D.A.V Cent. Public School Bahadurgarh
12 Arts Holidays Homework 2023-24

English

1) Prepare a book review after reading any one of the books mentioned below:
Five Point Someone - by Chetan Bhagat
Wings of Fire - by Abdul kalam
Time Machine - by H. G. Wells

2) Write and learn 20 antonyms, synonyms and one word substitutions each.(words may be taken fromhe texts you have done till now).

3) Write a self-composed poem about your mother/ grandmother or the person you like the most in your family.
Ornament your poem with the use of literary devices that you learnt in the poem my Mother at Sixty Six and present beautifully on A. 4 size sheet.

4)Prepare a debate (for / against) on the given topic:
a)We are happier than our forefathers. (R.N.1 10)
b)Happiness is proportional to income ()R. N. 11 to 20)
c)Working mothers-A Boon or a Bane (20 to30)
d)Schools should promote the students to join coaching institutes (R. N. 30…till last)

5)Activity:(to be done on A.4 sheet)
a)poster making on any social problem(1o 10)
b)Slogan writing (11 to 20)
c)Literary devices(With pictures and examples) Simile, Metaphor,Personification(21to30)
d)Crossword Puzzle/ Riddles (31 till last roll no.)

6)write recapitulating points of all the chapters done in literature in the form of flow chart,tabular form, bubbles form etc**.**

7)Draft notice on the given topics:
i)Inter-house Debate competition
ii)Annual Sports Meet
iii)Cultural Benefit Show
iv)Puppy lost in the park

8)write letter to the editor on the following issues:
i)Problem of Inflation
ii)Proliferation of coaching centres

9) Get the hard copy of unseen passages for comprehension to be shared in your respective whatsapp groups and write the answer in your HHW assignment notebooks.

- **Political Science**

1) Roll No 1-10 Show Disintegrattion of USSR on Thermocol Showing all 15 countries, Use thread to show disintegration
2) Roll No 11-20 Make a pictorial presentation of Unipolar world vs Multi polar world…. on the CHART
3) Roll No 21-30 India's Relations with Neighbours…. Bangladesh, Pakistan, Nepal only
4) Roll No 31 onwards ALL PRINCIPAL Organs of UNO ….
Revise the chapters done till date.

विषय हिंदी

नोट :- सभी प्रश्नों के उत्तर ध्यानपूर्वक और सुंदर लेख में दीजिए।

प्रश्न 1) 'भक्तिन' और 'बाजार दर्शन' पाठ को पढ़कर 10 - 10 अतिरिक्त प्रश्नों के उत्तर 40 से 50 शब्दों में लिखिए।

प्रश्न 2) 'आत्म परिचय' 'एक गीत' और 'पतंग' कविता को पढ़कर 10 - 10 अतिरिक्त प्रश्न उत्तर 30 से 40 शब्दों में लिखिए।

प्रश्न 3 'सिल्वर वेडिंग' पाठ को पढ़कर 20 बहुविकल्पी प्रश्न - उत्तर का निर्माण कीजिए।

प्रश्न 4 समाचार लेखन की शैली 'उल्टा पिरामिड शैली' को स्पष्ट करते हुए ककारों के साथ एक सुंदर सचित्र चार्ट तैयार कीजिए।

प्रश्न 5 'सिल्वर वेडिंग' पाठ के आधार पर पीढ़ी के अंतराल को दर्शाते हुए एक सचित्र मॉडल अथवा चार्ट तैयार कीजिए।

प्रश्न 6)बाजार एक जादू है वह आंखों के माध्यम से लोगों को अपने आकर्षण में फसाता है इस आकर्षण से हम अपने आप को कैसे बचा सकते हैं यह संदेश देते हुए चित्र सहित एक सुंदर चार्ट अथवा मॉडल तैयार कीजिए

प्रश्न 7 निम्नलिखित विषयों पर 100 से 120 शब्दों में फीचर लेखन लिखें।

i) युवाओं के लिए मतदान का महत्व। ii) कृत्रिम बुद्धिमत्ता (आर्टिफिशियल इंटेलिजेंस) का दौर (iii) कर्म ही पूजा है (iv) आत्मनिर्भरता की ओर बढ़ते हमारे कदम।

