

ADARSH VIDYALAYA, MOWA
HOLIDAY HOMEWORK (2021 - 22)
CLASS – X

General Note:

- 1. All the assigned work will be assessed and graded.**
- 2. All vacation Practice work need to be done in class work copy.**
- 3. Assessment of reading will be done in every exam.**
- 4. Parents are requested to:**
 - **Spend time & have meals together with their ward.**
 - **Motivate their ward to inculcate the habit of “READING HINDI & ENGLISH Literature (Newspaper, Comics etc.)**
 - **Allow them to be independent (age wise) in their daily tasks like:**
 - **Arrange shelves**
 - **Washing their own plates**
 - **Watering plants & weeding Garden**
 - **Hang/fold clean clothes**
 - **Dust furniture**
 - **Do simple mending (hems, buttons, etc.)**
 - **Shop for groceries with list**
 - **Iron clothes etc.**
 - **Include your ward while preparing monthly budget.**
 - **Share your family history & your childhood memories with them**
 - **Re continuation date of online teaching will be informed later**

SUBJECT - ENGLISH

- 1 Read the lessons "The Thief's story" and "The Making of a Scientist" make a PPT or video of it (time duration 3-5 minutes)
- 2 Write an analytical paragraph highlighting and analysing the importance of "Online classes in today's world" in about 120-150 words.
- 3 The youth of the country are very vigilant these days and feel concerned about the problems being faced by the people. Write a letter to the editor of a national daily urging him to highlight the role of the youth in eradicating the problems of poverty, unemployment and corruption. You are Rashi / Roshan, 21 Anand Society, Delhi.
- 4 Fill in the blanks to complete the passage



Kanika asked her mother(a).....Her mother was surprised and wanted to know why(b)..... sleep late. She replied that (c)..... The mother was pleased but asked her not(d).....

SUBJECT: HINDI

- प्रश्न 1. संज्ञा, सर्वनाम, विशेषण, क्रिया, क्रिया विशेषण की परिभाषा, उदाहरण एवं प्रकार सहित स्पष्ट कीजिए।
- प्रश्न 2. कारक किसे कहते हैं? कारकीय-चिन्ह सहित स्पष्ट कीजिए।
- प्रश्न 3. वाक्य किसे कहते हैं? रचना के आधार पर वाक्य के कितने भेद हैं? स्पष्ट कीजिए।
- प्रश्न 4. मिश्र वाक्य में कितने तरह के आश्रित उपवाक्य आ सकते हैं? प्रत्येक को उदाहरण देकर समझाइए।
- प्रश्न 5. 'एक भारत, श्रेष्ठ भारत' विषय पर निम्नलिखित संकेत बिंदु के आधार पर अनुच्छेद लिखिए।
संकेत बिंदु:- प्रधानमंत्री ने की घोषणा, योजना का प्रारूप, योजना के लाभ।
- प्रश्न 6. ऑनलाइन पढ़ाई का विवरण देते हुए अपने मित्र को एक पत्र लिखिए।
- प्रश्न 7. कोरोना से बचाव एवं सावधानियां बताते हुए एक विज्ञापन तैयार कीजिए।

SUBJECT: MATHEMATICS

- 1) Prove that $\sqrt{2}$ is irrational.
- 2) Prove that $\sqrt{7}$ is irrational.
- 3) Prove that $3 + 2\sqrt{5}$ is irrational.
- 4) Prove that $\sqrt{7} - \sqrt{5}$ is irrational. Given that $\sqrt{35}$ is irrational.
- 5) Express 0.323232... as a fraction in simplest form.
- 6) Express 0.2545454... as a fraction in simplest form.
- 7) The decimal expansion of the rational number $\frac{43}{2^4 \times 5^3}$ will terminate after how many places of decimals?
- 8) State Fundamental theorem of Arithmetic.
- 9) State Euclid's division lemma.
- 10) Using Euclid's algorithm, find the HCF of
 - (i) 405 and 2520
 - (ii) 504 and 1188
 - (iii) 960 and 1575
- 11) Using prime factorization, find the LCM and HCF of
 - (i) 24, 36, 40
 - (ii) 30, 72, 432
 - (iii) 21, 28, 36, 45
- 12) Show that 6^n can never end with the digit 0.
- 13) If n is an odd positive integer, show that $(n^2 - 1)$ is divisible by 8.
- 14) Show that one and only one out of n , $(n + 1)$ and $(n + 2)$ is divisible by 3, where n is any positive integer.
- 15) Find the least number of square tiles required to pave the ceiling of a room 15m 17cm long and 9m 2cm broad.

