DSK DAV Public School, Purulia

Class- XI Science

SUMMER HOLIDAY HOMEWORK -2021

SUBJECT- ENGLISH

LITERATURE SECTION

1. What traits of the Garoghlanian family are highlighted in this story?

2. How did the narrator react on seeing the horse and Moira s ?

3. Briefly narrate the character sketch of uncle Khosrove.

4. What kind of welcome did the narrate get from Mrs. Dorking ?

5. Write down the central idea of the poem A Photograph.

6. How deos Khushwant Singh describe the appearance of his grandmother in the text?

GRAMMAR SECTION

Rearrange the given sentence

1. Extremely /a/grief/ it/is/that/matter/unkindly/animals/are/of/exploited'

2. Their/heed/but/hears/and/pays/nobody/to/cries

3. Animal/matters/our vision/a word/should be/where/welfare

4. Inside/grandeur/the place hall/it was/all

5. Woooden stage/painted bleckcloth/ the/decorate/with a/was

WRITING SECTION

1. Suppose you are sports incharge in your school. Your school needs some sports items for the sake of the students. Write a letter to the sales manager, Global Sports Corner, Delhi to place some orders for the same.

2. Prepare a short article on impact of COVID pandemic in our daily life.

CHAPTERS- PHYSICALWORLD & UNITS AND MEASUREMENT

*Make an interesting Power Point Presentation on the chapter " Physical World". You may include some recent developments in Physics.

Exercises from Units & Measurements

1. State one law that holds good in all natural processes.

2. Among which type of elementary particles does the electromagnetic force act?

3. If the units of force and length each are doubled, then how many times the unit of energy would be

affected?

4. Justify $L + L = L$ and $L - L = L$.

5. Given relative error in the measurement of length is 0.02, what is the percentage error?

6. Name any three physical quantities having the same dimensions and also give their dimensions.

7. If g is the acceleration due to gravity and λ is wavelength, then which physical quantity does

represented by $\sqrt{g\lambda}$.

8. If heat dissipated in a resistance can be determined from the relation: $H = I^2Rt$ joule , If the maximum

error in the measurement of current, resistance and time are 2% ,1% , and 1% respectively, What

would be the maximum error in the dissipated heat?

9. In Vander Wall's equation $(P + a/V^2)(V - b) = RT$, Determine the dimensions of a and b.

10. If E, M, J and G respectively denote energy, mass, angular momentum and gravitational constant,

Calculate the dimensions of EJ^2/M^5G^2.

11. When the planet Jupiter is at a distance of 824.7 million km from the earth, its angular diameter is

measured to be 35.72´´ of arc. Calculate diameter of Jupiter.

12. If units of force, velocity and energy are 100 dyne , 10 cm/sec and 400 ergs , respectively , what

be the unit of mass, length and time ?

13. The nearest star to our solar system is 4.29 light years away .How much is the distance in terms of

parsecs? How much parallax would this star show when viewed from two locations of the earth six

month apart in its orbit around the sun?

14. A calorie is a unit of heat energy and it equals about4.2 J, where 1 J = 4.2 $kgm^2 s^{-2}$ .Suppose we employ a system of units in which the unit of mass equals α kg, the unit of length equals β m, the units of time is Υ sec. show that a calorie has a magnitude 4.2 $\alpha^{-1} \beta^{-2} \Upsilon^2$ in terms of the new units.

SUBJECT- CHEMISTRY

A. Answer the following questions-

1. Calculate the wave number for the longest wave length transition in the Balmer series of atomic hydrogen.

2. The mass of electron is 9.1×10^{-31}. If K.E is 3.0×10^{-25} J. calculate its wavelength.

3. Write down the electronic configuration of the following-

a. Fe   b.Br   c. Gd   d. Cr   e.Cu f. Cr^{3+} g. Fe^{2+}

4. State and explain Paulis exclusion principle.

5. Sate Heisenberg Uncertainty Principle.

6. If the velocity of the electron in Bohrs first orbit is 2.19×10^6 m/s , calculate the de Broglie wavelength associated with it.

