



HOLY HEARTS EDUCATIONAL ACADEMY

RAIPUR, CHHATTISGARH, 0771-421700, 2431088

CLASS : XII

SUMMER HOMEWORK - 2021

Note: Video should be maximum 3 minutes. It has to be sent through Whatsapp to your subject teacher.

ENGLISH:

1a. Write in your English copy all the long answers of

Lessons: a. The Last Lesson (Flamingo)

b. Deep Water (Flamingo)

c. The Enemy (Vistas)

1b. Write all short answers of

Poem: My Mother at Sixty- Six (Flamingo)

2a. Advertisement :-

- i. Principal, Sunrise Global School, Agra requires a receptionist for her school. Draft a suitable advertisement in about 50 words to be published in the classified columns of a national newspaper giving all the necessary details of qualifications and experience required in the receptionist.
- ii. You are Harish/Harshita of 12, Seva Nagar, Pune. You want to sell your flat as you are shifting to another city for work. Draft a suitable advertisement in not more than 50 words to be published in The Pune Times under the classified columns.

3. Notice :

- i. As Principal of Sardar Patel Vidyalaya, Lucknow, draft a notice in not more than 50 words informing students of the change in school timings with effect from the 1st of July. State valid reasons for the change.
- ii. As Student Editor, draft a notice in not more than 50 words for your school notice board inviting articles from the students for your school magazine. You are Rohan/Rohini of Vasant Vihar School, Pune.

4. Watch the English movie 'A Christmas Carol' and write the story of the movie in your own words. (Do it in your English copy)

5. **Video Making:** Make a video speaking on any one following topics;

- a. Real Life Hero
- b. A Funny Incident you faced
- c. The Global situation
- d. The person you admire the most.

(Video should be a maximum of 3 minutes. It has to be sent through Whatsapp to your English teacher.)

6. Write a Diary Entry daily on how you spent the day. Also list things that made you realize how grateful you need to be for all that you have. (To be done in your English copy)

Art Integration Project: (on any one topic)

1. Write an article on Covid Immunization and Vaccines, Benefits, Risks and Effectiveness.
2. Create a digital album on Covid Immunization and Vaccines, Benefits, Risks and Effectiveness with creative writing skill.
3. Make a video stating various reasons for Vaccine hesitancy in rural areas of Chhattisgarh ; Fear of the vaccine.

PHYSICS:

- 1) Solve NCERT in-text and end exercise questions of chapter-1 “Electric Charges and Fields”
- 2) Solve NCERT additional exercise questions of chapter -1 “Electric charges and Fields”
- 3) Write the proof of Gauss theorem and explain how it is used to find electric field intensity.
- 4) With the help of Gauss theorem find electric field intensity in following case
 - (i) Two infinite parallel uniformly charged long thin sheets of surface charge density “ σ ”.
 - (ii) Uniformly charged thin spherical shell.
 - (iii) Uniformly charged non-conducting solid sphere

5. Video Assignment (on any one topic given below)

- a) With the help of a short video explain how semiconductor devices like LED’s are useful for electrical energy conservation.
- b) Make a short INTERVIEW video with eminent science teacher/faculty of any school /college /university, asking some interesting science related question or any other questions. (first prepare 5 to 6 questions to be asked by you in the interview).
- c) Make a short documentary video on “3-top most scientific inventions that have changed the life of human beings radically”.

6. Activity Based Home work (any one topic)

Study of visual resources at home/surrounding by means of experiment and observations. Students have to make a video of not more than 3 minutes.

- (i) Explain how lenses are used to correct the defect of vision (either myopia or Hypermetropia)
- (ii) Explain the principle of Motor by making miniature motors with the help of wire coil and cell.
- (iii) Explain dispersion of light.

7. Art Integration Project

Prepare a PPT on working of one of the following medical instruments / devices essential during pandemic situation (Minimum 10 -slides) (Any one)

- (i) Pulse Oximeter
- (ii) Ventilator
- (iii) Oxygen concentrator
- (iv) Infra-red thermometer(Gun Thermometer),

CHEMISTRY:

- 1) Solve NCERT in -text and end exercise questions in your class work copy of following chapter
 - a) Solid state.
 - b) Solution
 - c) Electrochemistry.

- 2) **Video Assignment :**

Video should not exceed more than 3 minutes. (Any one topic). Topics as follows:

- a) World environment day.
- b) Career in Chemistry
- c) Chemistry in day to day life.

