

GIVEN DATE:1/5/20

SUBMISSION DATE:4/5/20

**SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
CLASS-IX
ENGLISH WORKSHEET-I
CH- THE LITTLE GIRL**

NAME: _____

ROLL NO.: _____

Read the following passages and answer the questions:

1. She never stuttered with other people — had quite given it up — but only with Father, because then she was trying so hard to say the words properly.
 - a. Who was she?
 - b. Why did she stutter and in front of whom?
 - c. Why did she try so hard to say words properly?
 - d. Who was she afraid of?
2. On Sunday afternoons Grandmother sent her down to the drawing-room to have a “nice talk with Father and Mother”. But the little girl always found Mother reading and Father stretched out on the sofa, his handkerchief on his face, his feet on one of the best cushions, sleeping soundly and snoring.
 - a. Where did the grandmother send Kezia on Sunday afternoons?
 - b. What did the girl always do after going to drawing room?
 - c. What was father’s usual habit?
 - d. Why was Kezia sent to her father and mother?

Answer the following questions in about 30 words:

3. “What’s the matter? What are you looking so wretched about? Who said these words, to whom and aboutwhom?
4. ‘You look like a brown owl’. Why did father say it to Kezia?
5. Why did the grandmother ask to make a surprise gift?
6. Who was MacDonald?
7. Why was Kezia afraid of sleeping alone at night?

8. Where did mother and grandmother go leaving Kezia alone at home?

Answer the following questions in about 100 words:

9. How Mr. MacDonald different from Kezia's father?

10. How did a change occur in Kezia towards her father?

GIVEN DATE:4/5/20

SUBMISSION DATE:5/5/20

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
CLASS-IX
ENGLISH WORKSHEET-II
CH- SUBJECT VERB AGREEMENT

NAME: _____

ROLL NO.: _____

Q I. Fill in the blanks with the correct word.

1. Bread and butter served for breakfast. (was / were)
2. The horse and carriage at the door. (is / are)
3. My brother to be an astronaut. (want / wants)
4. My parents teachers. (is / are)
5. Politics not something I am interested in. (is / are)
6. The cost of essential commodities gone up. (has / have)
7. Her clothes made of expensive fabrics. (is / are)
8. Either Manu or I to go. (has / have)
9. Neither Mala nor her parents at the party. (was / were)
10. Nobody what happened to her. (know / knows)
11. Ravi as well as his brother cricket well. (play / plays)
12. Everybody a man of integrity. (respect / respects)

QII. Choose the correct option

1. Fire and water _____ not agree.
a) do
b) does
2. Shyam and his wife _____ arrived.
a) has
b) have
3. My friend and benefactor _____ come.
a) has
b) have
4. Early to bed and early to rise _____ a man healthy, wealthy and wise.

- a) make
- b) makes

5. Every man and every woman _____ a vote.

- a) has
- b) have

6. Neither the manager nor his colleagues _____ present at the meeting.

- a) was
- b) were

7. You and he _____ birds of the same feather.

- a) are
- b) is

8. No news _____ good news.

- a) is
- a) are

9. Each one of my sisters _____ married.

- a) is
- b) are

10. Rama as well as Hari and Shiva _____ spicy food.

- a) like
- b) likes

GIVEN DATE:5/5/20

SUBMISSION DATE:7/5/20

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
CLASS-IX
ENGLISH WORKSHEET-III
CH- DETERMINERS

NAME: _____

ROLL NO.: _____

Q I. Fill in the blanks with suitable determiners.

1. We have only minutes to spare. (few / a few)
2. He is famous for being rich. (very / much)
3. There weren't people who followed the teaching of Socrates. (much / many / very / some)
4. Though most of the seats have been filled, are still left. (some / any / much)
5. I am sorry, there aren't good restaurants in this town. (any / some)
6. It did not rain last year and the crops failed. (much / many)
7. I have never experienced so (hot summer / hot a summer)
8. The children were told to wash hands. (they / their)
9. She thanked me for gift I gave her. (a / the / an)
10. Not people can afford to buy a car these days. (many / any / some)

Q II. Fill in the blanks with the given determiners

[a few, a little, a lot, a lot of, the majority of, enough, many, plenty, much of, several of, some]

1. There is not meat left.
2. of shops are open 24 hours a day 7 days a week.
3. of time is needed to learn a language.
4. criminals are harmless.
5. I am having of trouble going through the customs.
6. the information we found on their website proved to be outdated.
7. We are close to the deadline, but there is still time left.
8. I think you drank wine yesterday.
9. Although there are of brilliant students in our country, only of them will choose

to remain here after their studies.

