- Q1. What is the base of Indian constitution?
- Q2. What are the main functions of Parliament and executive?

Q3. Mention one important function of Judiciary.

Q13. Read the given passage and answer the following questions-(1+2+2)

Much before the constituent assembly finally came into being, the demand for such an assembly had already been made. This was echoed by Dr.Rajendra Prasad in his first address as the Chairman of the Constituent assembly of India on 9 December 1946.Rajendra Prasad quotes Mahatma Gandhi that swaraj would mean wishes of the people as expressed through their freely chosen representatives. He said “----- the idea of a Constituent Assembly had come to prevail largely as an article of faith in almost all politically minded classes in the country. 5

- a) When did the Constituent Assembly finally came into being?
- b) What did Dr. Ambedkar want in the Constitution?
- c) What is exactly in the Indian constitution?

Q14. How does Parliament control over executive. 6

OR

‘Rajya Sabha is less powerful than Lok Sabha’. Justify the statement

Q15.What are rights and why are they important? What are the bases on which claims to right can be made?

6

OR

Mention the steps taken by Constitution of India to ensure social justice.

Q16.Describe the powers and functions of the Prime Minister of India.

6

OR

How does the Election Commission of India ensure its independence?

Q17. “Political liberty cannot be imagined without economic liberty.”Analyse.

OR

Explain different kinds of liberty.

## Half Yearly Sample paper XI 2020-21

### Chemistry (Objective)

**Time : 1.5 hrs.**

**M. Marks : 50**

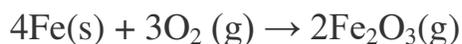
#### General Instructions

- (a) All questions are compulsory.
- (b) Q.no. 1 to 20 are very short answer questions (objective type) carry 1 mark each.
- (c) Q.no. 21 to 35 are short answer questions (objective type) and carry 2 marks each.

**1.** Which of the following statements about a compound is incorrect?

- (i) A molecule of a compound has atoms of different elements.
- (ii) A compound cannot be separated into its constituent elements by physical methods of separation.
- (iii) A compound retains the physical properties of its constituent elements.
- (iv) The ratio of atoms of different elements in a compound is fixed.

**2.** Which of the following statements is correct about the reaction given below:



- (i) Total mass of iron and oxygen in reactants = total mass of iron and oxygen in product therefore it follows law of conservation of mass.
- (ii) Total mass of reactants = total mass of product; therefore, law of multiple proportions is followed.
- (iii) Amount of  $\text{Fe}_2\text{O}_3$  can be increased by taking any one of the reactants (iron or oxygen) in excess.
- (iv) Amount of  $\text{Fe}_2\text{O}_3$  produced will decrease if the amount of any one of the reactants (iron or oxygen) is taken in excess.

**3.** The number of atoms present in one mole of an element is equal to Avogadro number. Which of the following element contains the greatest number of atoms?

- (i) 4g He
- (ii) 46g Na

(iii) 0.40g Ca

(iv) 12g He

4. Which of the following options does not represent ground state electronic configuration of an atom?

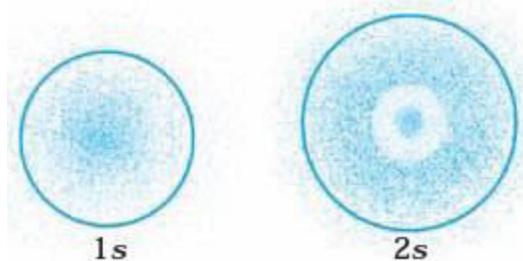
(i)  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^8 4s^2$

(ii)  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^9 4s^2$

(iii)  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^{10} 4s^1$

(iv)  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^5 4s^1$

5. The probability density plots of 1s and 2s orbitals are given in Fig. 2.1:



**Fig. 2.1**

The density of dots in a region represents the probability density of finding electrons in the region.

On the basis of above diagram which of the following statements is incorrect?

(i) 1s and 2s orbitals are spherical in shape.

(ii) The probability of finding the electron is maximum near the nucleus.

(iii) The probability of finding the electron at a given distance is equal in all directions.

(iv) The probability density of electrons for 2s orbital decreases uniformly as distance from the nucleus increases.

6. Two atoms are said to be isobars if.

(i) they have same atomic number but different mass number.

(ii) they have same number of electrons but different number of neutrons.

(iii) they have same number of neutrons but different number of electrons.

(iv) sum of the number of protons and neutrons is same but the number of protons is different.

7. The first ionisation enthalpies of Na, Mg, Al and Si are in the order:

(i)  $\text{Na} < \text{Mg} > \text{Al} < \text{Si}$

(ii)  $\text{Na} > \text{Mg} > \text{Al} > \text{Si}$

(iii)  $\text{Na} < \text{Mg} < \text{Al} < \text{Si}$

(iv)  $\text{Na} > \text{Mg} > \text{Al} < \text{Si}$

8. The statement that is not correct for periodic classification of elements is:

(i) The properties of elements are periodic function of their atomic numbers.

(ii) Non metallic elements are less in number than metallic elements.

(iii) For transition elements, the 3d-orbitals are filled with electrons after 3p-orbitals and before 4 s-orbitals.

(iv) The first ionisation enthalpies of elements generally increase with increase in atomic number as we go along a period.

9. In  $\text{PO}_4^{3-}$  ion the formal charge on the oxygen atom of P–O bond is

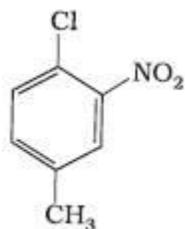
(i) + 1

(ii) – 1

(iii) – 0.75

(iv) + 0.75

10. The IUPAC name for



(i) 1-Chloro-2-nitro-4-methylbenzene

(ii) 1-Chloro-4-methyl-2-nitrobenzene

(iii) 2-Chloro-1-nitro-5-methylbenzene

(iv) m-Nitro-p-chlorotoluene

11. Electronegativity of carbon atoms depends upon their state of hybridisation. In which of the following compounds, the carbon marked with asterisk is most electronegative?

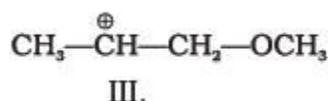
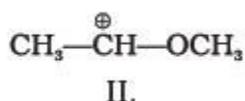
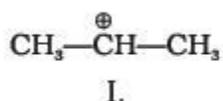
(i)  $\text{CH}_3 - \text{CH}_2 - * \text{CH}_3 - \text{CH}_3$

(ii)  $\text{CH}_3 - * \text{CH} = \text{CH} - \text{CH}_3$

(iii)  $\text{CH}_3 - \text{CH}_2 - \text{C} \equiv * \text{CH}$

(iv)  $\text{CH}_3 - \text{CH}_2 - \text{CH} = * \text{CH}_2$

12. What is the correct order of decreasing stability of the following cations.



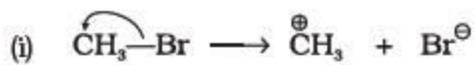
(i)  $\text{II} > \text{I} > \text{III}$

(ii)  $\text{II} > \text{III} > \text{I}$

(iii)  $\text{III} > \text{I} > \text{II}$

(iv)  $\text{I} > \text{II} > \text{III}$

13. Covalent bond can undergo fission in two different ways. The correct representation involving a heterolytic fission of  $\text{CH}_3\text{—Br}$  is



14. The IUPAC name for  $\text{CH}_3\text{—}\overset{\text{O}}{\parallel}\text{C}\text{—CH}_2\text{—CH}_2\text{—}\overset{\text{O}}{\parallel}\text{C}\text{—OH}$  is \_\_\_\_\_.

- (i) 1-hydroxypentane-1,4-dione
- (ii) 1,4-dioxopentanol
- (iii) 1-carboxybutan-3-one
- (iv) 4-oxopentanoic acid

15. Which of the following species has tetrahedral geometry?

- (i)  $\text{BH}_4^-$
- (ii)  $\text{NH}_2^-$
- (iii)  $\text{CO}_3^{2-}$
- (iv)  $\text{H}_3\text{O}^+$

16. If the electronic configuration of an element is  $1s^2 2s^2 2p^6 3s^2 3p^6 3d^2 4s^2$ , the four electrons involved in chemical bond formation will be \_\_\_\_\_.

- (i)  $3p^6$
- (ii)  $3p^6, 4s^2$
- (iii)  $3p^6, 3d^2$
- (iv)  $3d^2, 4s^2$

17. Which of the following angle corresponds to  $sp^2$  hybridisation?

- (i)  $90^\circ$
- (ii)  $120^\circ$
- (iii)  $180^\circ$
- (iv)  $109^\circ$

18. Polarity in a molecule and hence the dipole moment depends primarily on electronegativity of the constituent atoms and shape of a molecule. Which of the following has the highest dipole moment?

- (i)  $\text{CO}_2$
- (ii)  $\text{HI}$
- (iii)  $\text{H}_2\text{O}$

(iv)  $\text{SO}_2$

19. Consider the isoelectronic species,  $\text{Na}^+$ ,  $\text{Mg}^{2+}$ ,  $\text{F}^-$  and  $\text{O}^{2-}$ . The correct order of increasing length of their radii is

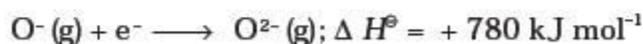
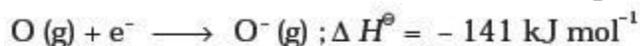
(i)  $\text{F}^- < \text{O}^{2-} < \text{Mg}^{2+} < \text{Na}^+$

(ii)  $\text{Mg}^{2+} < \text{Na}^+ < \text{F}^- < \text{O}^{2-}$

(iii)  $\text{O}^{2-} < \text{F}^- < \text{Na}^+ < \text{Mg}^{2+}$

(iv)  $\text{O}^{2-} < \text{F}^- < \text{Mg}^{2+} < \text{Na}^+$

20. The formation of the oxide ion,  $\text{O}^{2-}(\text{g})$ , from oxygen atom requires first an exothermic and then an endothermic step as shown below:



Thus process of formation of  $\text{O}^{2-}$  in gas phase is unfavourable even though  $\text{O}^{2-}$  is isoelectronic with neon. It is due to the fact that,

(i) oxygen is more electronegative.

(ii) addition of electron in oxygen results in larger size of the ion.

(iii) electron repulsion outweighs the stability gained by achieving noble gas configuration.

(iv)  $\text{O}^-$  ion has comparatively smaller size than oxygen atom.