प्रश्न 8 निम्नलिखित विषयों में से किसी एक विषय पर वार्षिक परीक्षा के लिए प्रायोगिक पुस्तिका (प्रोजेक्ट फाइल (15 से 20 पृष्ठों) तैयार कीजिए:-

i)छायावाद के आधार स्तंभ 'जयशंकर प्रसाद', 'सूर्यकांत त्रिपाठी निराला' सुमित्रानंदन पंत' और ' महादेवी वर्मा' आदि कवियों पर सचित्र एक प्रायोगिक पुस्तिका (प्रोजेक्ट फाइल) तैयार कीजिए (अथवा)

ii) हिंदी साहित्य की गद्य विधाएं (कहानी, नाटक, उपन्यास, रेखाचित्र, संस्मरण आदि पर एक सचित्र प्रायोगिक पुस्तिका तैयार कीजिए

iii) वर्तमान में जनसंचार माध्यम कितनी महत्वपूर्ण भूमिका निभा रहे हैं इसे प्रदर्शित करते हुए सचित्र एक प्रायोगिक पुस्तिका तैयार कीजिए

iv) आपके पाठ्यक्रम में दिए गए किसी भी लेखक अथवा लेखिका के संपूर्ण जीवन पर ,साहित्यिक रचनाओं पर अपने विचार व्यक्त करते हुए सचित्र एक प्रायोगिक पुस्तिका तैयार करेंगे।

प्रश्न :-9) अप्रैल और मई के महीने में करवाए गए पाठ्यक्रम को याद कीजिए।

ECONOMICS
1. Make Mind Map of Ch- 1 to 4 in your notebook with the help of Revision of key points given at the back of every chapter.
2. Write and learn all concepts given in 'Revision of key points'.
3. Read news related to Economy daily and make a collage of the same
4. Solve Objective questions given at the back of each chapter(1to4)
5. Solve numericals of National income from following methods(10 questions each method):
Income method, Expenditure method, Value Added method.
6. Collect information for the given Project and prepare case study. Complete work related to survey and analysis of data.
7. Make Modal/Chart on any one topic given below:
a. Lifeline of Indian Economy
b. India: Asia's Star of the next decade- Morgan Stanley
c. International trade
d. Lifeline of Indian Economy

Geography
1) Prepare your Geography practical file for first three chapter of practical book.
2) Learn all the chapters covered before vacations.
3) Complete notes of chapter 1,2,4&5 of first book and chapter 1&4 from 2 book in fair notebook.
4) Find out 10 short question answers of each chapter covered before vacations in assignment notebook of Geography.
5) Practice Map work of ch- 5 and paste them in assignment notebook.
6) Make a beautiful chart on any topic from ch-1,2, 4 &5 from first book and ch-1&4 from 2ndbook.
7) Try to make working model/ model on given topic in the class.

History
1) Make a project report on any one topic of your class 12th syllabus of History.
Note- Project should be handwritten covering at least 25 to 30 pages.
2) Learn all the chapters covered before vacations.
3) Complete notes of chapter 1, 2, 3 and 4 in your fair notebook.
4) Write 10 short question answers of each chapter covered before vacations in assignment notebook of History.
5) Practice Map work of ch- 1,2 and 4 and paste them in assignment notebook.
6) Make terracotta(clay) models from ch-1(Bricks, Beads and Bones)
OR
Make jewellery of Harappan civilization using clay or paper.
7) Make a beautiful chart on any topic from ch-1,2,3 or 4 or any other topic from Indian History

विषय- संगीत गायन

नोट - यह अवकाश गृह कार्य संगीत की प्रोजेक्ट फाइल पर ही करें ।

१. भारतीय संगीत के किन्ही पांच वाद्यों का सचित्र वर्णन कीजिए।

२. राष्ट्रीय गीत किसके द्वारा लिखा गया इसको पूरा कीजिए ।

३. तानपुरे का सचित्र वर्णन कीजिए और २/३ का चित्र बनाइए।

४. अब तक भारतीय संगीत में भारत रत्न ,पदम श्री और पदम विभूषण किस किसको मिला किन्हीं 12 कलाकारों के विषय में संक्षिप्त जानकारी दीजिए।

५. संगीत की देवी वीणा वादिनी की वंदना लिखें हे हंस वाहिनी ।

६. सरस्वती माता का एक सुंदर चित्र बनाएं।

७. राष्ट्रीय गीत राष्ट्रीय गान के रचयिता कौन कौन हैं राष्ट्रगीत और राष्ट्रगान को स्पष्ट कीजिए ।

८. किन्ही 12 राज्यों के लोक नृत्य का सचित्र वर्णन कीजिए ।

९. राष्ट्रीय वाद्य कौन सा है और अंतरराष्ट्रीय वाद्य कौन सा है सचित्र वर्णन कीजिए।

