

जय नारायण इण्टर कॉलेज
JAI NARAYAN INTER COLLEGE

ग्रीष्मवकाश गृहकार्य : 2023-24
Summer Vacation Home Work : 2023-24
कक्षा : 9

हिन्दी

1. दो बैलों की कथा पाठ पर आधारित 15 बहुविकल्पीय प्रश्न/उत्तर बनाकर स्कूल कॉपी में ही लिखें।
 2. "साखियां" कबीरदास काव्य खण्ड पर आधारित 10 बहुविकल्पीय प्रश्न/उत्तर कॉपी में ही करें।
 3. व्याकरण में उपसर्ग एवं प्रत्यय का सम्पूर्ण अभ्यास कार्य पुनः व्याकरण कॉपी में करें।
- नोट :** सभी कार्य करने से पूर्व ग्रीष्मकालीन गृहकार्य अवश्य लिखें।

ENGLISH

1. Read the Newspaper daily and write only one news article alongwith the picture in A3 size sheets.
 2. Write two new words with their meanings and sentences in A3 size ruled sheets.
 3. Write and present any one of the poems from Beehive in a creative manner :
(a) The Road Not Taken (b) Wind
(Do it in A3 size ruled sheet)
 4. Write 50 sentences related to different types of Tenses and Determiners in class work Grammar register.
 5. Write a letter to your Parents expressing your feelings about how you would like to be treated. Also write that you will never let them down by your acts or behaviour. (Grammar register)
 6. All of you have attended the Online classes due to Pandemic outbreak. Taking hint from teh lesson. The Fun they Had. Write a paragraph describing your experience of virtual classroom and all the fun you have in the school.
 7. Last year visited a fair with your family members. Taking clues from the lesson 'The Lost Child' write a paragraph describing your feelings when you realised that you were losti n the crowd and how you finally reunited with your family.
(Write both the paragraph in your Grammr register)
Revise the syllabus done in the class.
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MATHS

- Find 10 rational numbers between 5 and 6.
 - Find 7 rational number between $\frac{-4}{5}$ and $\frac{-3}{5}$
 - Find the decimal expansion of (i) $\frac{1}{7}$ (ii) $\frac{1}{17}$
 - Express the following rational numbers as decimals :
(i) $\frac{327}{500}$ (ii) $\frac{15}{4}$ (iii) $\frac{45}{1500}$
 - Express each of the following decimals in the form $\frac{p}{q}$
(i) $0.\overline{1}$ (ii) $0.\overline{3}$ (iii) $0.\overline{81}$ (iv) $0.\overline{729}$
 - Examine, whether the following number or irrational :
(i) 4 (ii) 7 (iii) $5 + 3$ (iv) $\sqrt{625}$ (v) $\sqrt{729}$
 - Find two irrational number $\frac{5}{7}$ and $\frac{9}{11}$
 - Show how $\sqrt{5}$ can be represented on the number line.
 - Show that :
(i) $\left(\frac{x^b}{x^c}\right)^a \left(\frac{x^c}{x^a}\right)^b \left(\frac{x^a}{x^b}\right)^c$ (ii) $(x^{b+c})^{b-c} \cdot (x^{c+a})^{c-a} \cdot (x^{a+b})^{a-b} = 1$
 - Solve it: (i) $2^{x-5} = 256$ (ii) $5^{x-3} \cdot 3^{2x-8} = 225$
 - Simplify: (i) $(64)^{1/3}$ (ii) $(125)^{-1/3}$ (iii) $(27)^{-2/3}$ (iv) $\left(\frac{64}{25}\right)^{-3/2}$
 - Find a and b
(i) $\frac{3-1}{3+1} = a + b \cdot 3$ (ii) $\frac{5+2}{7+4} \cdot \frac{3}{3} = a + b \cdot 3$
 - Simplify: $\frac{5-2}{5+2} - \frac{5+2}{5+2}$
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14. Evaluate each of following by using identities :
- (i) 103×97 (ii) 103×103 (iii) 97^2 (iv) 104×96
15. Expand :
- (i) $(2x - 3y + 4z)^2$ (ii) $\left(-\frac{1}{2}x + \frac{1}{3}y - z\right)^2$
 (iii) $(7y + 3z)^3$ (iv) $(5x - 3z)^3$
16. Show that :
- (i) $A^3 + B^3 = (A + B)(A^2 - AB + B^2)$
 (ii) $A^3 - B^3 = (A - B)(A^2 + AB + B^2)$
17. If $x = \frac{1}{x} = 3$ then find :
- (i) $x^2 + \frac{1}{x^2}$ (ii) $x - \frac{1}{x}$ (iii) $x^6 + \frac{1}{x^6}$
18. Factorize :
- (i) $x^2 + 2xy + y^2 - z^2$ (ii) $1 - 2ab + (a^2 + b^2)$