21. What will be the molarity of a solution, which contains 5.85 g of  $\text{NaCl}(\text{s})$  per 500 mL?

(i) 4 mol  $\text{L}^{-1}$

(ii) 20 mol  $\text{L}^{-1}$

(iii) 0.2 mol  $\text{L}^{-1}$

(iv) 2 mol  $\text{L}^{-1}$

22. If 500 mL of a 5M solution is diluted to 1500 mL, what will be the molarity of the solution obtained?

(i) 1.5 M

(ii) 1.66 M

(iii) 0.017 M

(iv) 1.59 M

23. What is the mass percent of carbon in carbon dioxide?

(i) 0.034%

(ii) 27.27%

(iii) 3.4%

(iv) 28.7%

24. Number of angular nodes for 4d orbital is \_\_\_\_\_.

- (i) 4
- (ii) 3
- (iii) 2
- (iv) 1

25. Orbital angular momentum depends on \_\_\_\_\_.

- (i) 1
- (ii) n and l
- (iii) n and m
- (iv) m and s

26. Which of the following is the correct order of size of the given species:

- (i)  $I > I^- > I^+$
- (ii)  $I^+ > I^- > I$
- (iii)  $I > I^+ > I^-$
- (iv)  $I^- > I > I^+$

27. The types of hybrid orbitals of nitrogen in  $NO_2^+$ ,  $NO_3^-$  and  $NH_4^+$  respectively are expected to be

- (i) sp,  $sp^3$  and  $sp^2$
- (ii) sp,  $sp^2$  and  $sp^3$
- (iii)  $sp^2$ , sp and  $sp^3$
- (iv)  $sp^2$ ,  $sp^3$  and sp

28. Hydrogen bonds are formed in many compounds e.g.,  $H_2O$ , HF,  $NH_3$ . The boiling point of such compounds depends to a large extent on the strength of hydrogen bond and the number of hydrogen bonds. The correct decreasing order of the boiling points of above compounds is :

- (i)  $HF > H_2O > NH_3$
- (ii)  $H_2O > HF > NH_3$
- (iii)  $NH_3 > HF > H_2O$
- (iv)  $NH_3 > H_2O > HF$

29. Electrophiles are electron seeking species. Which of the following groups contain only electrophiles?

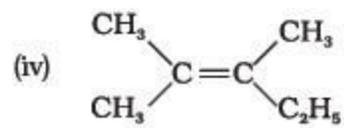
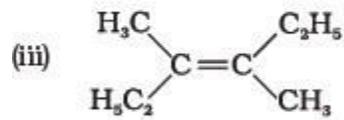
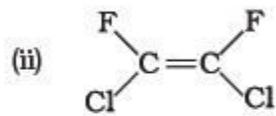
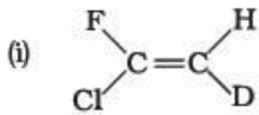
- (i)  $BF_3$ ,  $NH_3$ ,  $H_2O$
- (ii)  $AlCl_3$ ,  $SO_3$ ,  $NO_2^+$
- (iii)  $NO_2^+$ ,  $CH_3^+$ ,  $CH_3 - \overset{\cdot}{C} = O$
- (iv)  $C_2H_5^-$ ,  $\overset{\cdot}{C}_2H_5$ ,  $C_2H_5^+$

30. Arrange the following in decreasing order of their boiling points.

- (A) n-butane
- (B) 2-methylbutane



35. Which of the following will not show geometrical isomerism ?



## Half Yearly Sample paper XI 2020-21

### Chemistry (Subjective)

Time : 1.5 hrs.

M. Marks : 50

#### General Instructions

There are 18 questions in the question paper. All questions are compulsory.

(i) Very Short answer type questions, carrying 2 marks each. Answer to these questions should not exceed 20 to 30 words.

(ii) Short answer type questions, carrying 3 marks each. Answer to these questions should not exceed 50 to 60 words.

(iii) Long answer type questions, carrying 5 marks each. Answer to these questions should not exceed 80 to 90 words.

1. How many significant figures should be present in the answer of the following calculations?

$$\frac{2.5 \times 1.25 \times 3.5}{2.01}$$

2. What is the difference between molality and molarity?
3. Calculate the mass percent of calcium, phosphorus and oxygen in calcium phosphate  $\text{Ca}_3(\text{PO}_4)_2$ .
4. An atom having atomic mass number 13 has 7 neutrons. What is the atomic number of the atom?
5. Calculate the total number of angular nodes and radial nodes present in 3p orbital.
6. Write four characteristic properties of p-block elements.
7. The radius of  $\text{Na}^+$  cation is less than that of Na atom. Give reason.
8. Why do alkenes prefer to undergo electrophilic addition reaction while arenes prefer electrophilic substitution reactions? Explain.
9. How will you convert benzene into  
(i) p – nitrobromobenzene
10. Despite their – I effect, halogens are o- and p-directing in haloarenes. Why?
11. Wavelengths of different radiations are given below :  
 $\lambda(\text{A}) = 300 \text{ nm}$   $\lambda(\text{B}) = 300 \mu\text{m}$   $\lambda(\text{C}) = 3 \text{ nm}$   $\lambda(\text{D}) = 30 \text{ \AA}$   
Arrange these radiations in the increasing order of their energies.

12. Nitrogen has positive electron gain enthalpy whereas oxygen has negative. However, oxygen has lower ionisation enthalpy than nitrogen. Explain.

13. Arrange the elements N, P, O and S in the order of-

(i) increasing first ionisation enthalpy.

(ii) increasing non metallic character.

Give reason for the arrangement assigned.

14. Describe hybridisation in the case of  $\text{PCl}_5$  and  $\text{SF}_6$ . The axial bonds are longer as compared to equatorial bonds in  $\text{PCl}_5$ . Why?

15. Write structural formulae for compounds named as-

(a) 1-Bromoheptane

(b) 5-Bromoheptanoic acid

16. Briefly describe the valence bond theory of covalent bond formation by taking an example of hydrogen. How can you interpret energy changes taking place in the formation of dihydrogen?

17. The Balmer series in the hydrogen spectrum corresponds to the transition from  $n_1 = 2$  to  $n_2 = 3, 4, \dots$ . This series lies in the visible region. Calculate the wave number of line associated with the transition in Balmer series when the electron moves to  $n = 4$  orbit. ( $R_H = 109677 \text{ cm}^{-1}$ )

18. Calcium carbonate reacts with aqueous HCl to give  $\text{CaCl}_2$  and  $\text{CO}_2$  according to the reaction given below:



What mass of  $\text{CaCl}_2$  will be formed when 250 mL of 0.76 M HCl reacts with 1000 g of  $\text{CaCO}_3$ ? Name the limiting reagent. Calculate the number of moles of  $\text{CaCl}_2$  formed in the reaction.

**HALF YEARLY EXAMINATION  
CLASS- XI  
SUBJECT- ACCOUNTANCY  
SAMPLE PAPER**

**OBJECTIVE TYPE QUESTIONS**

**Time: 1:30Hrs**

**MM: 40**

**GENERAL INSTRUCTIONS:**

- Answer all questions.
- Each question carries marks indicated against it.

Q.1 What do you mean by debit note? (1)

Q.2 What shall be the amount of Capital if cash is Rs. 5,000; Furniture Rs. 12,000; Stock Rs. 30,000 and Creditors Rs. 6,000.

- |                |                |     |
|----------------|----------------|-----|
| (a) Rs. 53,000 | (b) Rs. 47,000 |     |
| (c) Rs. 41,000 | (d) Rs. 50,000 | (1) |

Q.3 Out of Revenue Reserve and Capital Reserve, which reserve is free for distribution as dividend? (1)

Q.4 Accrual concept is based on:

- |                       |                             |     |
|-----------------------|-----------------------------|-----|
| (a) Cost              | (b) Conservatism Convention |     |
| (c) Accounting Period | (d) Matching Concept        | (1) |

Q.5 A firm follows a practice of giving the figures of previous year along with the figures of current year. Now the Accountant of the firm wants to discontinue this practice. Do you justify this decision? (1)

Q.6 Purchase goods from Manoj of Rs. 20,000 at 20% trade discount. Posting will be made in Manoj account :

- |                              |     |
|------------------------------|-----|
| a) Rs. 20,000 on Debit side  |     |
| b) Rs. 16,000 on Debit side  |     |
| c) Rs. 20,000 on Credit side |     |
| d) Rs. 16,000 on Credit side | (1) |

Q.7 Name the two Central Taxes that have merged into GST. (1)

Q.8 State whether the statements is True or False: (1)

Materiality principle is an exception to the 'Full Disclosure Convention'.

Q.9 A firm earns a revenue of Rs. 21,000 and the expenses to earn this revenue are Rs. 15,000. Calculate its income. (1)

Q.10 State whether the statements is True or False:  
Trial Balance is a part of the Ledger. (1)

Q.11 Sale of Machinery by Suresh, a dealer in stationery to Sumit for Rs. 1,50,000 is recorded in  
(a) Purchases Book (b) Sales Book  
(c) Cash Book (d) Journal Proper (1)

Q.12 Give one difference between cash basis and accrual basis of accounting. (1)

Q.13 State whether the statement is True or False:  
Input credit of GST paid is not allowed on goods given as donation. (1)

Q.14 What are accounting standards? (1)

Q.15 Give one advantage of Ledger. (1)

Q.16 Give an example of a transaction due to which owner's capital and an asset will decrease. (1)

Q.17 For goods returned by customer \_\_\_\_\_ A/c is debited. (1)

Q.18 What is a Petty Cash Book? (1)

Q.19 Give two examples of Natural Personal Accounts. (1)

Q.20 Is a trial balance conclusive proof of the accuracy of the books of accounts? (1)

Q.21 What is the full form of IFRS? (1)

Q.22 Ledger is called a book of

- (a) Primary entry (b) Secondary entry  
(c) Final entry (d) None of these (1)

Q.23 'X' commenced business on 1<sup>st</sup> April, 2013 with a capital of Rs 6,00,000. On 31<sup>st</sup> March, 2014 his assets were worth Rs 8, 00,000 and liabilities Rs 50,000. Find out his closing capital.

- (a) Rs 7,50,000 (b) Rs 2,00,000  
(c) Rs 5,50,000 (d) None of these (1)

Q.24 Outstanding salary is a

- (a) Real Account. (b) Personal Account.  
(c) Nominal Account. (d) None of these. (1)

Q.25 Trial Balance is prepared from

- (a) Ledger. (b) Ledger and Journal Book.  
(c) ) Ledger and Cash Book (d) None of these. (1)

Q.26 Does cash basis of accounting violates GAAP? If Yes, how? (1)

Q. 27 State whether the statements is True or False:

If the Goods are sold or supplied from Gorakhpur, UP to Kolkata, West Bengal, it is Intra-State Supply. (1)

Q.28 Ledger Account is prepared from

- (a) Events (b) transactions  
(c) Journal (d) Any of the above (1)

Q.29 Which of the following is a business transaction?