१०. संगीत में आपको कौन सा वाद्य अच्छा लगता है उसका चित्र बनाकर स्पष्ट करें ।

११. हमारे 3 देवी देवता कौन-कौन से हैं जिनके हाथों में संगीत का वाद्य यंत्र है उनका चित्र संलग्न करें ।

१२. भारतीय संगीत में प्रसन्नता का वाद्य और दुख का वाद्य कौन सा है सचित्र वर्णन करें और उसके विषय में दो-दो लाइन लिखें ।

१३. घन वाद्य , तंत्र विद्या, सुशीर वाद्य कौन-कौन से हैं इनके विषय में लिखें ।

१४. कोई एक एक भजन , देशभक्ति गीत और लोकगीत लिखें ।

१५. संगीत क्षेत्र में किन्हीं पांच ख्याति प्राप्त कलाकारों के विषय में लिखें।

Physical education holiday homework
1. Labelled diagram of 400 metre track and explain 100 metre,200 metre, 400 metre, 800 metre, and 1500 metre races and show in 400 metre track.
2. Field Events
Shot put
discus throw
javelin throw
long jump
High jump
3. Anyone game of your choice out of the list above. Labelled diagram of field and equipment (rules, terminologies and skills) etc.
Football
Basketball
Kabaddi
Volleyball
Cricket
Hockey
Kho-kho
4. Pictorial presentation of any five asanas.

1. What is the number of reflexive relation on a set A consisting of n elements?
2. Let A= { 1,2,3,4}. Then how many symmetric relations will be there on set A?
3. For real numbers x and y , define xRy iff x -y+ $\sqrt{2}$ is an irrational number. Check this relation for reflexive,symmetric and transitive.
4. If the set A contains 5 elements and set B contains 6 elements, then what is the number of one-one and onto mappings from A to B?
5. Which of the following function from Z to Z is a bijection?

    (i)   F(x) = x^3 (ii) f(x)= x + 2   (iii) f(x)= 2x+1   (iv) f(x)= x^2 + 1
6. The domain of f(x) = $\cos^{-1}$ (x^2 − 4) ?
7. If $\cos^{-1}$ α + $\cos^{-1}$β + $\cos^{-1}$γ = 3π, then find value of α(β + γ) + β(γ+ α) + γ (α+ β)
8. What is one branch of $\cos^{-1}$ x other than the principal value branch?
9. If A and B are square matrices of the same order such that AB = 5I , then what is A^{-1}?
10. If A^3 = O , then I + A + A^2 equals to ?
11. If A = $\begin{matrix} x & 5 & 2 \\ 2 & y & 3 \\ 1 & 1 & z \end{matrix}$, xyz = 80 , 3x + 2y+ 10z = 20 and A(adjA) = k I , then k equals?
12. If A = $\begin{matrix} 0 & 1 & 3 \\ 1 & 2 & x \\ 2 & 3 & 1 \end{matrix}$ and A^{-1} = $\begin{matrix} 1/2 & -4 & 5/2 \\ -1/2 & 3 & -3/2 \\ 1/2 & Y & 1/2 \end{matrix}$, then find value of x and y.
13. Using determinants prove that the points (a,b) , (a1,b1) , (a- a1,b-b1) are collinear if ab1=a1b
14. If A = $\begin{matrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ a & b & -1 \end{matrix}$, then find A^{20}.
15. If $\begin{matrix} cos2\pi/7 & -sin2\pi/7 \\ sin2\pi/7 & cos2\pi/7 \end{matrix}$ = $\begin{matrix} 1 & 0 \\ 0 & 1 \end{matrix}$, then find the least positive integral value of k.

Questions based on limits

16. Evaluate : $\lim\limits_{x\to0} \dfrac{\sqrt{a+2x}-\sqrt{3x}}{\sqrt{3a+x}-\sqrt{4x}}$.

17. $\lim\limits_{x \to 0} \dfrac{tanx - sinx}{sin^3 x}$

18 (i) $\lim\limits_{x \to \pi/6} \dfrac{\sqrt{3}\, sinx - cosx}{x - \pi/6}$ **(ii)** $\lim\limits_{x \to \pi/2} \dfrac{1 + cos2x}{(\pi - 2x)^2}$

ACTIVITIES

PROJECT WORK : BEAUTY OF MATHEMATICS : WITHOUT MATHEMATICS , THERE IS NOTHING YOU CAN DO. EVERYTHING AROUND YOU IS MATHEMATICS .MATHEMATICS IS THE MOST BEAUTIFUL AND MOST POWERFUL CREATION OF THE HUMAN SPIRIT.