10. my friends want to emigrate.

11. I met French girls on the holiday.

12. Could I try of your soup?

GIVEN DATE:8/5/20

SUBMISSION DATE:11/5/20

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
CLASS-IX
ENGLISH WORKSHEET-I
CH- A TRULY BEAUTIFUL MIND

NAME: _____

ROLL NO.: _____

Read the following passage and answer the questions that follow:

1. At the age of two-and-a-half, Einstein still wasn't talking. When he finally did learn to speak, he uttered everything twice. Einstein did not know what to do with other children, and his playmates called him "Brother Boring."
 - a. When and where was Einstein born?
 - b. What was the reaction of Einstein's playmates?
 - c. When did Einstein first speak?
 - d. When he finally spoke, what problem did he face?
2. A headmaster once told his father that what Einstein chose as a profession wouldn't matter, because "he'll never make a success at anything." Einstein began learning to play the violin at the age of six, because his mother wanted him to; he later became a gifted amateur violinist, maintaining this skill throughout his life.
 - a. Why did the headmaster say that choice of profession wouldn't matter for Einstein.
 - b. Why did Einstein learn violin?
 - c. At what age did Einstein learn to play violin?
 - d. "he will never make a success at anything". Who said this and why?

Answer the following questions in about 30 words

3. How was Einstein at school?
4. What did Einstein's mother think about him?
5. Who was Einstein's love interest and where did he find her?
6. What did he jokingly call his desk drawer?
7. Which famous paper did Einstein publish in 1905?
8. Why didn't Einstein's mother approve of his marriage to Mileva?

Answer the following questions in about 100 words:

9. Why did the newspapers proclaim his work as "a scientific revolution"?
10. What was the effect of the letter that Einstein sent to President Roosevelt in 1939?

GIVEN DATE:11/5/20

SUBMISSION DATE:13/5/20

**SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
CLASS-IX
ENGLISH WORKSHEET-II
CH- RAIN ON THE ROOF**

NAME: _____

ROLL NO.: _____

Read the following passages and answer the questions:

1. When the humid shadows hover Over
all the starry spheres
And the melancholy darkness Gently
weeps in rainy tears,
 - a. What do you understand by humid shadow?
 - b. Give synonym for 'melancholy'.
 - c. Who gently weeps in rainy tears?
 - d. What are the 'starry spheres'?
2. Every tinkle on the shingles Has
an echo in the heart;
And a thousand dreamy fancies Into busy
being start,
 - a. What are shingles?
 - b. What echoes in the heart?
 - c. Explain 'fancies'.
 - d. What is the rhyming scheme of the stanza?
3. What does the poet dream about?
4. Why does the poet say, 'echo in the heart'?
5. Identify and explain the figure of speech used in the line 'into busy being start'?
6. Who is the poet of the poem 'Rain on the Roof'? What is the poet trying to convey through the poem?
7. What thoughts does he have about his mother?
8. Why does the poet say, 'list to the refrain'?
9. When the soft rain falls on the roof, have you ever listened to it? Explain your experience.
(100 words)
10. What are the childhood fancies that the poet talks about in the poem? (100 words)

GIVEN DATE:13/5/20

SUBMISSION DATE:15/5/20

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
CLASS-IX
ENGLISH WORKSHEET-III
GRAMMAR

NAME: _____

ROLL NO.: _____

Q1. Fill in the gaps by choosing the most appropriate words from the options given below.

(1 × 4 = 4)

Today we (a) _____ all familiar with the use of fingerprinting. It is a very important and is fighting crime. (b) _____ many people do not know that it was in India (c) _____ fingerprints (d) _____ first used for catching criminals. Fingerprints can be found on practically any solid surface including the human body.

- | | | | |
|---------------|----------|------------|-------------|
| (a) (i) are | (ii) is | (iii) were | (iv) was |
| (b) (i) Since | (ii) But | (iii) And | (iv) Though |
| (c) (i) which | (ii) who | (iii) that | (iv) where |
| (d) (i) was | (ii) is | (iii) are | (iv) were |

Q2. The following passage has not been edited. There is one error in each line. Write the incorrect word and the correction against each line of the passage.

