

**USE SUBJECT WISE NOTEBOOKS FOR ASSIGNMENT**  
**Assignment-4 for duration 01 June 2020 to 15 June 2020**  
**Assignment-5 will be uploaded on 15 June 2020**

**Class- 11-SCIENCE**  
**Subject-Biology**



**ASSIGNMENT - 4**

Read chapter 01 from NCERT app and answer the following questions:

1. Why are living organisms classified?
2. What are the characteristics of living organisms?
3. Is reproduction a defining feature of living organisms? ( refer page-4 of NCERT book)
4. Define biodiversity.(pg 6)
5. Define taxonomy.(pg 7)
6. Define Nomenclature.(pg 6)
7. Define classification.(pg 7)
8. What is binomial nomenclature?(pg 6)
9. What are taxonomic categories?(pg 8)
10. Define a taxon.(pg 8)

**Class-11**  
**Subject- Chemistry**

- Q1.What is chemistry?  
Q2. Into how many branches science is sub- divided?  
Q3.Write short note on the importance of chemistry?  
Q4.What is matter?  
Q5 What are pure substances ?  
Q6 What are mixtures?  
Q7 What are homogeneous and heterogeneous mixtures ?  
Q8 Which are the three different states of matter?  
Q9 What are the properties of solid, liquid and gas?  
Q10 What are compounds?

NOTE: refer NCERT text book of chemistry

### **Class- 11- Physics.**

- Q1. What is Science?  
Q2. In how many basic branches Science is divided?  
Q3. What is scientific attitude?  
Q4. What is scientific method?  
Q5. What is Physics?  
Q6. What is Principal thrust in Physics? Explain.  
Q7. Write any five branches of Physics.  
Q8. What are the scopes of Physics?  
Q9. What is the role of Physics in society?  
Q10. What is the difference between Physics and technology?

### **Class -11 Subject- Hindi**

- प्रश्न -१) कक्षा दसवीं की बोर्ड परीक्षा देने से पहले आपकी क्या मनोदशा थी, परीक्षा देने के बाद आपने उसमें क्या अंतर पाया। अपने विचार एक अनुच्छेद में लिखिए।  
प्रश्न -२) " विद्यालय का महत्व " विषय पर एक अनुच्छेद लिखिए।  
प्रश्न -३) लॉकडाउन (४) के नियमों का पालन न करने की शिकायत करते हुए किसी प्रतिष्ठित समाचार पत्र के संपादक को पत्र लिखिए।  
प्रश्न -४) " राष्ट्रीय भाषा हिंदी " विषय पर १२० शब्दों में निबंध लिखिए।  
प्रश्न -५) प्रेमचंद द्वारा रचित "ईदगाह" कहानी के शीर्षक की सार्थकता लिखिते हुए बताएं कि आपको कहानी में किस पात्र ने सबसे ज्यादा प्रभावित किया और क्यों?

### **CLASS : XI ENGLISH (WRITING SKILL)**

Note down this letter in your note-books:

You are Neeraj/Neeraja Shekhar, Principal, Vasant Public School, Pune. Your school has just started a music department. Write a letter to the Manager of Melody House, Pune, wholesale suppliers of musical suppliers of musical instruments, placing an order for musical instruments for the school. Ask for a discount on the catalogue prices. (120-150 words)

Vasant Public School  
Pune  
26 May,2020

The Manager  
Melody House  
Pune

Subject: Placing an order for Musical Instruments

Sir

We want to place a bulk order for the supply of musical instruments to our school's newly opened music department.

Following are the specification of the order:

Item	Quantity
Piano	2
Table	10
Guitar	10
Harmonium	5
Flute	10
Drum set	2

Please send the items to the school on any weekly day before 15<sup>th</sup> June, 2020 between 8 am and 2 pm. Since we are one of your valuable and regular customers , we would like to avail a discount of 20% on the order from the catalogue price.

You are also requested to send the bill after allowing the discount for schools. Payment would be made in cash/cheque on delivery of goods and checked by the Music department of the school.

Further, please ensure the quality of the items. If defects are found in the instruments, all the items will be returned without any payment.

Thanking you  
Yours sincerely  
Neeraj Shekhar

Do it yourself in your notebooks:

1. You are Ram/ Rajani, librarian, Sun Public School, Nagpur. Write a letter to Blossom Books Ltd, 9, Gandhi Marg, Hyderabad, placing an order for the books you require for your school library. Also ask about the discount allowed and the mode of payment. Insist on prompt delivery and good packing. (120-150 words)
2. Write a letter to Malhotra Sports, Chakrata Road, Dehradun, placing an order for sports articles (minimum 4) to be supplied to your school, Summerfield Residential & Day School, Herbertpur, Dehradun. Sign as Ravi/ Ravina, Sports Secretary.