SO STUDENTS LOOK AROUND AND SEE THE FOLLOWING MATHEMATICAL CONCEPTS. CLICK PHOTOGRAPHS OR YOU MAY DOWNLOAD THE PICS FROM INTERNET PASTE THEM ON A FILE AND PREPARE A SHORT NOTE ON THEM.

(I)ARITHMETIC PROGRESSION(GANDHI HOUSE STUDENTS)

(II)QUADRATIC EQUATION(SUBHASH HOUSE STUDENTS)

(III)SYMMETRY(TAGORE HOUSE STUDENTS)

(IV) FIBONACCI SEQUENCE (VIVEKANAND HOUSE STUDENTS)

2. PREPARE A BEAUTIFUL CHART ON ANY OF THE FOLLOWING TOPICS :

   (I)TRIGONOMETRIC FORMULAS

   (II)INVERSE TRIGONOMETRIC FORMULAS

   (III)BEAUTY OF NUMBER PATTERENS

   (IV) GRAPHS OF INVERSE TRIGONOMETRIC FUNCTION

 3. TAKE A CARDBOARD SHEET AND USING MATERIALS LIKE COLOURED THREADS,DRAWING PINS, GLUE ETC PREPARE THE FOLLOWING ACTIVIES :

(I)TO VERIFY THE RELATION R in the set L of all lines in a plane defined by R ={ (l , m): l is parallel to m} is an equivalence relation.(ROLL NO : 2,4,6,8,10,12,14,16,18,20)

(II)To demonstrate a function which is one-one but not on-to.

    (ROLLNO : 1,3,5,7,9,11,13,15,17,19)

(III)To demonstrate a function which is onto but not one-

    One.(21,23,25,27,29,31,33,35,37,39,41)

(IV)To verify that the relation R in the set L of all lines in a plane, defined by R= { (l,m) : l is perpendicular to m} is symmetric but neither reflexive nor transitive.(22,24,26,28,30,32,34,36,38,40,42)

Informatics Practices
MySQL

XII-B	**Make a presentation/Animation on Cyber safety**
XII-C	**Make a chart on Mysql Functions (full chart)**
XII-E	**Make a chart on Online Banking and Transaction Methods (full chart)**
XII-F	**Create a PPT /animated video on The impact of Artificial Intelligence on Sustainable Development Goals to develop responsible citizenship**

Note: For making animated videos you can use canva.com, powerpoint, kinemaster + green screen characters from youtube etc.

Q1. Answer the following questions briefly:

a) Write any two features/advantages of MySQL.

b) What is a database ? What is a database management system? Give two examples of RDBMS. Write any two advantages of RDBMS.

c) Write the full form of SQL? Explain the subcategories of SQL statements giving two examples in each category.
d) Define the following by taking suitable examples wherever necessary :
      1.Primary Key   2. Candidate Key   3. Alternate Key   4. Foreign Key
e) Differentiate between the following(Give examples to support your answer):
- CHAR and VARCHAR datatypes
- NUMERIC and NON NUMERIC datatypes
- Tuple and Attribute
- Degree and Cardinality of a relation
- DELETE and DROP TABLE
f) After creating the "employee" database, you want to use it. Write the command that you should give.
g) What is NULL value?
h) What do % and _ mean inside a SELECT with LIKE statement ? Explain with the help of example of each.
i) What are group/aggregate functions in MySQL? Explain the usage of any two group functions by taking example of each.
j) Briefly explain the difference between single row functions and group functions by taking examples of each.
k) Rama is not able to change a value in a column to NULL. What did she specify when she created the table?

*Q2. Write a SQL statement to create the following table **HOSPITAL**. (for practical file)*

Table: **HOSPITAL**

PNo	Name	Age	Department	DateofAdm	Charges	Sex
1	Sandeep	65	Surgery	23/02/98	300	M
2	Ravina	24	Orthopedic	01/01/98	200	F
3	Karan	45	Orthopedic	19/02/98	200	M
4	Tarun	12	Surgery	01/01/98	300	M
5	Zubin	36	ENT	12/01/98	250	M
6	Ketaki	16	ENT	24/02/98	300	F
7	Ankita	29	Cardiology	20/02/98	800	F
8	Zareena	45	Gynecology	22/02/98	300	F
9	Kush	19	Cardiology	13/01/98	800	M
10	Shailya	31	Medicine	19/02/98	400	M

Note: PNo is the primary key in the above table.