(1 × 4 = 4)

Essex Farms is the famous resort.
It is located in Aurobindo Marg.
It has the bowling alley and lots
with games for children to play.
The multi cuisine restaurant add for the charm.
This resort gives you a choice of air conditioned rooms.

Incorrect	Correction
e.g. the	a
(a) _____	_____
(b) _____	_____
(c) _____	_____
(d) _____	_____

Q3. Rearrange the following groups of words and phrases to form meaningful sentences:

(1 × 4 = 4)

(a) love/Indians/celebrate/to/festivals

(b) enjoy/time/they/with/spending/families/their

(c) exchanged/are/and/sweets/are/gifts/distributed

(d) even/away/some/stay/people/work/from N

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR
CLASS IX
HINDI WORKSHEET-I

संत निरंकारी पब्लिक स्कूल

अवतार सन्मलेव

कक्षा - नवी

विषय - हिंदी

कार्य पत्रिका

पाठ-२ स्मृति (संचयन)

1. निम्नलिखित प्रश्नों के उत्तर दीजिए।

(i) भाई को बुलाने पर घर लौटते समय लेखक के मन में किस बात का डर था?

(ii) गवसतपुर पहुंचे जाने वाली लीली रास्ते में पड़ने वाले कुएँ में पड़ने वाले कुएँ में डेला क्यों फेंकती थी?

(iii) साँप ने फुसकार मारी या नहीं, डेला उसे लगा या नहीं, यह बात अब तक स्मरण नहीं - यह कथन लेखक की किस मनोदशा को स्पष्ट करता है?

(iv) किन कारणों से लेखक ने चिट्ठियों को कुएँ से निकालने का निर्णय लिया?

(v) साँप का ध्यान बंटाने के लिए लेखक ने क्या-क्या युक्तियाँ अपनाईं?

(vi) फल तो किसी दूसरी शीकत पर निर्भर है - इस पंक्ति का आशय स्पष्ट कीजिए।

(vii) 'मनुष्य का अनुमान और भावी योजनाएँ कभी-कभी कितनी मिथ्या और उल्टी निकलती हैं' - का आशय स्पष्ट कीजिए।

प्रदत्त दिनांक - 1.5.2020

जिमा करने की तिथि - 2.5.2020

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR
CLASS IX
HINDI WORKSHEET- II

संत निरकारी पाठ्यक्रम स्कूल
अवतार स्व लेख
कक्षा - नवी
विषय - हिंदी

कार्य पत्रिका

पाठ-3 स्वस्तः मेरी शिखर यात्रा

1. निम्नील्लिखित प्रश्नों के उत्तर दीजिए।
 - (i) लेखिका को 'सागरमाथा' नाम क्यों अच्छा लगा?
 - (ii) मृत्यु के अवसाद को देखकर कर्नल खुल्लर ने क्या कहा?
 - (iii) लेखिका ने शेरपा कुली को अपना परिचय किस प्रकार दिया?
 - (iv) लेखिका की सफलता पर कर्नल खुल्लर ने उन्हें किन शब्दों में बधाई दी?
 - (v) तेनजिंग ने लेखिका की तारीफ में क्या कहा?
 - (vi) लोपसांग ने तंबू को रास्ता कैसे साफ किया?
 - (vii) साउथ कोल कैम्प पहुंचकर लेखिका ने अगले दिन की महत्वपूर्ण चर्चा की तैयारी कैसे शुरू की?

2. दीर्घ उत्तरीय प्रश्न

- (i) लेखिका के तंबू में गैर वर्क पिंड का वर्णन किस तरह किया गया है?
- (ii) लेखिका को देखकर की हक्का-वक्का क्यों रह गया?
- (iii) साम्प्रदायिक अभिमान में सहयोग एवं सहायता की भावना का परिचय वचेंद्री के किसे कार्य से मिलता है?

