

जय नारायण इण्टर कॉलेज JAI NARAYAN INTER COLLEGE

ग्रीष्मावकाश गृहकार्य : 2023-24
Summer Vacation Home Work : 2023-24
कक्षा : 10

हिन्दी

गद्य खण्ड

आलोक — समस्त कार्य अनिवार्य रूप से (फेयर कॉपी) पर ही करें।

- प्र.1 नेताजी का चश्मा नामक पाठ से आपको क्या संदेश मिलता है?
- प्र.2 अपने दैनिक कार्य में किसी न किसी रूप में हम भी देश प्रेम की भावना को किस प्रकार प्रकट कर सकते हैं?
- प्र.3 हालदार एक भावुक और देश प्रेमी इंसान थे। उदाहरण देकर सिद्ध कीजिए।
- प्र.4 कैप्टन की मृत्यु का समाचार देते समय पानवाला क्यों उदास हो जाता है?
- प्र.5 आपके विचार से 'पानवाला' या 'कैप्टन' में से असली लंगड़ा कान है? पठित पाठ के आधार पर लिखिए। नेताजी का चश्मा नामक पाठ के प्रश्नों को याद करें।

काव्य खण्ड

- प्र.1 उद्धव गोपियों की मनोदशा क्यों नहीं समझ सके?
- प्र.2 गोपियों ने कृष्ण के प्रति अपने एकनिष्ठ प्रेम को क्या कहकर प्रकट किया है?
- प्र.3 गोपियां कृष्ण से क्यों नाराज थीं?
- प्र.4 गोपियों द्वारा श्रीकृष्ण को राजधर्म क्यों याद दिलाना पड़ा?
- प्र.5 सूरदास जी श्रीकृष्ण के प्रेषित ज्ञान योग और गोपियों की प्रेम भक्ति दोनों में से किस के पक्षधर प्रतीत होते हैं? सूरदास जी द्वारा रचित समस्त पदों की व्याख्या एवं प्रश्न उत्तरों को याद करें।

व्याकरण

सही विकल्प चुनें —

1. आप ऑफिस जाएंगे या पार्क। वाक्य संबंधित है—

क. संयुक्त वाक्य से

ख. सरल वाक्य से

ग. मिश्र वाक्य से

घ. प्रश्न वाक्य से

2. 'सुबह हुई, सब प्रसन्न हो गए।' वाक्य का संयुक्त वाक्य रूपांतरण है—
 क. सुबह हुई और सब प्रसन्न हो गए ख. जैसे ही सुबह हुई सभी प्रसन्न हो गए
 ग. सुबह होते ही सभी प्रसन्न हो गए घ. उपरोक्त कोई नहीं
 3. 'उसने पिज्जा खाया और चक्कर खाकर गिर पड़ा' वाक्य का मिश्र वाक्य रूपांतरण होगा—
 क. उसने जैसे ही पिज्जा खाया, वैसे ही चक्कर खाकर गिर पड़ा।
 ख. पिज्जा खाते ही वह चक्कर खाकर गिर पड़ा।
 ग. वह पिज्जा खाकर चकरागर गिर पड़ा
 घ. पिज्जा वह जैसे ही खाया चक्कर खाकर गिर पड़ा।
 4. 'बच्चा दौड़क मेरे पास आया।' वाक्य का संयुक्त रूप है—
 क. दौड़ा और मेरे पास आया ख. बच्चा तेजी से दौड़कर मेरे पास आयेगा
 ग. बच्चा जल्दी—जल्दी दौड़ा एवं मेरे पास आया घ. बच्चा जैसे ही दौड़ा मेरे पास आ गया
 5. 'नीरजा आई और चली गई।' वाक्य का सरल रूप निम्न विकल्पों से चुनें
 क. जिस ही नीरजा आई वह चली गई ख. नीरजा आई और गई
 ग. नीरजा आकर चली गई घ. नीरजा आई और खड़ेखड़े चली गई
- रचना के आधार पर वाक्य के भेद परिभाषा, उदाहरण एवं वाक्य रूपांतरण कॉपी पर लिखकर तैयार करें।

परियोजना कार्य (प्रोजेक्ट वर्क)

व्याकरण की पुस्तक से देखकर विज्ञापन लेखन के अंतर्गत किसी भी एक विषय पर आर्टशीट पर एक सुंदर सा विज्ञापन तैयार करें।

रंगीन पेंसिल, स्केच पेन का प्रयोग करें।

आयताकार (रेक्टेंगल) बॉक्स में ही विज्ञापन बनाएं।

ENGLISH

1. Prepare 60 Multiple Choice questions from starting three chapters of 'First Flight (20 questions from each of the Chapter) (Do this work in A-4 Sheet)
2. Write down the synonyms of difficult words from starting three chapters of Foot Prints Without Feet.' (Write down in A-4 sheet)
3. Write down the poetic devices of any five poems from the book 'First flight'. (Write down in A-4 sheet)
4. Do five exercises of Tenses and five exercises of determines from your grammar book. (Do it in A-4 Sheet)

5. Create your own handmade diary in which you will write your experiences or about one positive change, which you will bring in yourself like being punctual or being disciplined. (80 to 100 words) Decorate the diary in your specific style.