- (a) Goods purchased on credit.  
(b) An employee being dismissed.  
(c) Proprietor purchasing a car for own use.  
(d) Sale of personal asset by the proprietor. (1)

Q.30 Provision is a

- (a) Specific Reserve. (b) General Reserve.  
(c) Capital Reserve. (d) None of these. (1)

Q.31 Which of the following is known as "Principal Book of Accounting"?

- (a) Journal (b) Ledger  
(c) Trial Balance (d) Balance Sheet (1)

- Q.32 Accrual Basis of Accounting recognises  
(a) Outstanding and Prepaid Expenses.  
(b) Accrued Incomes and Incomes received in advance.  
(c) Both (a) and (b).  
(d) None of the above. (1)
- Q. 33 State whether the statements is True or False:  
GST is not levied on Salaries and Wages. (1)
- Q.34 List two drawbacks of accounting standards. (1)
- Q. 35 Amount which the firm owes to outsiders is known as \_\_\_\_\_. (1)
- Q. 36 Give the full form of CGST. (1)
- Q. 37 State whether the statement is True or False:  
Accounting starts where Book keeping ends. (1)
- Q. 38 If accounting information is based on facts and it is verifiable by documents it has the quality of \_\_\_\_\_.  
(a) Relevance (b) Reliability  
(c) Understandability (d) Comparability (1)
- Q. 39 Goods worth Rs. 7,000 given away as charity would be credited to:  
(a) Sales A/c (b) Purchases A/c  
(c) Charity A/c (d) Trustee A/c (1)
- Q. 40 State whether the statement is True or False: (1)  
Creation of reserves is discretionary.

## **SUBJECTIVE TYPE QUESTIONS**

**Time: 1:30 Hrs**

**MM: 60**

### **GENERAL INSTRUCTIONS:**

- Answer all questions.
- All parts of the questions should be attempted at one pace.
- Each question carries marks indicated against it.

Q.1 In a financial year, Vinod had total sales of Rs. 7,40,000 out of which he received Rs. 5,60,000 in cash. He incurred an expense of Rs. 3,80,000, out of which Rs. 30,000 belongs to next year and Rs. 10,000 are still outstanding.

You are required to determine Vinod's income for the year if

- a) He follows Cash Basis of Accounting and
- b) He follows Accrual Basis of Accounting.

OR (3)

Accounting provides qualitative information about the financial transactions which are useful in making economic decisions. Accounting collects, records, classifies and summarizes the financial information which is communicated to its users. In the same context explain any three external users of accounting.

Q.2 Journalize the following transactions in the books of Anita Yadav of Delhi: 2018

2 March Purchased goods from Anupriya of Delhi for Rs. 2,50,000.  
(CGST @ 9% and SGST @ 9%)

15 March Sold goods to Priya of Punjab for Rs. 2,00,000. (IGST @ 12%)

25 March Goods sold to Priya for Rs. 60,000 at 5% trade discount and 10% cash discount and received 1/3<sup>rd</sup> in cash. (3)

Q.3 By taking Q.2 prepare Anupriya's A/C, Sale A/C, Output CGST A/c and Priya's A/C. (4)

Q.4 Explain the following terms:

- a) Goods & Service Tax
- b) Bad debt
- c) Drawing
- d) Non-Current Assets

OR (4)

'Accounting Standards have been evolved to improve the reliability and credibility of Financial Statements. Accounting Standards provide the solution in case of conflicts among various groups.' In the light of this statement, enumerate the objectives of accounting standards.

Q.5 Distinguish between Accountancy and Accounting by giving proper basis of difference? (4)

Q.6 Define Reserve. What is the importance of creating a Reserve? (4)

Q.7 State to which class of accounts does each of the following relate:

- a) Interest
  - b) Accrued Interest
  - c) Loan Account
  - d) Discount Allowed
  - e) Freehold Premises
  - f) Sales Account
  - g) Ram a debtor
  - h) Haryana Education Board
- (4)

Q.8 Enter the following transactions in the sales books of Ganesh & Co. of Jaipur (Rjasthan), who deals in furniture. Assume CGST @ 6% and SGST @ 6%:-

**2017**

- January 5** Sold to Gupta Furniture House, New Delhi: -  
120 Chairs @ Rs.2,500 per chair  
25 Tables @ Rs.8,000 per Table  
Less: 5%
- January 8** Sold to Raja Furniture House, Ahmedabad (Gujarat): -  
8 Almirahs @ Rs.15,000 each  
9 Steel Cabinets @ Rs.20,000 each  
Less: Trade Discount 10%
- January 12** Sold old Computer for Rs.1,500 to Mohan & Co. on credit.
- January 20** Sold to New Furniture House, Jaipur: -  
5 Sofa sets @ Rs. 20,000 each  
10 Tables @ Rs. 8,000 each
- January 25** Sold 4 Sofa sets @ Rs. 25,000 each to Varun & Co. for cash
- January 31** Purchaed from Ram Lal & Co. Jaipur on credit:-  
50 chairs @ Rs. 2,000 each
- (6)

Q.9 Rectify the following errors found in the books of X ltd. The trial balance showed Rs 250 as debit excess. The difference has been posted to the suspense account.

- a) The total of the debit side of Rent account has been cast in excess of Rs 375.
- b) The sales account has been total short by Rs 400.
- c) One item of purchase of Rs 25 has been posted from the Purchases book to the ledger as Rs 350.

- d) The sales return of Rs 200 from a Pari has not been posted to that account though the Pari's Account has been credited.
- e) A cheque of Rs 600 issued to the Suppliers Account (shown under Sundry Creditors) towards his dues has been wrongly debited to Purchases Account. (6)

Q.10 Show the accounting equation on the basis of the following transactions:

- (i) Raghu started business with Cash Rs 1,50,000.
- (ii) Purchased goods for Cash Rs 80,000 and on Credit Rs 40,000
- (iii) Goods costing Rs. 75,000 sold at a profit of  $33\frac{1}{3}\%$ . Half the payment received in cash.
- (iv) Goods costing Rs. 10,000 sold for Rs. 12,000 on credit.
- (v) Paid Rent Rs. 2,000 and Salary Rs. 4,000.
- (vi) Goods costing Rs. 20,000 sold for Rs. 18,500 for cash.

OR (6)

a) Mohan, the owner of a business receives an order for supply of goods worth Rs. 2,00,000. He has also received Rs. 25,000 against this order. Mohan wants to record it as a sale. Is Mohan correct in doing so?

b) During the year the company purchased ballpoint pens of Rs. 500. These were issued to employees and were still in use at the end of the year. Which accounting concept you would follow in dealing with this item?

c) A debtor who owes Rs. 2,00,000 to the company is rumoured to be declared insolvent. Will you disclose this information in the books?

Q.11 Fill in the missing information in the following journal entries:

JOURNAL

S.No.	Particulars	L. F.	Amount Dr. (Rs.)	Amount Cr. (Rs.)
a)	Dr.  To (Custom duty paid by cheque on import of a new machinery)		25,000	25,000

b)	Abbas & Sons	Dr.		_____	
	To				_____
	(Goods costing Rs. 50,000 sold above 10%; less 10% trade discount.)				
		Dr.			
c)	To			_____	
	(Interest charged on capital of Rs. 20,00,000 @ 9% p.a. for 7 months.)				
		Dr.			
d)	To			_____	
	(Goods costing Rs. 10,000 sale price Rs. 12,000 withdrawn for personal use.)				
		Dr.			
e)	To			_____	
	(Depreciation provided on Computers costing Rs. 1,50,000 @ 20% p.a. for 9 months.)				
f)	Bank A/c	Dr.		42,000	
		Dr.		_____	
	To				_____
	(60 Paise in the rupee received from official receiver of Gopal on his insolvency.)				
		Dr.			
g)		Dr.		_____	
	To				
	(Cash received from Gaurav and discount allowed @ 8%)				
h)		Dr.			
	To Bank A/c				
	(Machinery purchased for Rs. 40,000 and				

	spent Rs. 10,000 on its installation)			
--	---------------------------------------	--	--	--

OR

(8)

Prepare a Cash Book with appropriate number of columns from the following information for the month of December 2017 in the Books of Sharma:

**2017**

**December 1** Cash in Hand Rs.2,780; Bank Overdraft Rs.3,125.

**December 2** Cheque worth Rs.400 issued to the petty cashier.

**December 5** Rs.350 was paid to Hari & Sons for the supply of stationery on this day.

**December 7** Received a cheque worth Rs.600 from Pramod against sale of goods.

**December 10** Received Rs.1,200 for sale of goods.

**December 11** The cheque which was received from Pramod on 7<sup>th</sup> December, 2017 was endorsed in favour of Morgan together with Rs.1,400 in cash.

**December 15** Received Rs.950 from Sheila.

**December 23** Murarilal paid Rs.2,000 in cash and 3,000 in cheque after receiving a discount of Rs.200 for goods sold to him in November, 2017. The cheque was immediately deposited into the Bank.

