# KENDRIYA VIDYALAYA THIRUVANNAMALAI WINTER BREAK ASSIGNMENT CLASS XI (2020-21)

## शीतकालीन गृहकार्य 2020- 21

कक्षा:- ग्यारहवीं

विषय '- हिंदी ( HINDI)

1.एक सेम्पल पेपर को हल करके उसे अपनी कॉपी में करना हैं।

2.पूर्व में जो परियोजना कार्य दिया गया था (Project Work) उसको सही ढंग से पूरा करके उसकी हार्ड कॉपी को , 2,3 जनवरी को विद्यालय में जमा करना है।

### **Chemistry**

- 1.what will be the minimum pressure required to compress 500lit of air at 1 bar to 200lit at 30°c?
- 2. Calculate the temperature of 4 moles of gas occupying 5 lit at 3.32 bar(R=0.083bar lit /K/mol)
- 3. For the reaction  $2Cl(g) \rightarrow Cl_2(g)$ , what are the signs of  $\Delta H$  and  $\Delta S$ ?
- 4.Enthalpy of combustion of carbon to CO<sub>2</sub> is -393.5 kj/mol. Calculate the heat released upon Formation of 35.2g of CO<sub>2</sub> from carbon and dioxygen gas
- 5. Write the relation between Kp and Kc for the following reactions
  - a)  $H_2O(I)+C(s)\rightarrow H_2(g)+CO(g)$
  - b)  $CaCO_3(s) \rightarrow Cao(s) + CO_2(g)$

#### **ENGLISH**

- 1. You are a member of science club of your school. Your science club would like to procure apparatus for the senior lab. Write a supply order to M/S Ranjeeth Labs, Bangalore to dispatch the goods carefully and ask the firm to realize 15% of concession on total bill as per the laws of purchase by educational institutions.
- 2. Draft a poster on alarming water pollutions by factories situated nearby water bodies/ rivers in 25-50 words.
- 3. Prepare a report of analysis from the WHO data on covid-19 patients worldwide and analyze the data in detail which countries are better in reducing the pandemic and also report why other countries fail to do so etc in 150 words.

### **BIOLOGY**

#### **Answer the following questions**

- 1. Compare RER with SER .
- 2. Describe the types of Placentation with suitable examples
- 3. Mention the location and the function of the following animal tissues
  - a) Columnar epithelium
  - b) Starited muscle
  - c) Adipose tissue
  - d) ligaments
  - e) cartilage
- 4. Distinguish between cymose and racemose inflorescence.
- 5. How can we save our diverse species on our planet from Severe climate change?

### **Physics**

**Project Work** 

Make a project on Newton's laws of Motion

You can make a chart or working model to show Newton's laws of motion

### **MATHEMATICS**

- 1. Let R be set of points inside a rectangle of sides a and b (a, b > 1) with two sides along the positive direction of x-axis and y-axis. Then
  - (A)  $R = \{(x, y) : 0 \le x \le a, 0 \le y \le b\}$
  - (B)  $R = \{(x, y) : 0 \le x < a, 0 \le y \le b\}$
  - (C)  $R = \{(x, y) : 0 \le x \le a, 0 < y < b\}$
  - (D)  $R = \{(x, y) : 0 < x < a, 0 < y < b\}$
- 2. In a class of 60 students, 25 students play cricket and 20 students play tennis, and 10 students play both the games. Then, the number of students who play neither is
  - (A) 0 (B) 25 (C) 35 (D) 45
- **3.** In a town of 840 persons, 450 persons read Hindi, 300 read English and 200 read both. Then the number of persons who read neither is
  - (A) 210 (B) 290 (C) 180 (D) 260
- **4.** If  $X = \{8n 7n 1 \mid n \square N\}$  and  $Y = \{49n 49 \mid n \square N\}$ . Then

(A) 
$$X \square Y$$
 (B)  $Y \square X$  (C)  $X = Y$  (D)  $X \cap Y = \varphi$ 

- **5.**A survey shows that 63% of the people watch a News Channel whereas 76% watch another channel. If x% of the people watch both channel, then (A) x = 35 (B) x
- $= 63 \text{ (C) } 39 \le x \le 63 \text{ (D) } x = 39$
- 6. Let A and B be any two sets such that n(B) = p, n(A) = q then the total number of functions  $f: A \to B$  is equal to
- 7. Find the domain and Range of the function  $f(x) = \frac{1}{\sqrt{x-5}}$
- 8. If  $f(x) = y = \frac{ax}{cx-a}$ , then prove that f(y)=x
- 9. Write all trigonometric identities from NCERT Exemplar mathematics for -XI book
- 10. If 3 tan  $(\theta 15^{\circ})$  = tan  $(\theta + 15^{\circ})$ ,  $0^{\circ} < \theta < 90^{\circ}$ , then  $\theta =$

## **COMPUTER SCIENCE**

## Q.1: Classify each of the following as either a legal or illegal Python identifier:

- a) fred
- b) sum total
- c) xTwo
- d) #if
- e) Sumtotal
- f) static
- g) #2x
- h) While
- i) \_4
- j) sum total
- k) Private
- 1) 10%
- m) sumTotal
- n) public
- o) a27834
- p) sum-total
- q) \$16
- r) wilma's

### Q.2: Find Output: if i1=2, i2=5, i3=-3, d1=2.0, d2=5.0, d3=-0.5

- a) i1 + (i2 \* i3)
- b) i1 \* (i2 + i3)
- c) i1/(i2+i3)
- d) i1 // (i2 + i3)
- e) i1/i2 + i3
- f) i1 // i2 + i3
- g) 3+4+5/3
- h) 3+4+5//3
- i) (3+4+5)/3
- j) (3+4+5)//3
- k) d1 + (d2 \* d3)
- 1) d1 + d2 \* d3
- m) d1 / d2 d3
- n) d1/(d2-d3)
- o) d1 + d2 + d3 / 3
- p) (d1 + d2 + d3) / 3
- q) d1 + d2 + (d3 / 3)
- r) 3\*(d1+d2)\*(d1-d3)

# Q.3: Write the Python program for the following:

- (A) To take input a welcome message and display it.
- (B) To find whether a given number is even or odd?

- (C) To take input two numbers and display the larger number.
- (D) To accepts two integers and print their sum.
- (E) To accept radius of a circle and prints its area.
- (F) To take inputs a student's marks in three subjects (out of 100) and prints the percentage marks.
- (G) To compute the simple interest.
- (H) To accept two numbers and prints their quotient and reminder.
- (I) To take input three numbers and display the largest number.

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\*Stay at home\*

\*Beware of Covid-19\*