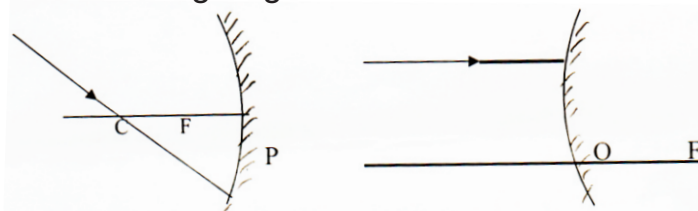
Note : All work should be done in neat and clean.

MATHS

1. For what value of 'K', the pair of equations $4x - 3y = 9$, $2x + ky = 11$ has no solution?
2. Find whether the following pair of linear equations is consistent or inconsistent :
 $3x + 2y = 8$, $6x - 4y = 9$
3. Draw the graph of :
 $2y = 4x - 6$, $2x = y + 3$ and determine whether the system of linear equations has a unique solution or not.
4. Solve the following pair of linear equations for x and y :
 $141x + 93y = 189$
 $93x + 141y = 45$
5. Do all the example of the following chapters :
(i) Real numbers (ii) Polynomials (iii) Pair of Linear Equations in two variables
6. Write all the formulas of Chapter 1 to 3.
7. Draw a Biography of any one mathematician.
8. Write the definitions of different types of polynomials with examples on the basis of terms and degree.
9. Express each number as a product of its Prime factors :
(i) 140 (ii) 3825 (iii) 5005
10. Do 5 questions of each chapter 1, 2 and 3.

PHYSICS

1. What is light? What is its nature?
2. What is the speed of light in vacuum?
3. What is a mirror?
4. What is the focal length of a plane mirror?
5. Differentiate between real and virtual image.
6. What type of image is formed on a cinema screen?
7. A concave mirror is a part of sphere of radius 40 cm. What is the focal length of the mirror?
8. Radius of curvature of a mirror is + 20 cm. What type of mirror is it?
9. Magnification of a mirror is $+2/3$. What type of mirror is it?
10. Complete the following diagrams :



11. Magnification of a mirror '___1'. What type of mirror is it? What is the position of object and image? Give the nature of image.
12. Name the type of mirror used :
(a) as a reflector in search light (b) as side view mirror in vehicles
(c) by the dentist (d) as a shaving mirror
13. Wherever you may stand in front of mirror, your image is always erect and same sized, what type of mirror is it?
14. (a) A ray of light strikes the mirror at an angle of 20° . What is the angle of reflection?
(b) Give the angle of incidence and reflection for normal incidence.
15. A candle is kept in front of plane mirror at distance of 15 cm. What is distance between candle and its image?
16. Radius of curvature of a mirror is +24 cm. Name the kind of mirror and give the characteristics of the image formed by it.
17. Draw ray diagrams using concave and convex mirror in all conditions?
18. Write the uses of concave and convex mirrors?
19. Define principal focus and aperture of concave and convex mirror?
20. What are properties of plane mirror?

CHEMISTRY

1. Write the balanced chemical equations for the following reactions :
 - (a) Calcium hydroxide + Carbon dioxide → Calcium Carbonate + Water
 - (b) Zinc + Silver nitrate → zinc nitrate + silver
 - (c) Aluminium + copper chloride → Aluminium chloride + Copper
 - (d) Barium chloride + Potassium sulphate → Barium sulphate + potassium chloride
2. Why is respiration considered as exothermic reaction? Explain.
3. Identify the Oxidising agent (Oxidant) in the following reactions :
 - (a) $\text{Pb}_3\text{O}_4 + 8 \text{HCl} \rightarrow 3 \text{PbCl}_2 + \text{Cl}_2 + 4 \text{H}_2\text{O}$
 - (b) $\text{CuSO}_4 + \text{Zn} \rightarrow \text{Cu} + \text{ZnSO}_4$
 - (c) $3 \text{Fe} + 4 \text{H}_2\text{O} \rightarrow \text{Fe}_3\text{O}_4 + 4 \text{H}_2$
4. Balance the following chemical eqns. and identify the type of chemical reaction :
 - (a) $\text{Mg(s)} + \text{Cl}_2 \rightarrow \text{MgCl}_2(\text{s})$
 - (b) $\text{Fe}_2\text{O}_3(\text{s}) + 2 \text{Al(s)} \rightarrow 2 \text{Fe(l)} + \text{Al}_2\text{O}_3(\text{s})$
 - (c) $\text{Pb(NO}_3)_2(\text{aq.}) + 2 \text{KI(aq.)} \rightarrow \text{PbI}_2(\text{s}) + 2 \text{KNO}_3(\text{aq.})$
 - (d) $\text{CaCO}_3(\text{s}) \xrightarrow{\text{heat}} \text{CaO(s)} + \text{CO}_2(\text{g})$
5. Learn and write symbols, Atomic number and Atomic masses upto 30 elements of Periodic Table.