**December 26** Bought goods worth Rs.1,700 from Rustom and paid by cheque after receiving a discount of Rs.170.

**December 30** Interest on overdraft Rs.50 was charged by the Bank.

**December 30** Cash in excess of Rs.1,000 was deposited into the Bank.

Q. 12 From the following ledger account balances extracted from the books of R.J. Gupta, prepare a Trial Balance as on 31<sup>st</sup> March, 2018:

<b>Purchases</b>	1,04,000	<b>Drawings</b>	7,950
<b>Sundry Debtors</b>	18,550	<b>Sundry Creditors</b>	8,300
<b>Premises</b>	62,000	<b>Returns Inward</b>	5,360
<b>Sales</b>	1,49,000	<b>Furniture</b>	15,600
<b>Return Outward</b>	8,900	<b>Cash in Hand</b>	390
<b>Rates &amp; Taxes</b>	780	<b>Capital</b>	85,000
<b>Cash at Bank</b>	1,560	<b>Factory Wages</b>	5,830
<b>Carriage Inwards</b>	650	<b>Carriage Outwards</b>	260
<b>Salaries</b>	3,900	<b>Rent Received</b>	2,990

<b>Stock (1<sup>st</sup> April,2017)</b>	25,000	<b>Insurance</b>	2,100
<b>Input IGST A/c</b>	5,000	<b>Bad Debts</b>	260
<b>Input CGST A/c</b>	2,500	<b>Output IGST A/c</b>	10,000
<b>Input SGST A/c</b>	2,500		

OR

(8)

Prepare a Trial Balance of Khanna Brothers from the following balances as on 31-03-2019:

	Rs.		Rs.
Capital 1-4-2018	90,000	Interest Received	2,000
Stock 1-4-2018	20,400	Investment	30,000
Sales	80,600	Furniture	15,000
Purchases Return	2,000	Loan Taken	20,400
Creditors	25,000	Carriage	4,000
Debtors	27,400	Stationery	3,000
Salary	16,600	Cash in hand	8,500
Depreciation	3,000	Bank (Cr.)	5,000
B/R	11,000	Bad debts	2,000
Sales Return	1,600	Purchases	60,000
Rent	6,000	Interest on Loan	3,000
Drawing	8,000	Discount Allowed	1,500
Commission Paid	4,000		

ST. PBN PUBLIC SCHOOL  
PHYSICAL EDUCATION XI 2020-2021  
HALF YEARLY SAMPLE PAPER

OBJECTIVE TYPE PAPER

1. What is the aim of Physical Education?

(1 Point)

- Physical development
- Growth and development
- Wholesome development of an individual
- Mental development

2. The major aim of physical education is to ensure a/an

(1 Point)

- All round development of the individual
- Complete removal of boredom of the class-room activity
- Programme of activity and sports for all
- Child's optimal physical development

3. How much financial assistance is provided to new talented players from various sports disciplines?

(1 Point)

- INR 6 lakh per annum for 4 years
- INR 3 lakh per annum for 5 years
- INR 5 lakh per annum for 8 years
- INR 8 lakh per annum for 2 years

4. Which out of the following courses is necessary to pursue a health related career in physical education?

(1 Point)

- Diploma in Yoga education
- Certified diploma after 12th class
- Diploma course in sports medicine
- All of the above

5. Which out of the following helps to modify one's behaviour towards progress?

(1 Point)

- science
- Education
- Technology
- Social development

6.The Olympic games were revived with the sole objective of

(1 Point)

- Creative creating Amity , understanding and brotherhood among Nation
- promoting games and sports among the masses
- Giving a new look to ancient sport
- Making children and youth more skillful

7.Olympic flag consists of

(1 Point)

- White background with no border and Olympic symbol in the centre
- White background with black border and Olympic symbol in the centre
- Yellow background with black border and Olympic symbol on the top right corner
- Grey background with no border and Olympic symbol in the centre

8.Which of the following represent the correct combination of colours of Olympic rings

(1 Point)

- Blue, yellow, black ,green,red
- Brown, blue ,yellow, black,red
- Purple ,green ,red ,pink, yellow
- Blue, yellow, brown, green, purple

9.Which country did Baron Pierre De coubertin -the father of modern olympic games -belongs to ?

(1 Point)

- Switzerland
- USA
- London
- France

10.Who was the founding president of Indian Olympic Association?

(1 Point)

- Dr AG noheren
- Sir Dorabji tata
- Pierre de coubertin
- Henri didon

11. Which Olympics marked the debut tour of Olympic torch relay?

(1 Point)

- Amsterdam 1928
- London 2012
- Mexico 1968
- Berlin 1936

12. Which out of these is not a sport in winter Olympics?

(1 Point)

- Skiing
- speed skating
- Long jump
- Snowboarding

13. According to historical records, the first ancient Olympic games can be traced back to

(1 Point)

- 770 BC
- 776 BC
- 774 BC
- 772 BC

14. The ancient Olympic games were initially

(1 Point)

- Three day event
- Two day event
- One day event
- Five day event

15. In 393 AD, which emperor banned Olympic games?

(1 Point)

- Theodosius
- Augustus

- Claudius
- Marcus Aurelius

16.The Paralympic Games is a major International  
(1 Point)

- Football tournament
- Cricket tournament
- baseball tournament
- Multi sport tournament

17. who started paralympic Games?  
(1 Point)

- Eunice kennedy shriver
- Sir Ludwig guttmann
- John f Kennedy
- M. Mahadeva

18.Which of the following is known as the ideal fitness?  
(1 Point)

- Physical fitness
- Wellness
- Mental fitness
- None of the above

19.What is the way of living of individuals,families and societies which is manifested in coping with their physical ,social ,psychological and economic environments known as?

(1 Point)

- Physical fitness
- Lifestyle
- Wellness
- None of the above

20.What is the primary cause of lifestyle diseases such as high blood pressure ,diabetes ,heart attack?

(1 Point)

- Poor eating habits
- Lack of exercise

- Sedentary lifestyle
- All of the above

21. competitions are helpful for the development of  
(1 Point)

- Social qualities
- Selection of players
- Sports skills
- All the above

22. Uber Cup is related to  
(1 Point)

- Table tennis
- Lawn tennis
- Badminton
- None of the above

23. Which one of the following components is not included in khelo India programme?

(1 Point)

- Play field development
- Talent Search and development
- Sports for women
- To organise cricket competitions

24. Which one of the following objectives is not the objective of physical education mentioned by H. Clarke?

(1 Point)

- Physical fitness
- Worthy use of leisure time
- Social efficiency
- Culture

25. Who is the president of International Olympic committee?

(1 Point)

- Antonio Samaranch
- Thomas Bach
- Robert Bach

None of these

26. Which one of the following is headquarters of IOC?

(1 Point)

Lausanne

New York

Bonn

Paris

27. What is the ability to perform same pattern of movement at a faster rate?

(1 Point)

Speed

Strength

Endurance

Flexibility

28. What is the ability of muscles and brain to work together without any unwanted movement?

(1 Point)

Static flexibility

Dynamic flexibility

Passive flexibility

Coordinative ability

29. What is the ability of an individual to leave physically, mentally, socially and emotionally balanced life?

(1 Point)

Physical fitness

Lifestyle

Wellness

All of the above

30. What is the ability to perform a cardiovascular exercise like running, aerobic exercise, or swimming, for an extended period of time called?

(1 Point)

Speed

Endurance

Strength

Flexibility

31. Which agency has accredited The Special Olympics Bharat program?

(1 Point)

- Special Olympics India
- Special olympic International
- National sports Federation
- Sports Authority of India

32. When was International co-coordinating committee sports for the disabled created?

(1 Point)

- 1974
- 1986
- 1982
- 1984

33. Which organisation is responsible for selecting athletes to represent India at the Paralympic Games?

(1 Point)

- International coordinating committee sports for the disabled
- Paralympic Committee of India
- National sports Federation
- Sports Authority of India

34. Which is the main governing body responsible for the organisation of deaflympics?

(1 Point)

- world deaf champions committee
- International committee of sports for the deaf
- International coordinator committee sports for the disabled
- National sports Federation

35. What should be the body fat percentage in women?

(1 Point)

- 5 to 10
- 10 to 15
- 15 to 20

20 to 25

36. Which is the component of Wellness in the following?

(1 Point)

- Nutritional Wellness
- Physical Wellness
- Social Wellness
- All of the above

37. Which one of the following is not a part of dynamic strength?

(1 Point)

- Maximum strength
- Strength endurance
- Explosive strength
- Static strength

38. Which one of the following is not an example of corrective asana?

(1 Point)

- Bhujangasana
- Padmasana
- Chakrasana
- Halasana

39. Which one of the following is not an element of ashtanga yoga ?

(1 Point)

- Yama
- Niyama
- Pratyahara
- Parmatma

40. Which one of the following is an example of advantages of yog Nindra?

(1 Point)

- Awakeness creativity
- Relaxes the mind
- Reduces the tension
- All of the above

41. Which one of the following is not the component of health related fitness?

(1 Point)

- Body composition
- Cardiovascular endurance
- flexibility
- Speed

42. In which year, the Indian Olympic Association was established?

(1 Point)

- 1925
- 1926
- 1927
- 1928

43. How many sports are included in summer Paralympic Games?

(1 Point)

- 12
- 15
- 20
- 22

44. What is the term used for sitting in a position that is firm, but relaxed for extended, or timeless periods?

(1 Point)

- Yama
- Niyama
- Asana
- Dhyana

45. Which term is used to describe alternative nostril breathing in Yoga?

(1 Point)

- Kapalbhata
- Sheetal Pranayama
- Anulom vilom
- Bhramari pranayama

46. How many years have been outlined in ashtanga yoga?

(1 Point)

- 4
- 2

- 5
- 4

47. Which stage of yoga is the union of individual's soul with the supreme soul?

(1 Point)

- Dhyana
- Swadhyana
- Samadhi
- Tapas

48. The concentration of mind on an impulse without any divergence is known as

(1 Point)

- Yoga
- Pranayama
- Vritti
- Meditation

49. Which yoga technique helps in cleaning the internal as well as external organs of the body?

(1 Point)

- Kriyas
- Pranayama
- Dhayana
- Naukasana

50. Which type of asanas can help in postural defects, corrects disturbed function of various systems, improper muscle tone?

(1 Point)

- Corrective Asanas
- Dhyanatamak asanas
- Relaxative asanas
- All of the above

ST. PBN PUBLIC SCHOOL  
PHYSICAL EDUCATION XI 2020-2021  
HALF YEARLY SAMPLE PAPER

SUBJECTIVE TYPE PAPER

Time-1:30 hour. MM:50 General instructions : (i) All questions are compulsory. (ii) Questions nos. 1 to 10 carry 3 marks each. Answer to each question should not exceed 80-100 words (iii) Questions nos. 11 to 14 carry 5 marks each. Answer to each question should not exceed 150-200 words.

1.What are the various competitions that are held at international level?

(3 Points)

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2.What is the importance of physical education?

(3 Points)

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3.Write briefly about the special olympic.

(3 Points)

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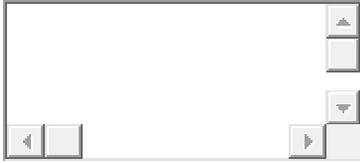
4.What are the Olympic symbols? Describe any one of them.

(3 Points)

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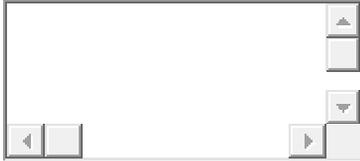
5.Write about the importance of Wellness.

(3 Points)



6. Write briefly about speed as a component of physical fitness.

(3 Points)



7. What are the aims and objectives of deaflympics?

(3 Points)



8. How a physiotherapist helps children with special needs?

(3 Points)



9. Write a short note on Samadhi.

(3 Points)



10. What is the procedure of padmasana and Shashankasana?

(3 Points)



11. Explain Paralympic movement in detail.

(5 Points)



12.What is meditation? What is the importance of meditation?

(5 Points)



13.What are the components of health related fitness? Explain.