7. Define molality and mole fraction.

8. Calculate the molarity of a solution of ethanol in water , in which the mole fraction of ethanol is 0.040 (assume density of water is one).

9. How are 0.50 mol Na_2CO_3 and 0.50 M Na_2CO_3 different ?

10. How many significant figures are present in the following-

0.0025, 6.0012, 5000.0

11. What is the lowest value of n that allows g orbitals to exist?

An electron is in one of the 3d orbitals. Give the possible values of n. l & ml for this electron.

12. What is mole fraction? Calculate the molarity of NaOH in the solution prepared by dissolving its 4 g in enough water to form 250 ml of the solution.

Is molality temperature dependent or not?

13. Determine the empirical formula of an oxide of iron which has 69.9% iron and 30.1% dioxygen by mass.

B. Make a power point representation on the topic of '' Quantum mechanical model of Atoms ".

SUBJECT- BIOLOGY

CHAPTER-1

1.   How will you differentiate between growth of plants and animals .

2.   All living organisms are linked with a common genetic material .What is this material ?

3.   What is meant by living ? Give any four defining features of life for ms

4.   Why are living organisms classified ?

5.   What makes species a basic taxonomic category?

6.   Define taxon. Give some examples of taxa at different hierarchial levels.

7.   Define the following terms

a)   Phylum

b)   Class

c)   Family

d)   Order

e)   Genes

CHAPTER-16

1.   Draw the diagram of Human digestive system and label it .

2.   Draw the diagram of the T.S. of alimentary canal to show its various parts .

3.   Draw a section of small intestine to show Villi.

4.   Explain the term Thecodont and Diphyodont.

5.   Draw the arrangement of teeth in human beings

6.   Stomach is located in upper left portion of the abdominal cavity and has three major parts . Name these three parts .

7.   Mention the modification of structural features of Ileum , which make it suitable for absorption .

8.   What is the location of ileocaecal valve in the alimentary canal of the human. Mention its role.

9.   What are the functions of Liver?

10.   HCl is a strong acid .Yet it does not corrode the walls of stomach why?

11.   Describe the accessory digestive glands in human.

12.   Bile juice contains no enzymes , yet it is important for digestion. Explain

13.   Explain the action of different enzymes in succus enteric us.

14.   Discuss the main steps in the digestion of protein on the food passes through different parts of alimentary canal.

SUBJECT- CPMPUTER SCIENCE

Question 1:

What are the two modes in Python ?

Question 2:

Write any two Standard Data Types in Python.

Question 3:

Is List a standard data type ?

Question 4:

Write the kind of Python's dictionary ?

Question 5:

What is the extension of Python language?

Question 6:

Which mode of Python invoking the interpreter without passing a script file as a parameter ?

Question 7:

Which mode of Python invoking the interpreter with a script parameter begins

execution of the script and continues until the script is finished ?

 Question 8:

In which mode of Python, the interpreter is no longer active ?

Question 9:

Do Python variables have to be explicitly declared to reserve memory space ?

Question 10:

Does Python allows you to assign a single value to several variables

simultaneously?

Question 11:

Give a example of immutable data type.

Question 12:

Which type of values can be store in Number data types.

Question 13:

Does Python allow for only double quotes ?

Question 14:

Write the name of most versatile Python's compound data types.

Question 15:

Which data type consists of a number of values separated by commas ?

Question 16:

What is IDLE?

Question 17:

Name some commands of Python.

Short Answer type Questions [2 mark each]

Question 1:

What is the difference between a keyword and an identifier ?

Question 2:

What are literals in Python ? How many types of literals are allowed in Python?

Question 3:

How many ways are there in Python to represent an integer literal?

Question 4:

How many types of strings are supported in Python ?

Question 5:

What is "None" literal in Python ?

Question 6:

What factors guide the choice of identifiers in Programs?

Question 7:

What will be the size of the following constants : "\a". "\a", "Manoj\'s", '\'", "XY\

YZ"

Question 8:

What is the difference between a tuple and a list ?