BIOLOGY

- Q.1 Photosynthesis in green Plants is directly and Indirectly dependent on so many plant structures. Explain : Briefly the role of the following structures in this process :
- | | |
|-----------------------|-------------------|
| (a) Guard cells _____ | (b) Cuticle _____ |
| (c) Chlorophyll _____ | (d) Stomata _____ |
- Q.2 Define the following terms :
(a) Photolysis of water (b) Dental Carries.
- Q.3 To show that sunlight is necessary for Photosynthesis.
- Q.4 Why do herbivores have longer, small Intestine than carnivores?
- Q.5 Draw a neat labelled diagram of human alimentary canal.
-
-

- Q.6 Explain the process of nutrition in Amoeba.
- Q.7 State the role of the following in human digestive system.
- (a) Digestive enzymes (b) Hydrochloric acid (HCl) (c) Villi

SOCIAL STUDY

CIVICS (Chapter : Power Sharing)

- Q.1 Why is power sharing democratically desirable?
- Q.2 Explain drawbacks of the term majoritarianism.
- Q.3 Is it feasible to change the power sharing arrangement? If so, how?

HISTORY (Chapter : The Rise of Nationalism in Europe)

- Q.1 How had Britain come into existence?
- Q.2 Describe the impact of 'revolution of liberals' of 1945 in Europe.
- Q.3 Explain certain changes brought about in Europe by the Treaty of Vienna in the year 1815.

GEOGRAPHY (Chapter : Resources and Development)

- Q.1 Why is resource planning considered significant in the context of a country like India?
- Q.2 How has technical and economic development led to more consumption of resources?
- Q.3 Delineate the land use pattern in India.

Project Work

Map - based question :

- Q. Mark the following in separate maps of India (political) :
- (i) Prominent rivers and mountain ranges
 - (ii) Ore deposits of coal, iron, bauxite
 - (iii) Major sea ports of India (any 5)

COMPUTER APPLICATION

- A. Web server is a special computer system running on HTTP through web pages. The web page is a medium to carry data from one computer system to another. The working of the web server starts from the client or user. The client sends their request through the web browser to the web server. Web server takes this request, processes it and then sends back processed data to the client. The server gathers all of our web page information and sends it to the user, which we see on our computer system in the form of a web page. When the client sends a request for processing to the web server, a domain name and IP address are important to the web server. The domain name and IP address are used to identify the user on a large network. (Do any five)
- (i) Web servers are :
 - (a) IP addresses (b) Computer System (c) Web pages of a site
 - (d) A medium to carry data from one computer to another
 - (ii) What does the web server need to send back information to the user?
 - (a) Home address (b) Domain name
 - (c) IP address (d) Both (b) and (c)
 - (iii) What is the full form of HTTP?
 - (a) Hypertext Transfer Protocol (b) Hypertext Transfer Procedure
 - (c) Hyperlink Transfer Protocol (d) Hyperlink Transfer Procedure
 - (iv) The _____ translates internet domain and host name to IP address
 - (a) Domain name system (b) Routing information protocol
 - (c) Google (d) Network time protocol
 - (v) Computer that requests the resources or data from other computer is called as _____ computer
 - (a) Server (b) Client (c) None of the above (d) (a) and (b)
 - (vi) DNS stands for :
 - (a) Domain Name Security (b) Domain Number System
 - (c) Document Name System (d) Domain Name System
- B. In mid 80's another federal agency, the NSF created a new high capacity network called NSF net, which was more capable than ARPANET. The only drawback of NSF net was that it allowed only academic research on its network and not any kind of private business on it. Now, several private organisations and people started working to build their own networks, named private networks, which were later (in 1990's) connected with ARPANET and NSF net to form the Internet. The Internet really became popular in 1990's after the development of World Wide Web. (Do any five)