(5 Points)



14.Explain in detail the career option in physical education.

(5 Points)

HALF YEARLY SAMPLE PAPER

CLASS XI

HISTORY

**Subjective Question Paper Part –I**

1. How was Western European society divided?
2. What was the duty of the serfs?
3. Discuss any four factors responsible for the decline of feudalism?
4. Mention a few reasons that were responsible for the emergence of the Renaissance?
5. Do you think that the Renaissance has started a new age?
6. Industrial Revolution with the demand for raw material and the market made the Nation more dependent on one another. How?
7. What were the relative advantages of canal and Railway transportation?
8. Which was the ancient town of Mesopotamia? Name it's capital also.
9. What do you know about Mari?
10. Who founded Ur & when?

**Objective Question Paper Part- II**

**An Early Library:**

In the iron age, the Assyrians of the north created an empire, at its height between 720 and 610 BCE, that stretched as far west as Egypt. The state economy was now a predatory one, extracting labor and tribute in the form of food, animals, metal and craft items from a vast subject population.

The great Assyrian kings, who had been immigrants, acknowledged the southern region, Babylonia, as the center of high culture and the last of them, Ashurbanipal

(668-627 BCE), collected a library at his capital, Nineveh in the north. He made great efforts to gather tablets on history, epics, omen literature, astrology, hymns and poems. He sent his scribes south to find old tablets. Because scribes in the south were trained to read and write in schools where they all had to copy tablets by the dozen, there were towns in Babylonia where huge collections of tablets were created and acquired fame. And although Sumerian ceased to be spoken after about 1800 BCE, it continued to be taught in schools, through vocabulary texts, sign lists, bilingual (Sumerian and Akkadian) tablets, etc. So even in 650 BCE, cuneiform tablets written as far back as 2000 BCE were intelligible – and Ashurbanipal's men knew where to look for early tablets or their copies.

Copies were made of important texts such as the Epic of Gilgamesh, the copier stating his name and writing the date. Some tablets ended with a reference to Ashurbanipal. I, Ashurbanipal, king of the universe, king of Assyria, on whom the gods bestowed vast intelligence, who could acquire the recondite details of scholarly erudition, I wrote down on tablets the wisdom of the gods ... And I checked and collated the tablets. I placed them for the future in the library of the temple of my god, Nabu, at Nineveh, for my life and the well-being of my soul, and to sustain the foundations of my royal throne.

More important, there was cataloguing: a basket of tablets would have a clay label that read: 'n number of tablets about exorcism, written by X'. Ashurbanipal's library had a total of some 1,000 texts, amounting to about 30,000 tablets, grouped according to subject.

### **Questions:**

**(i) Which type of state economy was prevalent at that time?**

**(ii) Who established a huge library at Nineveh?**

**(iii) (a) Name the place acknowledged as the center of high culture by Assyrian.**

**(b) Who helped Ashurbanipal to collect huge tablets of different literary texts and how?**

**(iv) How many texts were in Ashurbanipal's library?**

**(v) Describe the achievements of Ashurbanipal.**

### **Passage 2.**

A major difference between the two superpowers and their respective empires was that the Roman Empire was culturally much more diverse than that of Iran. The Parthians and later the Sasanians, the dynasties that ruled Iran in this period, ruled over a population that was largely Iranian. The Roman Empire, by contrast, was a mosaic of territories and cultures that were chiefly bound together by a common system of government. Many languages were spoken in the empire, but for the purposes of administration Latin and Greek were the most widely used, indeed the only languages.

The upper classes of the east spoke and wrote in Greek, those of the west in Latin, and the boundary between these broad language areas ran somewhere across the middle of the Mediterranean, between the African provinces of Tripolitania (which was Latin speaking) and Cyrenaica (Greek-speaking). All those who lived in the empire were subjects of a single ruler, the emperor, regardless of where they lived and what language they spoke.

### **Questions:**

**(i) How would you differentiate the Roman Empire from Iran?**

**(ii) Name two dynasties who ruled over Iran during this period.**

**(iii) Which empire was bound together by a common system of government and why?**

SAMPLE QUESTION PAPER  
BIOLOGY-12<sup>TH</sup>  
PART-A(OBJECTIVE)

Time - 1.5 hrs

MM-50

1- All questions are compulsory.

2-Multiple choice questions (MCQ) carrying two marks each.

1) The imperfect fungi which are decomposers of litter and help in mineral cycling belong to -

- a) Ascomycetes
- b) Deuteromycetes
- c) Basidiomycetes
- d) Phycomycetes

2) The structures that help some bacteria to attach to rocks and/or host tissues are :

- a) Holdfast
- b) Rhizoids
- c) Fimbriae
- d) Mesosomes

3) Choose the wrong statement

- a) Yeast is unicellular and useful in fermentation
- b) Penicillium is multicellular and produces antibiotics
- c) Neurospora is used in the study of biochemical genetics
- d) Morels and truffles are poisonous mushrooms

4) Which one of the following is wrong for fungi ?

- a) They are heterotrophic
- b) They are both unicellular and multicellular
- c) They are eukaryotic
- d) All fungi possess a purely cellulosic cell wall

5) Macro molecule chitin is

- a) Nitrogen containing polysaccharide
- b) Phosphorus containing polysaccharide
- c) Sulphur containing polysaccharide
- d) Simple polysaccharide

6) Zygotic meiosis is characteristic of

- a) Marchantia
- b) Fucus
- c) Funaria
- d) Chlamydomonas

- 7) Life cycle of Ectocarpus and Fucus respectively are
- Haplontic, Diplontic
  - Diplontic, Haplodiplontic
  - Haplodiplontic, Diplontic
  - Haplodiplontic, Haplontic
- 8) Select the mismatch :
- Pinus – Dioecious
  - Cycas – Dioecious
  - Salvinia – Heterosporous
  - Equisetum – Homosporous
- 9) An example of colonial alga is
- Chlorella
  - Volvox
  - Ulothrix
  - Spirogyra
- 10) Double fertilization is exhibited by
- Gymnosperms
  - Algae
  - Fungi
  - Angiosperms
- 11) Which among these is the correct combination of aquatic mammals?
- Seals, Dolphins, Sharks
  - Dolphins, Seals, Trygon
  - Whales, Dolphins, Seals
  - Trygon, Whales, Seals
- 12) In case of poriferans the spongocoel is lined with flagellated cells called :
- Ostia
  - Oscula
  - Choanocytes
  - Mesenchymal cells
- 13) Which of the following represents order of 'Horse'?
- Equidae
  - Perissodactyla
  - Caballus
  - Ferus
- 14) Choose the correct statement.
- All reptiles have a three-chambered heart.
  - All pisces have gills covered by an operculum.
  - All mammals are viviparous.

d) All cyclostomes do not possess jaws and paired fins.

15) Among the following edible fishes, which one is a marine fish having rich source of omega-3 fatty acids ?

- a) Mrigala
- b) Mackerel
- c) Mystus
- d) Mangur

16) Axile placentation is present in

- a) Argemone
- b) Dianthus
- c) Lemon
- d) Pea

17) Free-central placentation is found in :-

- a) Brassica
- b) Citrus
- c) Dianthus
- d) Argemone

18) Radial symmetry is found in the flowers of :-

- a) Pisum
- b) Cassia
- c) Brassica
- d) Trifolium

19) Which type of tissue correctly matches with its location ?

- a) Tissue: Smooth muscle; Location: Wall of intestine
- b) Tissue: Areolar tissue; Location: Tendons
- c) Tissue: Transitional epithelium ; Location: Tip nose
- d) Tissue: Cuboidal epithelium; Location: Lining of stomach

20) Choose the correctly matched pair

- a) Areolar tissue - Loose connective tissue
- b) Cartilage - Loose connective tissue
- c) Tendon - Specialized connective tissue
- d) Adipose tissue - Dense connective tissue

21) Which of the following cell organelles is responsible for extracting energy from carbohydrates to form ATP?

- a) Lysosome
- b) Ribosome
- c) Chloroplast
- d) Mitochondrion

22) A cell organelle containing hydrolytic enzymes is :-

- a) Ribosome
- b) Mesosome
- c) Lysosome
- d) Microsome

23) Which of the following biomolecules does have a phosphodiester bond ?

- a) Nucleic acids in a nucleotide
- b) Fatty acids in a diglyceride
- c) Monosaccharides in a polysaccharide
- d) Amino acids in a polypeptide

24) Fruit and leaf drop at early stages can be prevented by the application of

- a) Cytokinins
- b) Ethylene
- c) Auxins
- d) Gibberellic acid

25) You are given a tissue with its potential for differentiation in an artificial culture.

Which of the following pairs of hormones would you add to the medium to secure shoots as well as roots ?

- a) Auxin and abscisic acid
- b) Gibberellin and abscisic acid
- c) IAA and gibberellin
- d) Auxin and cytokinin

SAMPLE PAPER  
BIOLOGY-12<sup>TH</sup>  
PART-B (SUBJECTIVE)

Time allowed: 1.5 hrs

MM-50

General Instructions:

1. All questions are compulsory.
2. Short answer type I(1-5) questions of two marks each.
3. Short answer type II(6-10) questions of three marks each.
4. Long(11-15) answer type questions of five marks each.

- 1- Why is abscisic acid is also known as stress hormone?
- 2- Differentiate between
  - (a) Apocarpous and syncarpous ovary
- 3- State two economically important uses of:
  - (a) heterotrophic bacteria
- 4- What is the nature of cell-wall in diatoms?

- 5- If you are given a specimen, what are the steps that you would follow to classify it?
- 6- Define activation.
- 7- Explain kingdom monera?
- 8- What is difference between angiosperms and gymnosperms?
- 9- Describe the structure of the following with the help of labelled diagrams.
  - (i) Nucleus
  - (ii) Centrosome
  
- 10- List five main groups of natural plant growth regulators. Write a note on discovery, physiological functions and agricultural/horticultural applications of any one of them.
- 11- How useful is the study of the nature of body cavity and coelom in the classification of animals?
- 12- Explain family solanaceae?
- 13- Differentiate between the following:
  - (i) Red algae and brown algae
  - (ii) Homosporous and heterosporous pteridophytes
  - (iii) Liverworts and moss
  - (iv) Syngamy and triple fusion.
- 14- Describe various types of epithelial tissues with the help of labelled diagrams.
- 15- Name two cell-organelles that are double membrane bound. What are the characteristics of these two organelles? State their functions and draw labelled diagrams of both?