3. विलोमशब्द लिखें।

- | | |
|--------------|--------------|
| (i) अनुकूल | (iv) सुंदर |
| (ii) नियोजित | (v) निर्यात |
| (iii) आरंभ | (vi) निश्चित |

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR
CLASS IX
HINDI WORKSHEET- III

संत निरंकारा पाठशाला स्कूल

अवतार सन्सलैव

कक्षा - नवी

विषय - हिंदी

कार्य पीठिका

व्याकरण (पुनरावृत्ति)

1. शब्द और पद में अंतर स्पष्ट कीजिए।

2. शब्द कब पद बन जाता है? स्पष्ट कीजिए।

3. विलोम शब्द लिखें।

(i) आरोह

(j) उपस्थित

(ii) आकाश

(k) गहरा

(iii) ठोस

(l) कृतज्ञ

(iv) स्पष्ट

(m) क्यालु

4. पर्यायवाची शब्द लिखें।

(i) समुद्र

(j) इच्छा

(ii) नदी

(k) दिन

(iii) सूर्य

(l) दानव

(iv) वस्त्र

(m) वन

5. श्रुतिसमीभन्नार्थक शब्द - अंतर स्पष्ट करें।

(i) कुल-कूल

(ii) दिन-दीन

(iii) निधन-निर्धन

(iv) अवधि-अवधी

(v) नियत-नीयत

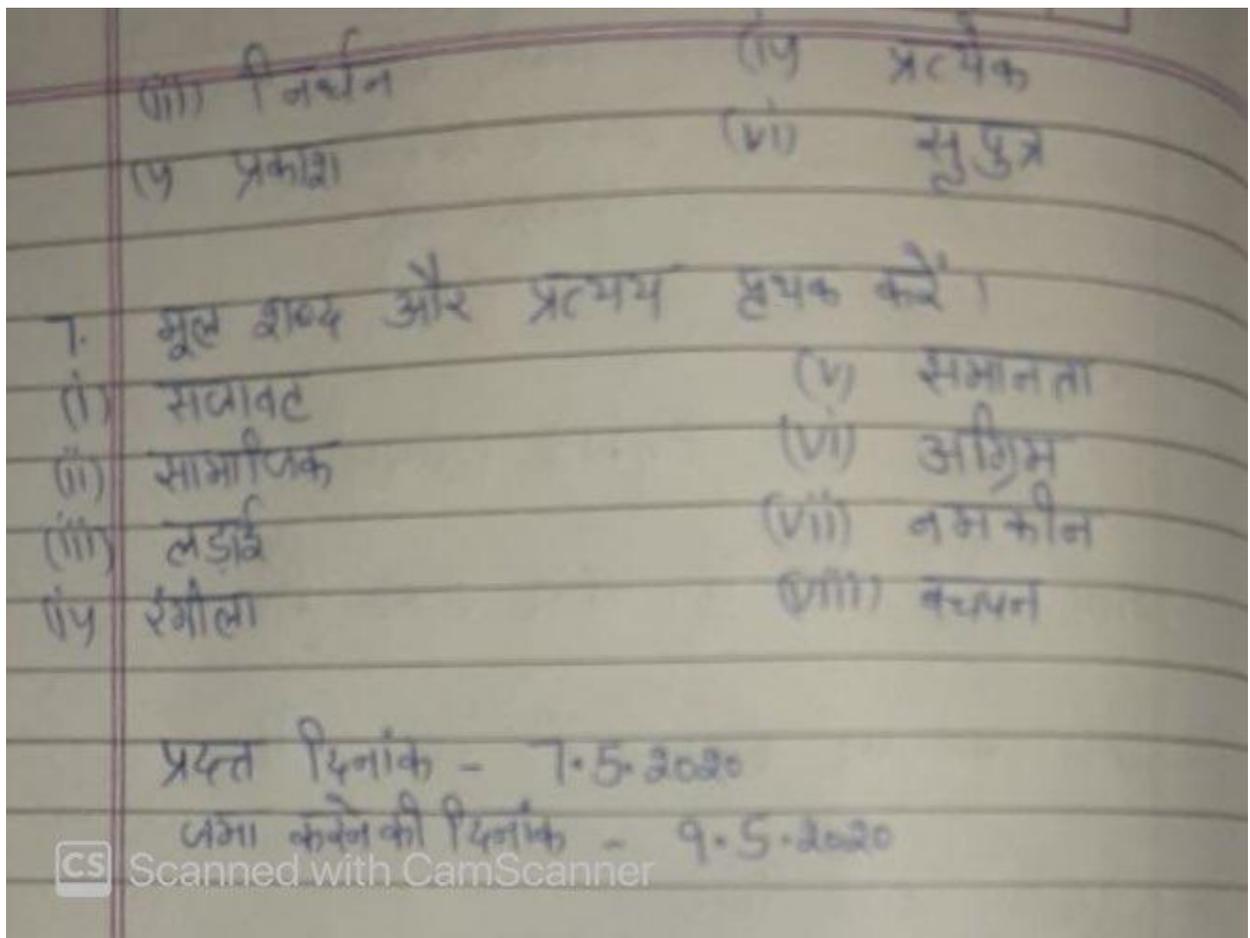
6. मूलशब्द और उपसर्ग अलग करें।

उपसर्ग

मूलशब्द

उपसर्ग

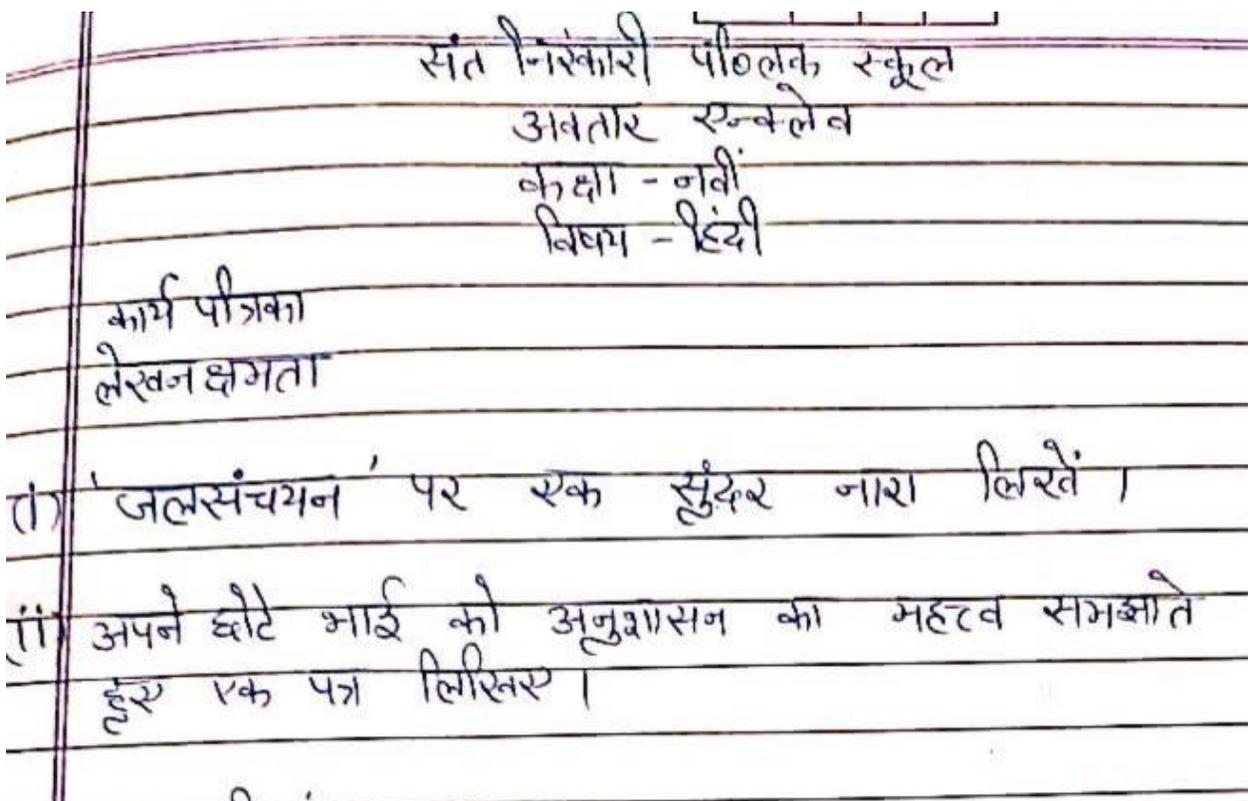
मूलशब्द



GIVEN DATE: 11/5/2020

SUBMISSION DATE: 13/5/2020

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR
CLASS IX
HINDI WORKSHEET- IV



GIVEN DATE: 6/5/2020

SUBMISSION DATE: 9/5/2020

**SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR**

CLASS IX

P+C WORKSHEET- III

CH- IS MATTER AROUND US PURE

NAME: _____

M.M. 20

1. Which of the following settles down when allowed to stand undisturbed does sometimes? **(1)**
 - a. Copper sulphate solution
 - b. Blood
 - c. Muddy water
 - d. Solution of egg albumin in water
2. Which of the following solution scatter light? **(1)**
 - a. None of these
 - b. Both colloidal solution and suspension
 - c. colloidal solution
 - d. suspension
3. A Substance can be beaten into sheets and beaten into wires. What will you call it? **(1)**
 - a. It is both brittle and lustrous
 - b. It is both sonorous and ductile
 - c. It is both Malleable and ductile
 - d. It is both malleable and brittle
4. Which of the following methods would you use to separate cream from milk? **(1)**
 - a. centrifugation
 - b. filtration
 - c. distillation
 - d. fractional distillation
5. A shining thick liquid is often used in glass thermometers. Name it. **(1)**
6. A saturated solution becomes unsaturated on heating. Why is it so? **(1)**