Question 9:

Write various python modules convert the list to generate the output "one, two,

three" ? a = ['one', 'two', 'three']

Question 10:

What would the following code yield ? word = 'abcdefghij'

Question 11:

Is there a tool to help find bugs or perform static analysis?

Question 12:

What is a tuple ?

Question 13:

What is a list?

Question 14:

Explain String data type.

Question 15:

What is a Number data types ?

Question 16:

Write the names of all Standard Data Types.

Question 17:

Write a list comprehension that builds a list of the even numbers from 1 to 10

(inclusive).

Question 18:

When do you use list vs. tuple vs. dictionary vs. set?

Question 19:

Explain the dictionary in Python.

Question 20:

What is PEP 8?

Question 21:

Explain how Python is interpreted.

Long Answer type Questions [4 mark each]

Question 1:

How do we share global variables across modules in Python?

Question 2:

What are the rules for local and global variables in Python?

Question 3:

What does 'immutable' mean ? Which data type in Phython are immutable.

Question 4:

Does Python support data type conversion ?

Question 5:

How do you make an array in Python?

Question 6:

How do you make conversion between tuples and lists ?

Question 7:

What is the difference between list and tuple ? Give an example.

Question 8:

What is used to represent Strings in Python ?

Question 9:

Is there a tool help to find bugs or perform static analysis ?

Question 10:

Which of the following variable names are invalid ? Justify.

(a) try

(b) 123 Hello

(c) sum

(d) abc@123

Question 11:

Name four Python's basic data types. Why are they called so ?

Question 12:

Classify the Python data types.

SUBJECT- MATHEMATICS

Q.1 Define a set with some examples

Q.2 What is a Null or Empty set.

Q.3 Define a finite and an infinite set with suitable examples.

Q.4 Which of the following represents a set. Justify your answer.

    (i) A set of most talented writers of English literature.

    (ii)A set of all boys of Class XI of your school.

    (ii) A set of natural numbers having negative sign.

    (iv) A set af all real numbers

    (v) A Collection of all odd integers

Q.5 Write the following sets in roaster form

    (i) A={x: x is greater than 10 and x is a natural number}

    (ii)B={x: x is an integer and $-3 \leq x \leq 3$

(iii)X={x: x is absolute value of 1,-1,2,-2,3and-3}

(iv)Y={x:x is 1st five multiple of 13}

(v)Z= {x:x are all divisors of 36}

Q.6 Define equality of two sets with proper examples.

Q.7 Write the following sets in set builder forms.

(i) A={a,e,i,o,u}

(ii)B={5,25,125,625}

(iii)C={1,8,27,64}

(iv)D={2,4,6,8,10,……….}

(v)E={2,3,5,7,11}

Q.8 Are the following pair of sets equal?Justify your answer.

A={1,2} and B={x:x is solution of (x-1)(x+2)=0

SUBJECT- HINDI

क.   'नमक का दारोगा' कहानी का प्रश्नोत्तर तैयार कीजिए।

ख.   मियाँ नसिरुद्दीन कहानी का अभ्यास एवं प्रश्नोत्तर तैयार कीजिए।

ग.   कबीर के 'संतो आई ग्यान की आंधी रे' 'मै तो एक एक करी जाना' पाठ का प्रश्नोत्तर तैयार कीजिए।

घ.   'मीरा के पद' का प्रश्नोत्तर तैयार करें।

ङ.   पाठ आधारित महत्वपूर्ण प्रश्नों के उत्तर तैयार करें।

च.   पढाए गए पाठ को ध्यानपूर्वक पढे और पाठ आधारित बोर्ड के प्रश्नों को हल करें।

छ.   रचनात्मक लेख

कोई भी विस्मरणीय यात्रा का वर्णन करे

संप्रदायिक भेदभाव समाज के लिए बाधक

ज.   कोई भी दो औपचारिक पत्र लिखिए।

Q1. Why physical education is different from academic classroom based education?

Q2. What is the Khelo-India programme?

Q3. What are the rules of ancient Olympic Games?

Long answer type question:

Q1. Explain the values of Olympic game.

Q2. Explain in details about IOC.

Q3. Explain any three career options of Physical education

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