## St. PBN public School

### Sample Paper- Business Studies (Objective)

#### Class-XI

#### M.M: 10

1. Mention the name of 2E-commerce does not include:

- (a) A business's interactions with its suppliers
- (b) A business's interactions with its customers
- (c) Interactions among the various departments within the business
- (d) Interactions among the geographically dispersed units of the business. companies that perform DTH services in India. (1)

2. Expand RTGS and NEFT.(1)

3. Under which type of industry do oil refinery and sugar mills are classified?(1)

4. Mention the names of the systems that regulate the membership in Joint Hindu Family. (1)

5. In which occupation people get salary or wages in return for their work?(1)

- A. Employment
- B. Business
- C. Profession
- D. None of the above

6. Explain MIS.(1)

7. Goods are stored in : (1)

- (a) Warehouses
- (b) Keeping in open
- (c) Buildings
- (d) None of these

8. Which is biggest Retail Bank : (1)

- (a) SBI
- (b) HDFC
- (c) Post office
- (d) ICICI.

9. E-commerce does not include: (1)

- (a) A business's interactions with its suppliers
- (b) A business's interactions with its customers
- (c) Interactions among the various departments within the business
- (d) Interactions among the geographically dispersed units of the business.

10. State any one argument for social responsibility of business. (1)

## St. PBN public School

### Sample Paper- Business Studies (Subjective)

#### Class-XI

1. Bhuwan limited issues 5 lakh shares of Rs 10 each for public subscription. Application along with money was received for 4 lakh shares. Can company allot the shares? Explain.(3)
2. Mr. Rajiv took an insurance policy against his car and after 3 months he sold it to Mr. Kailash. The car was stolen from outside of Mr. Kailash house. Mr. Rajeev made a claim to insurance company. His claim was rejected on the ground that Mr. Rajiv was no longer owner of the car so he have no insurable interest and no financial loss with the loss of the car.(3)
  - i. What does principle of insurable interest say?
  - ii. Was Mr. Rajiv right in making claim?
  - iii. Who should get compensation?
3. "Earning of profit can't be the objective of business anymore then the eating is the objective of living". Do you agree with the statement? Give reason to support your answer.(4)
4. Identify the form of public sector enterprise in the following cases(5)
  - a. It is under the control of ministry of department
  - b. It .enjoys maximum autonomy in all management activities
  - c. LIC and AIR India are the example of which form of organization
  - d. This enterprise is more suitable when national security is concerned.
  - e. These enterprises are setup under a special act of parliament
5. Explain briefly the social responsibilities of business towards different interest group.(5)

## St. PBN public School

### Sample Paper- Economics (Objective)

#### Class-XI

#### M.M: 10

1. Under random sampling, each item of the universe has \_\_\_\_\_ chance of being selected.(1)
  - a. Equal
  - b. Unequal
  - c. Zero
  - d. None of these
2. Questionnaires are filled by the(1)
  - a. Investigator
  - b. Enumerator
  - c. Informant
  - d. None of these
3. What is complex table?(1)
4. In case of discrete variable data are expressed in fractions. (true/False)(1)
5. Suppose mean of a series of 5 items is 30. Four values are 10,15,30 and 35 respectively. Find the missing value of the series.(1)
6. TU is sum total of MU from all units of consumption of a commodity. Write true or false with reasons.(2)
7. \_\_\_\_\_ Economics relate to the study of economic issue which are subject to verification.(1)
8. The law of demand does not apply to \_\_\_\_\_ goods.(1)
9. When TP is 100 units and unit of variable factor are four, AP will be : (1)
  - a. 25
  - b. 400
  - c. 96
  - d. 104

## St. PBN public School

### Sample Paper- Economics (Subjective)

#### Class-XI

1. Would a consumer equate price of a commodity with total utility or marginal utility?  
Give reason in support of your answer.(3)
2. What are the features of statistics.(3)
3. What is the relationship between TP and MP.(4)
4. How is production possibility frontier affected when resources are inefficiently employed in an economy?(4)
5. Calculate the mode of the following series: (6)

Class Interval	0-5	5-10	10-15	15-20	20-25	25-30
Frequency	20	24	32	28	20	26

**Half Yearly Examination**  
**Class - XI**  
**Subject - Mathematics**  
**OBJECTIVE SAMPLE PAPER**

**Time 1:30 hours**

**M.M:50**

1. For any set A,  $(A')$ ' is equal to (1)
  - (i)  $A'$
  - (ii)  $A$
  - (iii)  $\emptyset$
  - (iv) None of these.
2. In set builder method the null set is represented by (1)
  - (i)  $\{\}$
  - (ii)  $\emptyset$
  - (iii)  $\{x: x \neq x\}$
  - (iv)  $\{x: x = x\}$
3. The domain of definition of  $f(x) = \sqrt{4x - x^2}$  (1)
  - (i)  $R - [0, 4]$
  - (ii)  $R - (0, 4)$
  - (iii)  $(0, 4)$
  - (iv)  $[0, 4]$
4. If the set A has p elements, B has q elements, then the number of elements in  $A \times B$  has (1)
  - (i)  $p + q$
  - (ii)  $p + q + 1$
  - (iii)  $pq$
  - (iv)  $p^2$
5. Which of the following is incorrect? (1)
  - (i)  $\sin \theta = -\frac{1}{5}$
  - (ii)  $\cos \theta = 1$
  - (iii)  $\sec \theta = \frac{1}{2}$
  - (iv)  $\tan \theta = 20.$
6. If  $-3x + 17 < -13$ , then (1)
  - (i)  $x \in (10, \infty)$
  - (ii)  $x \in [10, \infty)$
  - (iii)  $x \in (-\infty, 10]$
  - (iv)  $x \in [-10, 10]$
7. The mean deviation of the numbers 3, 4, 5, 6, 7 from the mean is (1)
  - (i) 25
  - (ii) 5
  - (iii) 1.2
  - (iv) 0
8. Write the interval in set builder form (2)
  - (i)  $(6, 2)$
  - (ii)  $(-3, 0)$
9. Solve  $4x + 3 < 6x + 7$ . (1)
10. Let  $A = \{1, 2\}$ ,  $B = \{3, 4\}$ . Write  $A \times B$  and how many subsets will  $A \times B$  have. (1)
11. Solve  $5x - 3 < 3x + 1$  when (2)
  - (i) x is an integer.
  - (ii) x is a Real number
12. Find the value of  $\sin 75^\circ$ . (1)
13. Write the formula for standard deviation for (2)
  - (i) Discrete frequency distribution
  - (ii) Continuous frequency distribution

14. Find the mean deviation about the mean for the following data (2)  
6, 7, 10, 12, 13, 4, 8, 12
15. Define the function  $f: \mathbb{R} \rightarrow \mathbb{R}$  by  $y=f(x) = x^2$ ,  $x \in \mathbb{R}$ . What is domain and range of this function? (1)
16. Let  $A = \{1, 2, 3\}$ ,  $B = \{3, 4\}$  and  $C = \{4, 5, 6\}$ . Find (2)  
(i)  $A \times (B \cap C)$  (ii)  $(A \times B) \cup (A \times C)$
17. Find the value of trigonometric function (2)  
(i)  $\sin(765^\circ)$  (ii)  $\tan \frac{19\pi}{3}$
18. Find all pairs of consecutive odd natural numbers, both of which are larger than 10, such that their sum is less than 40. (1)
19. In a survey of 600 students in a school, 150 students were found to be taking tea and 225 taking coffee, 100 were taking both tea and coffee. Find how many students were taking neither tea nor coffee? (2)
20. Write the set  $A = \{1, 4, 9, 16, 25, \dots\}$  in set-builder form. (1)
21. Let  $A = \{1, 2\}$  and  $B = \{3, 4\}$ . Find the number of relations from A to B. (1)
22. Write the relation  $R = \{(x, x^3): x \text{ is a prime number less than } 10\}$  in roster form. (1)
23. Express  $(5 - 3i)^3$  in the form of  $a + ib$ . (1)
24. Solve  $x^2 + 2 = 0$ . (1)
25. If  $x$  is a real number and  $|x| < 5$ , then (1)  
(iii)  $x \geq 5$  (iii)  $-5 < x < 5$   
(iv)  $x \leq -5$  (iv)  $-5 \leq x \leq 5$
26. The standard deviation of first 10 natural numbers is (2)  
(iii) 5.5 (iii) 2.97  
(iv) 3.87 (iv) 2.87
27. Write the number of elements in the power set of null set. (1)  
(i) 0 (iii) 2  
(ii) 1 (iv) 3
28. Solve  $-3x + 12 < 0$ . (1)
29. If  $A = \{1, 2\}$ , form the set  $A \times A \times A$ . (1)
30. Find the value of  $\cos(-1710^\circ)$ . (1)
31. Evaluate:  $i^{528}$ . (1)
32. Find the mean deviation about the mean for the following data (2)  
13, 17, 16, 14, 11, 13, 10, 16
33. If  $\mathbb{R}$  is the set of real numbers and  $\mathbb{Q}$  is the set of rational numbers, then what is  $\mathbb{R} - \mathbb{Q}$ ? (1)
34. If  $(x+1, y-2) = (3, 1)$ , find the values of  $x$  and  $y$ . (1)
35. Find the range of the function  $f(x) = [x]$ , where  $[x]$  is greatest integer function. (1)

36. The solution set of the inequality  $|x + 2| \leq 5$  is (1)

(v)  $(-7, 5)$  (iii)  $[-7, 3]$

(vi)  $[-5, 5]$  (iv)  $(-7, 3)$

37. The mean deviation of the numbers 4, 7, 8, 9, 10, 12, 13, 17 from the mean is (1)

(v) 25 (iii) 1.5

(vi) 3 (iv) 0

38. Find the mean deviation about the median (2)

4, 7, 8, 9, 10, 12, 13, 17

39. If  $A = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$ ,  $B = \{2, 4, 6, 8\}$  and  $C = \{2, 3, 5, 7\}$ , find (2)

(i)  $B - C$  (ii)  $A - C$

**Half Yearly Examination**  
**Class - XI**  
**Subject – Mathematics**  
**SAMPLE PAPER**

**Time 1:30 hours**

**M.M:50**

40. If  $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9\}$ ,  $A = \{2, 4, 6, 8\}$  and  $B = \{2, 3, 5, 7\}$ , verify that (2)

(i)  $(A \cup B)' = A' \cap B'$                       (ii)  $(A \cap B)' = A' \cup B'$

41. Find the value of trigonometric function (2)

(i)  $\sin(765^\circ)$                       (ii)  $\tan \frac{19\pi}{3}$

42. Express the following in the form of  $a+ib$ : (2)

$$\frac{5 + \sqrt{2}i}{1 - \sqrt{2}i}$$

43. The marks obtained by a student of class XI in first and second terminal examination are 62 and 48 respectively. Find the minimum marks he should get in the annual examination to have an average at least 60 marks. (2)

44. In a committee, 50 people speak french, 20 speak spanish and 10 speak both Spanish and french. How many speak atleast one of these two languages? (4)

45. Prove that (4)

$$\frac{\cos 4x + \cos 3x + \cos 2x}{\sin 4x + \sin 3x + \sin 2x} = \cot 3x.$$

46. Find the conjugate of (4)

$$\frac{(3-2i)(2+3i)}{(1+2i)(2-i)}.$$

47. Find the mean deviation from the median for the following data: (4)

Marks	0-10	10-20	20-30	30-40	40-50	50-60
Number of girls	6	8	14	16	4	2

48. If  $z_1 = 2-i$ ,  $z_2 = 1+i$ , find  $\left| \frac{z_1 + z_2 + 1}{z_1 - z_2 + 1} \right|$ . (4)

49. Find the range of the following functions (4)

- (i)  $f(x) = 2-3x$ ,  $x \in \mathbb{R}, x > 0$ .
- (ii)  $f(x) = x^2 + 2$ ,  $x$  is a real number.
- (iii)  $f(x) = x$ ,  $x$  is a real number.