- (i) What does NSF net stand for?
 - (a) National Senior Foundation Network
 - (b) National Science Framework Network
 - (c) National Science Foundation Network
 - (d) National Science Formation Network
- (ii) What does ARPANET stand for?
 - (a) Advanced Research Premium Agency NET work
 - (b) Advanced Research Projects Agency NET work
 - (c) Advanced Review Projects Agency NET work
 - (d) Advanced Research Protection Agency NET work
- (iii) What is Internet?
 - (a) A single network
 - (b) A vast collection of different networks
 - (c) Interconnection of local area networks
 - (d) Interconnection of wide area networks
- (iv) To join the internet, the computer has to be connected to a _____
 - (a) Internet architecture board (b) Internet society
 - (c) Internet service provider (d) Different computer
- (v) Internet access by transmitting digital data over the wires of a local telephone network is provided by :
 - (a) Leased line (b) Digital subscriber line
 - (c) Digital signal line (d) Digital leased line
- (vi) A piece of icon or image on a web page associated with another webpage is called _____
 - (a) URL (b) Hyperlink (c) Plugin (d) Extension

C. A blog is a publication of personal views, thoughts and experience on web links. It is a kind of personal diary note about an individual. The contents published on a blog are organized in a reverse manner, it means recent posts appear first and the older posts are further downwards.

Blogger - a person who posts a blog in the form of text, audio, video, web links, etc. is known as a blogger. Bloggers have followers who follow them to get instant messages posted by the blogger.

In most cases, celebrities, business tycoons, famous politicians, social workers, speakers, etc. are the successful bloggers because people follow them to know about

their success stories and ideas. (Do any five)

- (i) Using websites for building network with friends and relatives is called as _____
(a) Social networking (b) blogging (c) net banking (d) e-commerce
- (ii) Websites used to buy and sell something are categorized under _____
(a) social networking sites (b) e-commerce websites
(c) search engines (d) entertainment sites
- (iii) Google is an example of _____
(a) social network (b) entertainment
(c) search engine (d) none of these
- (iv) Which of the following is an example of micro-blogging?
(a) orkut (b) facebook (c) google + (d) twitter
- (v) Which of the following is not used as blogging platform?
(a) Type Pad (b) Blogger (c) Word Press (d) Printerest
- (vi) _____ was one of the first uses of the Internet and is still the most popular use, accounting for most of the traffic on the Internet.
(a) blogs (b) chat rooms (c) E-mail (d) discussion boards

D. Mr. Harish, an accountant, works in an IT firm and due to the pandemic, has been asked to work from home. He has set up his online office at his home. He has purchased a laptop, web camera and other accessories. Now he has started working from home and performs his various duties online.

- (i) Mr. Harish wants to hold an online meeting with the company's client such that he can interact as well as see them. Which web service should be available?
- (ii) Mr. Prithvi sends an email to Harish requesting him to prepare the balance sheet. Which network protocol is involved during this email communication?
- (iii) The company's financial head needs to send some high security documents to Mr. Harish. He uses an application which supports the _____ protocol.
- (iv) In order to gather some information on latest accounting trends, Mr. Harish has to do some research. He can do this by locating sites online using a _____
- (v) Joseph, the company secretary sends a link to Mr. Harish which contains important company files. What should he do in order to access the files?

E. Search Engines allow us to filter the tons of information available on the internet and get the most accurate results. And while most people don't pay too much attention to search engines, they immensely contribute to the accuracy of results and the experience you enjoy while scouting through the internet.

Besides being the most popular search engine covering over 90% of the worldwide market, Google boasts outstanding features that make it the best search engine in the experience. The platform is renowned for continually updating its search engine results and features to give users the best experience. (Do any five)

- (i) Search engines are :
 - (a) Software systems that are designed to search for information on the world wide web.
 - (b) Used to search documents
 - (c) Used to search videos
 - (d) All of the above
- (ii) We get a list of sites after typing a word in search bar called :
 - (a) Single word (b) Key phrase (c) Site (d) All of the above
- (iii) The search results are shown in a line of results. This is called :
 - (a) Search engine pages (b) Categories
 - (c) Search engine result pages (d) Tag list
- (iv) Search engines are able to serch _____ type of information.
 - (a) Videos (b) Images (c) Documents (d) All of the above
- (v) Web search engines store information about web pages with the help of :
 - (a) Web router (b) Web crawler (c) Web indexer (d) Web organizer
- (vi) Web crawler is also called as :
 - (a) Web spider (b) Web manager (c) Ink directory (d) Search optimizer

PHYSICAL EDUCATION

1. Calculate your Body Mass Index (BMI)
$$\text{BMI} = \frac{\text{Weight (kg.)}}{\text{Height (m)}^2}$$
2. What is conjunction and Examination of conjunction.
3. Characteristics of growth and development.
4. Effects of Yoga on the Body.
5. Effects of Physical Activities, Games, Sports and Yoga on Moscular, Circulatory and Respiration systems?