PHYSICS

1. A farmer moves along the boundary of a square field of side 10m in 40 s. What will be the magnitude of displacement of the farmer at the end of 2 minutes 20 seconds from his initial position?
2. Which of the following is true for displacement? (a) It cannot be zero. (b) Its magnitude is greater than the distance travelled by the object.
3. Distinguish between speed and velocity.
4. Under what condition(s) is the magnitude of average velocity of an object equal to its average speed?
5. During an experiment, a signal from a spaceship reached the ground station in five minutes. What was the distance from the spaceship to the ground station? The signal travels at the speed of light, that is, 3×10^8 m/s.
6. An object has moved through a distance. Can it have zero displacement? If yes, support your answer with an example.
7. When will you say a body is in (i) uniform acceleration? (ii) non-uniform acceleration?
8. What is the nature of the distance time graphs for uniform and non-uniform motion of an object?

CHEMISTRY

1. Give reasons for the following observation :
 - (a) The smell of hot sizzling food reaches you several meters away, but to get the smell from cold food, you have to go close.
2. A diver is able to cut through water in a swimming pool. Which property of matter does this observation show?
3. Tabulate the differences in the characteristics of matter.
4. Comment upon the following : rigidity, compressibility, fluidity, filling a gas container, shape, kinetic energy and density.
5. Give reasons :
 - (a) gas fills completely the vessel in which it is kept.
 - (b) A gas exerts pressure on the walls of the container.
 - (c) A wooden table should be called a solid.
 - (d) We can easily move our hand in the air, but to do the same through a solid block of wood, we need a karate expert.
6. How does the water kept in an earthen pot (matka) become cool during summer?
7. Give reason for the following observations :
 - (a) Naphthalene balls disappear with time without leaving any solid.
 - (b) We can get the smell of perfume while sitting several metres away.

BIOLOGY

1. Draw diagram of Plant tissue in file.
2. Make a project on animal tissue with brief description and Hguros.
3. Write differences between prokaryotic and Eukaryotic cell.
4. Draw neat and well labelled diagram of chloroplast and mito chondria.

SOCIAL SCIENCE

1. Makeup ten Multiple Choice Question from the following chapter.
History : The French Revolution
Geography : India size and Location.
Civics : What is Democracy? Why Democracy?

Economics : People as Resource.

2. Project Work : Map based.

History : Outline political map of world locate major countries of world war

Central Powers : Germany, Austria - Hungary, Turkey

Allied Power : France, England, Russia and U.S.A.

Geography : (i) Tropic of Cancer (ii) Neighbouring countries

3. **Mountain Ranges** : The Karakoram, The Aravali, The Vindhya, Teh Satpura, Western and Eastern Ghats.

4. **Plateau** : Deccan Plateau, Chota Nagpur, Malwa.

5. **Coastal Plain** : Konkan, Malabar, Coronandel and Northern Circar.

6. **Himalayan River Systems** : The Indus, The Ganga, The Sutlej

The Peninsular Rivers : The Narmada, The Tapti, The Kaveri, The Krishna, The Godavari, The Mahanadi.

7. **Lake** : Wular, Pulicat, Sambhar, Chilika.

Note : (i) Do all work in fair copy

(ii) Apply the map of India separately for all the topics.

COMPUTER

A. **Fill in the Blank** :

(i) A Computer compiles results using _____ unit.

(ii) Data are raw facts which when processed gives us _____

(iii) A _____ is a combination of dark and light strips.

(iv) The _____ printer uses toner to print image.

(v) _____ temporarily holds data and instructions tht is needed shortly by the CPU.

B. **State True or False** :

(i) Nibble is a group of 8 bits.

(ii) Flash memory is a specific type of memory.

(iii) WinZip OS one of the popular compression software.

(iv) Processing of information gives data.

(v) The Term 'Versatile' means that a comptuer can do different type of task.

C. Short Answer Type Questions :

- (i) Differentiate between Input and Output units.
- (ii) What is the Function of ALU.
- (iii) Differentiate between flatbed plotter and drum plotter.
- (iv) How are LCD monitors different from LED monitors.
- (v) Differentiate between System and application Software.

D. Application based Questions :

- (i) Which types of computer do Indian railways use to interact the customers for the various online functions, like booking, cancellation and so on?
- (ii) Tiya requires a black and white print out of her presentation on Global warming, she needs two copies of the presentation, which printer is the suite for this work.

E. Project :

- (i) Find information about scientists who have made important inventions in the fields of computer. (in Copy)
- (ii) Draw the diagram of four input devices OR four output devices. (in Chart Paper)

OR

Draw the basic design of computer system. (in Chart Paper)

PHYSICAL EDUCATION

1. What do you mean by Physical Education?
2. Write the note about the scope of Physical education?
3. Difference between Play, Games and Sports.
4. What is Corona Virus? What are the symptom's. How to prevent Corona Virus?
5. Who is a Physically fit person?