50. Solve the following system of inequality graphically (6)

$$3x + 4y \leq 60$$

$$X+3y \leq 30$$

$$x \geq 0, y \geq 0$$

51. In a survey of 60 people, it was found that 25 people read newspaper H, 26 read newspaper T, 26 read newspaper I, 9 read both H and I, 11 read both H and T, 8 read both T and I, 3 read all the three newspapers find (6)

(i) The number of people who read at least one of the newspapers.

(ii) The number of people who read exactly one newspaper.

52. Find the mean, variance and standard deviation using short cut method. (6)

Height In cm	70-75	75-80	80-85	85-90	90-95	95- 100	100- 105	105- 110	110- 115
Number Of children	3	4	7	7	15	9	6	6	3

ST. PBN PUBLIC SCHOOL, GURGAON  
CLASS XI  
SAMPLE PAPER  
SUBJECT- ENGLISH  
PART – A (OBJECTIVE)

TIME: 1.5 HRS

MM. 40

GENERAL INSTRUCTIONS:

1. ALL QUESTIONS ARE COMPULSORY.
2. READ ALL INSTRUCTIONS CAREFULLY.

**Q2. Read the following passage carefully and tick the correct options that follow:  
(any ten) ( 10x1=10marks)**

1. Internet is built around the idea of openness. It allows people to connect and exchange information freely if the information or service is not illegal. Much of this is because of the idea of net neutrality.

2. When the Internet started to take off in the 1980s and 1990s, there were no specific rules which stated that Internet Service Providers (ISPs) should follow the same principle. But mostly because telecom operators were also ISPs, they adhered to the same principle. This principle is known as net neutrality. An ISP does not control the traffic that passes its servers. When a web user connects to a website or web service, he or she gets the same speed. Data rate for YouTube Videos and Facebook photos is theoretically the same. Users can access any legal website or web service without any interference from an ISP.

3. Net neutrality has shaped the Internet in two fundamental ways. One, web users are free to connect to whatever website or service they want. ISPs do not bother with what kind of content is flowing through their servers. This has allowed the Internet to grow into a truly global network and has allowed people to freely express themselves. But more importantly, net neutrality has enabled a level playing field on the Internet. To start a website, you don't need a lot of money or connections. Just host your website and you are ready to go. If your service is good, it will find favor with web users. This has led to creation of Google, Facebook, Twitter and countless other services.

4. If there is no net neutrality, ISPs will have the power (and inclination) to shape the Internet traffic, so that they can derive extra benefit from it. For instance, several ISPs believe that they should be allowed to charge companies for services like YouTube and Netflix because these services consume more bandwidth compared to a normal website. Basically, these ISPs want a share in the money that YouTube or Netflix make.

5. Without net neutrality, the internet as we know will not exist. Instead of free access, there could be 'package plans' for consumers. For instance, if you pay Rs. 500, you will only be able to access websites based in India. To access international websites, you may have to pay more. Or maybe there can be different connection speed for different types of content, depending on how much you are paying for the service and what 'add-on-package' you have bought.

6. Lack of net neutrality will also spell doom for innovation on the web. It is possible that ISPs will charge web companies to enable faster access to their websites. Those who don't pay may see that their websites will open slowly. This means that bigger companies like Google will be able to pay more to make access to YouTube or Google + faster for web users, but a start-up that wants to create a different and better video hosting site may not be able to do that.

7. Legally, the concept of net neutrality doesn't exist in India. Sunil Abraham, the Executive Director of the Centre for Internet and Society in Bangalore, says that Telecom Regulatory Authority of India (TRAI), which regulates the telecom industry, has tried to come up with some rules regarding net neutrality several times. For instance, it invited comments on the concept of net neutrality from industry bodies and stakeholders in 2006. But no formal rules have been formed to uphold and enforce net neutrality.

8. However, despite lack of formal rules, ISPs in India mostly adhere to the principle of net neutrality. There have been some incidents where Indian ISPs have ignored net neutrality, but these are few and far between.

Questions:

(i) Which of the following statements is true about ISPs?

1. They run according to specific rules and regulations
2. They are not responsible for controlling the jamming of the Internet
3. They interfere in the usage and accessibility of legal websites
4. They are responsible for monitoring the kind of content flowing through the Internet

(ii) Without net neutrality, how will one be able to access the Internet?

1. There will be no access to the Internet
2. One will have to travel miles to use the web
3. By opting for 'package plans' by ISPs to access the web
4. None of the above

(iii) What problem will the start-ups face in case there is lack of net neutrality?

1. They will have to pay more to the ISPs

2. They will face funding problems
3. They won't be able to prototype the idea of better and innovative websites
4. All of the above

(iv) What does the passage and the writer talk about?

1. The advantage of Internet to mankind
2. Importance of net neutrality and its enforcement as law
3. Evolution of start-ups
4. All of the above

(v) What are the "package plans" the author talks about in the passage?

1. travel package
2. insurance package
3. payment based Internet packages
4. all of the above

(vi) The concept of net neutrality

1. legally doesn't exist in India
2. Exists with formal rules from 2001
3. Is opposed in India
4. All of the above

(vii) fundamental means in the (para 2)

1. basic
2. base
3. superficial
4. secondary

(viii) an interested party or individual means in the (para 7)

1. non participant
2. stakeholder
3. spectator
4. observer

(ix) To start a website you need.....

1. need money
2. host website
3. connection
4. all of the above

(x) What is the full form of ISP?

1. Internet Security Protocol

2. Internet Survey Period
3. Internet Service Providers
4. Integrated Service Provider

(xi) Antonym of ill – fated is

1. hopeful
2. blessed
3. doom
4. all of the above

**Q2. Read the passage carefully and tick the correct option. (any 8) (1x8=8marks)**

### **LIFE BEYOND ACADEMICS**

1. Academics has always been an essential part of human development. It prepares us to survive in the outside world and establish an identity of our own. But, is an individual's development restricted to merely academics? In India, from an early age, we have been taught that education is limited to the boundaries of academics only; the idea of getting out into the field, for gaining practical experience, is always considered a hoax. This has hindered students' development. But, the truth is that education represents a considerably broader field than we know of it. Our teaching, from the basics, has been focused on getting good grades and job offers, rather than being creative and unique.
2. In the 21st century, the pure academic type of education is slowly paving way for a whole new type. The paradigm shift in the whole education system is evident. People have now come to understand that education is a 360 degree activity that should focus on students' overall development, rather than restricting him/her to the classroom.
3. Co-curricular activities that take place outside the classroom but reinforce or supplement classroom curriculum, in some way, have become a point of focus today. These activities help in the growth of the child, in more than one way. Participating in such activities helps youngsters grow mentally, socially and individually. Intellectual development of a student is developed in the classroom, but for the aesthetic development such as team- building, character- building, and physical growth, students must step out into the outside world. For instance, if a student is a part of school football team, he/ she will learn team- work and coordination, in a practical manner, which cannot be taught in the class.
4. Similarly, in colleges and institutions, there is a need for practical exposure so that the students can experience the actual working of an industry. For example, taking a student to a manufacturing firm will give him/ her the real insight and better learning of the industry. Catering to this change, most professional colleges including schools, have started providing practical exposure to students through regular guest lectures, industrial

visits, conferences, seminars, cultural festivals, and so on. With industry visits, students are able to better identify their prospective areas of work in the overall organizational function. Moreover, they help enhance interpersonal skills and communication techniques. In addition, guest lectures are equally important for all – round development of students. It is a great way for students to gain maximum exposure, as guest speakers talk about their real- life experiences and not what is there in the text books.

5. Through such events, students are made to participate and coordinate different events wherein, they get to know how exactly things are managed. Classroom teaching provides the foundation, and co-curricular or extra- curricular activities provide practical exposure and opportunities to implement what students learn in the classroom. This helps in developing the overall personality of the students, inculcating various soft – skills in them, which otherwise are difficult to teach. Clearly, life beyond academics creates creative and empowered professionals.

**On the basis of your understanding of the above passage, choosing the most appropriate option:**

- a. Students' development is hindered by
  - i. limiting education to academic boundaries.
  - ii. getting out to the field.
  - iii. being creative and unique.
  - iv. gaining practical knowledge.
  
- b. The shift in the education system means
  - i. to restrict to classroom activities.
  - ii. to focus on academic development.
  - iii. to ignore 360 degree activity.
  - iv. to focus on overall development.
  
- c. Co- Curricular activities that take place outside the classroom do not help in
  - i. teamwork and co-ordination.
  - ii. mental and social growth.
  - iii. intellectual development.
  - iv. character building.
  
- d. Guest speakers talk about
  - i. all round development.
  - ii. their real life experiences.
  - iii. what is in text books.
  - iv. gaining exposure.

e. Classroom teaching provides

- i. practical exposure
- ii. opportunities to implement what is learnt in classroom
- iii. chance to learn soft skills
- iv. the foundation

f. Life beyond academics facilitates

- i. organizational functions
- ii. creativity
- iii. professional fields
- iv. industrial visits

g. What is the synonym of 'fabricated'? (Para 1)

- i. hoax
- ii. real
- iii. genuine
- iv. none of the above

h. What is the synonym 'cooperative effort' (Para 3)

- i. segregation
- ii. isolation
- iii. Team work
- iv. all of the above

i. What is the antonym of 'theoretical' (Para 5)

- i. real
- ii. practical
- iii. Hands on
- iv. pragmatic

**Q3. Fill in the blanks with suitable determiners using alternatives given below:  
(4marks)**

Lilly : What would you like to have (a) ..... apple or (b)..... grapes?