Write SQL commands for the statements (a) to (s) on the basis of the table HOSPITAL.
a) To show all the information of the patients of the cardiology department..
b) To list the names of female patients who are either in the orthopedic or surgery department.
c) To list the name of all the patients with their date of admission in ascending order.
d) To display the patient's name, charges, age for male patients only.
e) To count the number of patients with age > 20.
f) To display various departments.
g) To display the number of patients in each department.
h) To display the number of male & female patients.
i) To display the details of the patients admitted in first quarter of 1998.
j) To display the names of the department where the number of patients is less than 2.
k) To display the details of all the patients whose name starts with the alphabet 'Z'.
l) To change the age of the patient Kush to 20.
m) To increase the charges of all the patients by 5%.
n) To remove the record of the patient whose Name is Tarun.
o) To add another column WardNumber of the type Number in the above table.
p) To change the column Charges such that it can allow NULL values.
q) To set charges to NULL for all the patients in the Surgery department.

r) To decrease the charges by 10% of all the patients admitted in the Cardiology department.
s) To remove the primary key constraint in the above table.
t) To insert a new row in the HOSPITAL table with the following data:
   11,'Mustafa',37,'ENT','1998-02-25',250,'M'.

Give the output of the following SQL statements based on the above table HOSPITAL:
   (i) Select COUNT(DISTINCT Charges) FROM Hospital;
   (ii) Select MIN(Age) From Hospital WHERE Sex='M';
   (iii)Select AVG(Charges) FROM Hospital where DateofAdm < '1998-02-12';
   (iv)Select SUM(Charges) FROM Hospital where Sex ='F';
   (v) Select Left(Name ,4) FROM Hospital where Charges = 200;
   (vi)Select RIGHT(Name,3) FROM Hospital where Deaprtment='ENT';
   (vii)   Select Length(Department) FROM Hospital where Department IN ('ENT','Orthopedic');
   (viii)   Select CONCAT(Name,Age) FROM Hospital where Sex='F' and Age <18;
   (ix)Select LCASE(Department) FROM Hospital where Department Like '%y';
   (x) SELECT SUBSTR(Deaprtment,2,3) FROM Hospital where Charges between 500 and 1000;
   (xi)SELECT MONTH(DateofAdm) , DAY(DateofAdm) From Hospital where cost between 500 and
       1000;
   (xii)   SELECT NOW( ), DAYNAME(now());
   (xiii)   SELECT DAYOFYEAR(NOW());
   (xiv)   SELECT ROUND(2345.67,2) , ROUND(2345.67,1) , ROUND(2345.67,0) ;
   (xv)   SELECT POWER(25,-1), MOD(56,7) ;

Q3. Write SQL queries based on the following two tables:
Table: **ACTIVITY**

Acode	ActivityName	Stadium	ParticipantsNum	PrizeMoney	ScheduleDate
1001	Relay 100x4	Star Annex	16	10000	23-Jan-2004
1002	High Jump	Star Annex	10	12000	12-dec-2003
1003	Shot Put	Super Power	12	8000	14-Feb-2004
1005	Long Jump	Star Annex	12	9000	01-Jan-2004
1008	Discuss Throw	Super Power	10	15000	19-Mar-2004

Table: **COACH**

Pcode	Name	Acode
1	Ahmed Hussain	1001
2	Ravinder	1008
3	Janila	1001
4	Naaz	1003

a) Display the names of all the activities with their Acodes in descending order.
b) Display the sum of PrizeMoney for the activities played in each of the stadium separately.
c) Display the coach's name and Acodes in ascending order of Acode from the table COACH.
d) Display the content of Activity table whose ScheduleDate is earlier than 01/01/2004 in ascending order of ParticipantsNum.
e) Display the names of coaches who are not associated with any activity at all.
f) Display the names activity and its corresponding coachname.

Give the output of the following queries:

(i)   SELECT COUNT(DISTINCT ParticipantsNum) FROM Activity;

(ii)   SELECT Max(ScheduleDate), MIN(ScheduleDate) FROM Activity;

(iii)   SELECT COUNT(*) FROM Coach;

(iv)   SELECT Name, Activityname FROM activity A, COACH C
                  WHERE A.Acode = C.Acode AND A.ParticipantsNum =10;

(v)   SELECT DISTINCT Acode FROM Coach;