**Class : 11**  
**Subject : Maths**

**Example 1. State which of the following sets are finite or infinite :**

- (i)  $\{x : (x - 1)(x - 2) = 0 \text{ and } x \in \mathbb{N}\}$
- (ii)  $\{x : x^2 - 4 = 0 \text{ and } x \in \mathbb{Z}\}$
- (iii)  $\{x : x \text{ is a prime and } x \in \mathbb{N}\}$
- (iv)  $\{x : x \text{ is an odd and } x \in \mathbb{N}\}$

**Solution .** To check finite and infinite first we have to find roster form of the sets

- (i) Given set =  $\{1, 2\}$ . Hence it is finite set .
- (ii) Given set =  $\{-2, 2\}$ . Hence it is finite set.
- (iii) Given set =  $\{2, 3, 5, \dots\}$ . It is the set all prime numbers and since there are infinite number of prime numbers. Hence the given set is infinite set .
- (iv) Given set =  $\{1, 3, 5, 7, \dots\}$ . It is the set of all odd natural numbers which are uncountable . Hence it is an infinite set.

**Example 2. Which of the following are examples of the null set**

- (i) Set of even prime numbers.
- (ii)  $\{x : x \in \mathbb{N}, x < 5 \text{ and } x > 8\}$
- (iii)  $\{x : x \text{ is a point common to any two parallel lines .}$
- (iv)  $\{x : x \text{ is the student of your school presently studying in both the classes X and XI }\}$

**Solution.** As we know that " a set which does not contain any element is called null set ". So from given sets we have

- (i) Given set = { 2 } , as it contain an element . Hence it is not a null set.
- (ii) Given set is null set . Since odd numbers cannot be divisible by 2 .
- (iii) Given set does not contain any element . Hence it is null set .
- (iv) Given set is null set. Since any two parallel lines does not have any common point.
- (v) Given set is null set . Since same student could not be study in two classes .

**Now solve the following questions from NCERT book.**

1. State whether the following set is finite or infinite:
  - (i) The set of lines which are parallel to the x- axis.
  - (ii) The set of letters in the English alphabet.
  - (iii) The set of numbers which are multiple of 5.
  - (iv) The set of animals living in the earth.
  - (v) The set of circles passing through the origin (0,0).
  - (vi) Set of prime numbers less than 99
2. In the following sets check whether  $A = B$  or not
  - (i)  $A = \{ a, b, c, d \}$                        $B = \{d, c, b, a \}$
  - (ii)  $A = \{ 4, 8, 12, 16 \}$                        $B = \{8, 4, 16, 18 \}$
  - (iii)  $A = \{ 2, 4, 6, 8, 10\}$                        $B = \{ x : x \text{ is positive even integer and } x < 11\}$
  - (iv)  $A = \{ x : x \text{ is a multiple of } 10\}$                        $B = \{ 10, 15, 20, 25, 30, \dots\}$
3. Are the following sets equal? Give reasons .
  - (i)  $A = \{ 2, 3 \}$  ,                       $B = \{ x : x \text{ is solution of } x^2 + 5x + 6 = 0\}$
  - (ii)  $A = \{ x : x \text{ is a letter of the word FOLLOW} \}$                        $B = \{ y : y \text{ is letter of WOLF} \}$
4. List all the elements of the following sets :
  - (i)  $A = \{ x : x \text{ is the odd natural number less than } 20\}$
  - (ii)  $B = \{ x : x \text{ is an integer , } -\frac{1}{2} < x < \frac{9}{2} \}$
  - (iii)  $C = \{ x : x \text{ is an integer , } x^2 \leq 4 \}$
  - (iv)  $D = \{ x : x \text{ is the month of a year not having } 31 \text{ days} \}$

- (v)  $E = \{ x : x \text{ is a consonant in the English alphabet which precedes } k \}$ .
5. From the sets given below, select equal sets :
- $A = \{ 2, 4, 8, 12 \}$ ,  $B = \{ 1, 2, 3, 4 \}$ ,  $C = \{ 4, 8, 12, 14 \}$ ,  $D = \{ 3, 1, 4, 2 \}$ ,
- $E = \{ -1, 1 \}$ ,  $F = \{ 0, 1 \}$   $G = \{ 1, -1 \}$   $H = \{ 0, a \}$
6. Let  $T = \{ x : \frac{x+5}{x-7} - 5 = \frac{4x-40}{13-x} \}$ , is T an empty set ? Justify your answer.
- (hint : solve the given equation and find the value of x )**
7. Write the cardinal number of all the sets formed in the Q. No. 4.
8. Write the following sets in set builder form :
- (i)  $A = \{ 1/2, 2/3, 3/4, \dots, 9/10 \}$
- (ii)  $B = \{ 1, 1/4, 1/9, 1/16, 1/25, 1/36, \dots \}$

**Physical Education  
Assignment No. 4**

- Q. 1- Explain in detail about Special Olympic Bharat.
- Q. 2- What is adaptive physical education. Explain aim and objectives of adaptive Physical Education?
- Q. 3- Write in detail about deaflympics. What are the aims and objectives of Deaflympics?
- Q. 4- Explain paralympic in detail?
- Q. 5- How a physiotherapist helps children with special needs?
- Q. 6- Explain the need of inclusive education?
- Q. 7- What are the challenges faced in implementation of inclusive education In India?