Usha : I prefer apples to grapes. My mother says that (c) ..... apple (d) .....  
day keeps (e) .....doctor away.

Lilly : Would you like to have(f)..... cup of coffee please?

Usha : No, thanks.

Lilly : I am in (g) ..... hurry.

Usha : You come at least when you have (h) ..... time.

Alternatives:

- |  |   |   |
|--|---|---|
| (a) (i) an<br>(ii) a<br>(iii) the<br>(iv) some       | (d) (i) every<br>(ii) the<br>(iii) an<br>(iv) a | (g) (i) few<br>(ii) the<br>(iii) an<br>(iv) a             |
| (b) (i) many<br>(ii) more<br>(iii) most<br>(iv) some | (e) (i) a<br>(ii) an<br>(iii) every<br>(iv) the | (h) (i) few<br>(ii) little<br>(iii) a little<br>(iv) some |
| (c) (i) a<br>(ii) an<br>(iii) the<br>(iv) some       | (f) (i) an<br>(ii) a<br>(iii) the<br>(iv) some  |   |

**Q4. Read the following questions carefully and fill with correct alternatives: (any four) (1x4=4marks)**

1. An eighty year old man \_\_\_\_\_(die) when he \_\_\_\_\_(fall off) a very high building this evening.

- (a) died, falls off      (b) died, fell off  
(c) dies, falls off      (d) had died, fell off

2. The body of the old man \_\_\_\_\_(discover) from the central lobby.

- (a) discovers      (b) discover  
(c) was discovered      (d) had discovered

3. Yesterday when I \_\_\_\_\_(go) to see my friend. I \_\_\_\_\_(find) his door locked.

- (a) goes, find      (b) went, found  
(c) go, find      (d) was going, found

4. Rishabh \_\_\_\_\_(be) feeling thrilled because he has passed his S.S.C. Examination with 90% marks.

- (a) being  
(b) was  
(c) is  
(d) are

5.He \_\_\_\_\_ (suffer)from fever since last Monday.

- a)suffered
- b)suffers
- c) will suffer
- d) has been suffering

6.The Delhi Jodhpur intercity express usually \_\_\_\_\_ (come)on time.

- a)comes
- b)came
- c)will come
- d) shall come

**Q5. Read the extract and tick the correct options that follow. (3marks)**

And who art thou? said I to the soft falling shower,  
which, strange to tell, gave me an answer,as here translated:

1. Identify I and “thou”here

- a) the poet and the rain respectively
- b) the rain and the poet respectively
- c) a poem and the poet respectively
- d) a student and a teacher respectively

2.The expression And who art thou expresses.....

- a)hatred
- b)indifference
- c)curiosity
- d) admiration

3.Who asks the question from rain?

- a) rain
- b)poet
- c) a friend
- d)none of the above

OR

Now she’s been dead nearly as many years  
As that girl lived. And of this circumstance  
There is nothing to say at all.  
Its silence silences.

1.Who is she referred to here?

- a) poet
- b) poet's mother
- c) Dolly
- d) Betty

2. The expression "Its silence silences" is.....

- a) paradox
- b) simile
- c) repetition
- d) alliteration

3. "This circumstance" refers to.....

- a) the death of Dolly and Betty
- b) the beach holiday
- c) the pain and void due to mother's death
- d) the loss of time

**Q6. (a) Read the extract and choose the correct option from the following. (3marks)**

When my parents were comfortably settled in the city, they sent for us. That was a turning point in our relationship. Although we shared the same room, my grandmother no longer came to school with me.

1) whose parents are being talked about?

- a) grandmother's
- b) author's
- c) teacher's
- d) none of the above

2) Who are we in the second line?

- a) author and teacher
- b) author and grandmother
- c) author and his parents
- d) none of the above

3) Why author's grandmother didn't accompany him to school now?

- a) he was angry with grandmother
- b) grandmother was angry with him
- c) he started going by bus
- d) he didn't want to go with her

**Q6. Read the extract and choose the correct option from the following. (3marks)**

(b) My left leg pains me,the farmer said.  
Pay no attention to it,my uncle Khosrove said.  
That horse cost me sixty dollars,the farmer said  
I spit on money,my uncle Khosrove said.  
He got up and stalked out of the house,slamming the screen door.

1.)Who is My in the first line?

- a) Murad
- b) Aram
- c)uncle khosrove
- d) John Byro

2.)That horse means.....

- a) the one he has
- b) the one which is stolen
- c) the one he has bought
- d) none of the above

3.)Who is my in the second line?

- a) Aram
- b) Murad
- c)John Byro
- d) none of the above

**Q7. Answer the following questions very shortly (any five) (1x5=5marks)**

- 1)Who stole the horse? (The Summer of the Beautiful White Horse)
- 2)What was written on the name plate? (The Address)
- 3)Where Ranga had gone for higher studies?
- 4) How did the sparrows behave on day of grandmother's demise?
- 5)Why the captain was sending the May day calls?
- 6)What was the age of age of king Tut when he died?

ST. PBN PUBLIC SCHOOL, GURUGRAM  
CLASS XI  
SAMPLE PAPER  
SUBJECT- ENGLISH  
PART – B (SUBJECTIVE)

TIME: 1.5 HRS

MM. 40

GENERAL INSTRUCTIONS:

1. ALL QUESTIONS ARE COMPULSORY.
2. READ ALL INSTRUCTIONS CAREFULLY.

**Q1. Read the following passage carefully: 8 marks**

There is nothing more frustrating than when you sit down at your table to study with the most sincere of intentions and instead of being able to finish the task at hand, you find your thoughts wandering. However, there are certain techniques that you can use to enhance your concentration. “Your concentration level depends on a number of factors,” says Samuel Ghosh, a social counselor. “In order to develop your concentration span, it is necessary to examine various 2 facets of your physical and internal environment,” she adds.

To begin with one should attempt to create the physical environment that is conducive to focused thought. Whether it is the radio, TV or your noisy neighbours, identify the factors that make it difficult for you to focus. For instance, if you live in a very noisy neighbourhood, you could try to plan your study hours in a nearby library.

She disagrees with the notion that people can concentrate or study in an environment with distractions like a loud television, blaring music etc. “If you are distracted when you are attempting to focus, your attention and retention powers do not work at optimum levels,” cautions Ghosh. “Not more than two of your senses should be activated at the same time,” she adds. What that means is that music that sets your feet tapping is not the ideal accompaniment to your books.

Also do not place your study table or desk in front of a window. “While there is no cure for a mind that wants to wander, one should try and provide as little stimulus as possible. Looking out of a window when you are trying to concentrate will invariably send your mind on a tangent,” says Ghosh.

The second important thing, she says, is to establish goals for oneself instead of setting a general target and then trying to accomplish what you can in a haphazard fashion. It is very important to decide what you have to finish in a given span of time. The human mind recognizes fixed goals and targets and appreciates schedules more than random thoughts. Once your thoughts and goals are in line, a focussed system will follow.

She recommends that you divide your schedule into study and recreation hours. When you study, choose a mix of subjects that you enjoy and dislike and save the former for the last so that you have something to look forward to. For instance, if you enjoy verbal skill tests more than mathematical problems, then finish Maths first. Not only will you find yourself working harder, you will have a sense of achievement when you wind up.

Try not to sit for more than 40 minutes at a stretch. Take a very short break to make a cup of tea or listen to a song and sit down again. Under no circumstances, should one sit for more than one and a half hours. Short breaks build your concentration and refresh your mind. However, be careful not to overdo the relaxation. It may have undesired effects.

More than anything else, do not get disheartened. Concentration is merely a matter of disciplining the mind. It comes with practice and patience and does not take very long to become a habit for life.

(a) On the basis of your reading of the above passage, make notes on it in points only, using abbreviations, wherever necessary. Also suggest a suitable title.(5 Marks)

(b)write a summary of the above passage in about 80 words.(3 marks)

Q2. As the Sports Secretary of DAV Public School, Rohtak, draft a notice in not more than 50 words for your school notice board informing the students about the sale of old sports goods of your school. You are Rohini/ Rohit. (3marks)

OR

You are Secretary of Gymkhana Club, Gurugram. Write a notice in not more than 50 words informing the members to attend an extraordinary meeting of the governing body. Include details like date, time, venue etc. Sign as Prabhat /Pratibha.

Q3. As the President of Leo Club of Temple Town, prepare a poster on behalf of Lions Club and Leo Club for 'Diwali Mela' to be held at Nehru Stadium, mentioning some of the attractions. (3marks)

OR

Design a poster in not more than 50 words about the need for regular exercise. You may use slogans.

Q4. Write a letter to the Manager Oberoi International, Lucknow, to find out the rates for conducting the wedding reception of your sister on their lawns, inquiring specifically about the catering cost per head, service and decoration charges and advanced to be paid in about (120-150 words) (5 marks)

OR

You are A.R. Aggarwal, General Manager, Aggarwal Enterprises Indore. You need various items of furniture and stationery for your newly constructed head office. Write a letter to Kuber Official works, Indore placing a bulk order for the supply giving all details of the item ordered.

Q5. You are Ram/Reema. You have been selected to represent your school in an All India Debate Competition organised by the Rotary Club, Delhi. The topic for the debate is: In the opinion of this house Value Based Education is the only remedy for decreasing the crime rate amongst the educated folk. (120-150 words) (5marks)

OR

Write a speech to be delivered in the morning assembly on the topic "Need For Protecting Environment,". you are shobha /shobhit.

**Q6. Answer the following questions in 30-40 words (any two) (2x2=4marks)**

1. What startling fact was revealed about Tut's mummy 40 years after its discovery?
2. What preparations did the author and his wife make for their round the world sea voyage?
3. How does rain "purify and beautify it"? (its origin)
4. Write two activities of the goldfinch?

**Q7. Answer the following question in 30-40 (any one) (1x2=2marks)**

1. Where did the boys hide the horse after enjoying their ride? why?
2. Why was Ranga not in a hurry to find a bride for himself?

**Q8. Answer the following in about 120-150 words. (1x5=5 marks)**

Briefly write about the title 'A Photograph'

OR

Man's quest to unravel the mysteries of the past is an ongoing process. No single person can claim all the credit .Explain.

**Q9. Answer the following in about 120-150 words (1x5=5 marks)**

One should beware of the astrologers because mostly their perceptions are based more on hearsay and conjecture than what they learn from the study of stars. Comment with reference to the story.

OR

Why did the narrator of the story "The Address" want to forget the address?