SUBJECT: PHYSICS

- 1) Write a short note on usage of Alternative sources of Energy in India.
- 2) Write a short note on the work done by the scientist Isaac Newton in the field of science.
- 3) Describe the model and working of Nuclear Reactor for the generation of electricity.
- 4) How many nuclear reactors located in India?
- 5) What is Hubble Space Telescope? Write a short note on the discoveries done by the Hubble Space Telescope.

SUBJECT: CHEMISTRY

Q1) Balance the following reactions and also mention the type of reaction.

- 1) $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
- 2) $\text{C}_2\text{H}_6 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- 3) $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$
- 4) $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
- 5) $\text{CaO} + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2$
- 6) $\text{Ca}(\text{OH})_2 + \text{CO}_2 \rightarrow \text{CaCO}_3 + \text{H}_2\text{O}$
- 7) $\text{FeSO}_4 \cdot 7\text{H}_2\text{O} \rightarrow \text{FeSO}_4 + \text{H}_2\text{O}$
- 8) $\text{Cu} + \text{AgNO}_3 \rightarrow \text{Cu}(\text{NO}_3)_2 + \text{Ag}$
- 9) $\text{HNO}_3 + \text{KOH} \rightarrow \text{KNO}_3 + \text{H}_2\text{O}$
- 10) $\text{Cu} + \text{O}_2 \rightarrow \text{CuO}$
- 11) $\text{MnO}_2 + \text{HCl} \rightarrow \text{MnCl}_2 + \text{Cl}_2 + \text{H}_2\text{O}$
- 12) $\text{CuO} + \text{H}_2 \rightarrow \text{Cu} + \text{H}_2\text{O}$
- 13) $\text{CH}_4 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O}$
- 14) $\text{BaCl}_2 + \text{Na}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{NaCl}$
- 15) $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$
- 16) $\text{Fe} + \text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + \text{H}_2$
- 17) $\text{ZnO} + \text{C} \rightarrow \text{Zn} + \text{CO}$
- 18) $\text{KClO}_3 \rightarrow \text{KCl} + \text{O}_2$
- 19) $\text{MgO} + \text{H}_2\text{O} \rightarrow \text{Mg}(\text{OH})_2$
- 20) $\text{PbNO}_3 + \text{KI} \rightarrow \text{PbI}_2 + \text{KNO}_3$

Q2) Write the reaction in the symbolic form balance it and identify the type of reaction occurred.

- 1) Zinc is reacting with hydrochloric acid to form Zinc chloride and Hydrogen gas.
- 2) Hydrogen sulphide is reacting oxygen to form water and sulphur dioxide.
- 3) Sodium chloride is reacting with silver nitrate to form silver chloride and sodium nitrate .
- 4) Ammonium Nitrite is splitting in to Nitrogen and water.
- 5) Magnesium is burning in the presence of oxygen and forming Magnesium oxide.

SUBJECT: BIOLOGY

- a) Draw a neat labeled diagram of Human Respiratory system.
 - b) What effect do aerosol have on the ozone, how does they reflect on human respiratory system.
 - c) List some disorders of human respiratory system.
- a) Write a brief note on corona virus and how can you protect ureself and others from the spread of corona virus?
- Make a neat labeled diagram of Human Excretory system.
- b) Write a brief note on Dialysis

SUBJECT: SOCIAL STUDIES

Q1) Prepare 'My own Atlas' in your map copy on the following topics.

- 1) On Physical map of India –1
Neighbouring Countries with capital
- 2) On Physical map of India –2
Major soils found in India
- 3) On Physical map of India - 3
Major Physiographic divisions of India
- 4) On Political map of India –1
States with Capitals
- 5) On Political map of India –2
Union Territories with Capitals
- 6) On Political map of India –3

Locate the following rivers- • River Indus • River Ganga • River Brahmaputra • River Tapi • River Narmada • River Krishna • River Godavari • River Kaveri

Q2) Write a report on the given topic in your Civics copy.

What are the three farm bills passed by the government and why are protest vociferous only from Punjab and Haryana?

SUBJECT: COMPUTER APPLICATION

- 1) Write steps to book online flight tickets from the following site-
 1. <https://www.goindigo.in/>
- 2) Explain how search engine works with a diagram.
- 3) List 10 types of servers with information it provides and Explain application servers.
- 4) Collect 20 domain names with their affiliation.
- 5) Differentiate between Open source software and free software.