7. How will you justify that rusting of iron is a chemical change? **(1)**
8. In what respect does a true solution differ from a colloidal solution? **(3)**
9. Describe a method that can be used to separate a mixture of salt and ammonium chloride. **(3)**
10. A compound is regarded as a pure substance while the mixture is not. Give reason. **(3)**
11. Fog and cloud are both colloidal in nature. How do they differ? Write their dispersed phase and dispersed medium also. **(4)**

GIVEN DATE: 8/5/2020

SUBMISSION DATE:9/5/2020

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR

CLASS IX

BIOLOGY WORKSHEET- 3

CH- Tissues

Question 1.

What is the function of sieve tube cells and how are they designed to carry out their function?

Question 2.

Name the basic packing tissue in the form of a few layers of cells.

Question 3.

In a temporary mount of a leaf epidermis, we observe small pores.

- a)What are the pores present in leaf epidermis called?
- b)How are these pores beneficial to the plant?

Question 4.

What is epidermis? What is its role?

Question 5.

State the difference between the outer layer of the tissue of a branch of a tree and the outer layer of a young tree stem.

Question 6.

How is striated squamous epithelial tissue different from squamous epithelial tissue?

Question 7.

Give one word for the following:

- a)Group of cells with similar structure and designed to give highest efficiency of function.
- b)The process of taking up a permanent shape, size and function
- c)Animal tissue connecting muscle to bones
- d)Kidney shaped cells that enclose stomata.

Question 8.

Which parts of our body are composed of nervous tissue? Name the cells that make up the nervous tissue.

Question 9.

- (a) Voluntary muscles are also known as skeletal muscles. Justify.
- (b) Give two structured characteristics of these voluntary muscles.

Question 10.

Differentiate Chlorenchyma and Aerenchyma.

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE, PASCHIM VIHAR

CLASS IX
SANT NIRANKARI PUBLIC SCHOOL
(AVTAR-ENCLAVE)
CLASS - IX

9/05/2020 (SAT)

Sub: 12/05/2020
(TUES).

SUBJECT: HISTORY.

CH-1: FRENCH REVOLUTION.

WORK-SHEET-1.

Q1. Answer these questions in one word or one sentence:

- (i) Who wrote the 'The Spirit of the Laws'?
- (ii) Which estate paid taxes out of all?
- (iii) In which book did Rousseau mention the idea of 'one person, one vote'?
- (iv) Define chateaux.
- (v) Name the two Indian individuals who responded to the ideas coming from revolutionary France.

Q2. Answer in Brief:

- (i) Describe the middle class in three points.
- (ii) How did the women suffer in France during the Old Regime?
- (iii) Describe the main features of the constitution of 1791.

Q3. Answer in True/False.

- (i) Sceptre was symbol of royal power. (True/False).
- (ii) A broken chain stands for the act of becoming free. (True/False).
- (iii) Slavery was finally abolished in French colonies in 1848. (True/False).

Q4. Arrange the following events in a proper order:

- (a) Convention and abolition of Monarchy.
- (b) Abolition of Feudal system by National Assembly.
- (c) American war of Independence.
- (d) Bastille - storm of.
- (e) Rise of Napoleon.

SANT NIRANKARI PUBLIC SCHOOL

AVTAR ENCLAVE, PASCHIM VIHAR

CLASS IX

SANT NIRANKARI PUBLIC SCHOOL.

AVTAR-ENCLAVE.

CLASS - IX13/05/2020.

Sub: 15/05/2020.

(Friday).

SUBJECT: HISTORY.CH-2: SOCIALISM IN EUROPE AND THE
RUSSIAN REVOLUTION.WORK-SHEET-2.

Q1. Answer in one word or one sentence:

(i). Name the ruler of Russia in 1914?

(ii). When did Bolshevik uprising take place in Petrograd?

(iii). What was the new name of the Bolshevik Party?

(iv). When did the Tsar abdicated?

(v). Who introduced collectivisation programme in Russia?

Q2. Answer in brief:

(i). Describe the effects of industrialisation on society.

(ii). What changes took place after the 1905 Revolution.

(iii). What was 'cheka'? In whom did the 'reds', 'greens', and 'whites' refer to during the Civil War in Russia?

Q3. Answer in detail:

(i). Why did Bolshevik Party accept the 'April Theses' to live any five reasons.

(ii). Examine the role of Lenin in Russian Revolution.

Q4. Prepare a Mind Map.

SANT NIRANKARI PUBLIC SCHOOL

AVTAR ENCLAVE PASCHIM VIHAR

CLASS : X

SUBJECT : INFORMATION TECHNOLOGY (402)

PART – B UNIT – 1 INTRODUCTION TO IT AND ITeS INDUSTRY

DATE: 01/05/2020

SUBMISSION DATE: 15/05/2020

EXERCISE

Answer the following questions:

1. What is Information Technology? How does it help in enabling various business services.
2. What is BPO? List any of its 5 application areas.
3. How is BPO different from BPM?

EXERCISE

Answer the following questions:

1. How has IT influenced our daily life and work place?
2. How are computers help in managing a library?
3. Write a not how IT has impacted education sector positively?
4. Write a brief note on LMS.
5. Discuss how IT has revolutionalised health care sector.
6. What is E-Governance? How IT has realised the vision of E-Governance?

Assessment

1. What is the basic difference between IT and ITeS? Which 4 operations does IT encompass?
2. How is data different from information? Explain with an example.
3. Explain ITeS.
4. What are BPO services? How are they different from BPM?
5. Discuss the advantages of BPO services.
6. What is a BPM industry?
7. Discuss IT applications in certain major areas.
8. What is the role of IT in education and medical field?
9. How is LMS different from traditional way of training and learning?
10. How do businesses and banks harness the power of IT?
11. Discuss the role of government in serving the masses using IT.
12. Write a note on IT applications in general in our daily lives.

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
PASCHIM VIHAR
ASSIGNMENT 1
CLASS IX
Mathematics

Given on 4th May

Submit on 8th May

1. Visualize 3.756 on the number line, using successive magnification

2. Represent $\sqrt{3.5}$ on the number line

3. If $x = 3 + 2\sqrt{2}$, find the value of $x^2 + 1/x^2$

4. If $x = 2 + \sqrt{5}$, Prove that $x^2 + \frac{1}{x^2} = 18$

5. Express $1.\overline{32} + 0.\overline{35}$ as a fraction in simplest form.

6. Rationalise the denominator $\frac{1}{\sqrt{6} + \sqrt{5} - \sqrt{11}}$

7. If a and b are rational numbers, find a and b

$$a) \frac{\sqrt{2} + \sqrt{3}}{3\sqrt{2} - 2\sqrt{3}} = a + b\sqrt{6}$$

$$b) \frac{\sqrt{5} - 2}{\sqrt{5} + 2} - \frac{\sqrt{5} + 2}{\sqrt{5} - 2} = a + b\sqrt{5}$$

8. Simplify: a) $\frac{1}{1 + \sqrt{2}} + \frac{1}{\sqrt{2} + \sqrt{3}} + \frac{1}{\sqrt{3} + \sqrt{4}}$

9. If $a = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$ and $b = \frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}}$, find $a^2 + b^2$

10. If $a = 9 - 4\sqrt{5}$, find the value of $[a - 1/a]^2$

11. If $x = 1 - \sqrt{2}$, find the value of $[x - 1/x]^3$

12. If $x = 3 + 2\sqrt{2}$, find the value of $\left[\frac{\sqrt{x} - 1}{\sqrt{x}} \right]$

13. If $x = 0.125$, find the value of $(1/x)^{1/3}$

14. If $x = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$ then find the value of x^2

15. If $x = \frac{1}{2 - \sqrt{3}}$, find the value of $x^3 - 2x^2 - 7x + 5$

16. Find four rational numbers between $3/5$ and $4/5$

17. Find two irrational numbers lying between $\sqrt{2}$ and $\sqrt{3}$

18. Find two rational and irrational numbers between 0.3101 and 0.3222

19. Simplify the following: a) $\left[\frac{576}{625} \right]^{-1/2}$ b) $\left[\frac{343}{1000} \right]^{-1/3}$ c) $(-1/27)^{-2/3}$ d) $(0.008)^{4/3}$ e) $(729)^{-1/6}$

20. Simplify and express the result in the simplest form:

$$\frac{(25)^{3/2} \times (243)^{2/5}}{(16)^{5/4} \times (8)^{4/3}}$$

21. Find the value x, if $5^{x-3} \times 3^{2x-8} = 225$

22. Solve: a) $49 \times 7^x = (343)^{1/3}$
b) $2^x = (128)^{1/7} \times (\sqrt{2})^4$
c) If $3^x = \frac{9}{27^x}$, find x
d) $(1/7)^{4-2x} = \sqrt{7}$
23. Evaluate: a) $125^{-1/3} \times 27^{1/3} (6^2 + 8^2)^{1/2}$
b) $(17^2 - 8^2)^{1/2}$
c) $64^{1/3} (64^{1/3} - 64^{2/3})$
24. Simplify: a) $\sqrt{45} + \sqrt{80} - 3\sqrt{20}$
b) $7\sqrt{6} - \sqrt{252} - \sqrt{294} + 6\sqrt{7}$
c) $4\sqrt{28} + 3\sqrt{7}$
25. Give an example of two irrational numbers whose:
(A) Sum is rational
(B) product is rational
(C) quotient is rational

SANT NIRANKARI PUBLIC SCHOOL
AVTAR ENCLAVE
PASCHIM VIHAR
ASSIGNMENT 2
CLASS IX
Mathematics

Given on 9th May

Submit on 10th May

Q1. Write an example of an algebraic expression that is not a polynomial.

Q2. $p(x) = \sqrt{x^3 + 1}$ is not a polynomial. Give reason

Q3. Find the value of polynomial $8x^3 - 6x^2 + 2$ at $x = 1$

Q4. If $p(x) = 6x^3 + 5x^2 - 3x + 2$ find $p(-1)$

Q5. Find the zero of the polynomial $p(y) = 2y + 7$

Q6. Find the remainder when $x^{101} - 1$ is divided by $x - 1$

Q7. Find whether $x^n + y^n$ is divisible by $x - y$ ($y \neq 0$) or not.

Q8. Write the following polynomials in standard form

i. $4y - 4y^3 + 3 - y^4$

ii. $5m^3 - 6m + 7 - 2m^2$

Q9. Write the integral zeroes of the following polynomials

i. $(x - 3)(x - 7)$

ii. $(x + 1)(3x + 2)$

SANT NIRANKARI PUBLIC SCHOOL
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ASSIGNMENT 3
CLASS IX
Mathematics

Given on 9th May

Submit on 14th May

1. If $x + y = 12$ and $xy = 32$, Find the value of $x^2 + y^2$.
2. If $3x + 2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$.
3. Write the following cubes in the expanded form:
 - (i) $(3a + 4b)^3$
 - (ii) $(5p - 3q)^3$
4. If $x^2 + \frac{1}{x^2} = 27$, find the values of each of the following:
 - (i) $x + \frac{1}{x}$
 - (ii) $x - \frac{1}{x}$
5. If $x - \frac{1}{x} = 4$, then evaluate $x^2 + 1/x^2$ and $x^4 + 1/x^4$
6. If $a + b + c = 15$ and $a^2 + b^2 + c^2 = 83$, find the value of $a^3 + b^3 + c^3 - 3abc$.
7. Factorize:
 - (i) $6ab - b^2 + 12ac - 2bc$
 - (ii) $9(2a - b)^2 - 4(2a - b) - 13$
8. If $x^3 + ax^2 - bx + 10$ is divisible by $x^2 - 3x + 2$, find the values of a and b .
9. Using factor theorem, factorize each of the following polynomials:
 - (i) $x^3 - 6x^2 + 3x + 10$
 - (ii) $2y^3 - 5y^2 - 19y + 42$
10. Which one is not a polynomial
 - (a) $4x^2 + 2x - 1$
 - (b) $y + \frac{3}{y}$
 - (c) $x^3 - 1$
 - (d) $y^2 + 5y + 1$
11. The number of zeros of $x^2 + 4x + 2$
 - (a) 1
 - (b) 2
 - (c) 3
 - (d) none of these
12. The value of k , if $(x - 1)$ is a factor of $4x^3 + 3x^2 - 4x + k$, is
 - (a) 1
 - (b) 2
 - (c) -3
 - (d) 3