- 3) **Activity based Homework (any one topic) .**

Study of visual resources at home/surrounding by means of experiment and observations. Students have to make a video of not more than 3 minutes.

- a) Explain Endo osmosis and Exosmosis with one activity each.
- b) Explain the presence of salt in water to elevate its boiling point.
- c) Effect of temperature on solubility of sugar in water.

- 4) **Art integrated project :**

Students have to make a powerpoint presentation on any one topic. Topic as follows

- a) Composition and effectiveness of hand wash on Covid -19 virus.
- b) Composition and effectiveness of vaccine on Covid-19 virus.
- c) Remdesivir injection and its effectiveness on Covid-19 virus

BIOLOGY:

1) Carry out an investigatory project on covid-19 and prepare a report of the same that would include a presentation of the result obtained in the investigation. **(Make a PPT presentation)**

- 2) Answer the following questions:-(NCERT based)

- 1)Write differences between sexual and asexual reproduction
- 2)Describe male reproductive system with a diagram.
- 3)Draw a typical angiospermic flower.
- 4)What do you mean by sexually transmitted diseases?
- 5)Describe IVF technology.

Video assignment(on any one topic given below)

- a) With the help of a report make a documentation on vaccination on **covid-19.(This project will be included as your ART INTEGRATION 2021-22)**
- b) Explain double fertilisation in angiospermic flower(Use clay models for video demonstration)
- c) Demonstrate the different types of surgical birth control methods in humans.

MATHEMATICS:

- 1) Solve the unsolved exercises of the following chapters from NCERT Book and 50 questions from a reference book in maths copy.
 - a. Inverse Trigonometric Functions
 - b. Matrices
- 2) Check out the local newspaper and cut out examples of information depicted by graphs. Draw your own conclusions from the graph and compare it with the analysis given in the report.(In Activity copy)

Video Assignment (on any one topic given below)

- a) Application of Matrices in science.
- b) With the help of a short video explain how Trigonometry is useful in daily life.
- c) With the help of a short video explaining the system of linear Equations through activity by taking a real life example.

ART INTEGRATED PROJECT:

Prepare PPT on Analysis of Covid – 19 situations in India by Any one of the following methods. (Max.10 slides)

1.Matrix method

2.Histogram

3.Pie chart

ACCOUNTANCY :

1. Chapter 2: Complete the numerical assignment for; Accounting for partnership firms
Chapter 3: Complete the numerical assignment for: Reconstitution of partnership change in Profit sharing ratio and ratio.

Do all NCERT back questions in your Accountancy copy.

(a) Video Assignment : (on any one topic given below)

- i.) With the help of short video explain “how Partnership deed is having its importance in Real life”
- ii.) With the help of short video explain the provisions provided by Indian Partnership Act 1932 in absence of partnership deed.
- iii.) Make a short documentary video on “Modes Of Reconstitution Of Partnership”.
- iv.) Make a short video i.e. explaining the changes which occur in Partnership Deed at the time of admission.
- v) Make a short INTERVIEW video with any local businessmen asking about their success and achievements.(before making video you must prepare 5 to 6 question to be asked by you in interview)

(b) Art Integration :

Prepare PPT on “Top 5 pharmaceutical companies in Gujarat and Chhattisgarh who supported during pandemic situation with accounting data(i.e. related to net profit, no. of manufacturing units, using graphs for showing the company competitors, etc. ” (minimum 15 slides..)

(This project is mandatory for all students. It will be included as your ART INTEGRATION 2021-2022)

BUSINESS STUDIES :

1. Complete all the notes properly in your copy for below given chapters:

Part B – Chapter 12 - Consumer protection

Part B – Chapter 1 - Financial Management

Do all NCERT back questions in your Business Studies copy.

2. Video assignment: (on any one topic given below)

1. With the help of short video explain Rights of Consumers (Consumer Protection)
2. With the help of a short video explain the importance of consumer protection from a business point of view.
3. With the help of a short video explain the importance of consumer protection from a consumer point of view.
4. Make a short documentary video on “Explaining the factors affecting the dividend decision”
5. Make a short video explaining the “Three decisions taken in Financial Management”.
6. Make a video explaining “Three forums available for consumer protection” .

(b) Art Integration :

Prepare PPT on “Business opportunities for pharmaceutical companies in Gujarat and Chhattisgarh during pandemic situation” (minimum 15 slides..)

(This project is mandatory for all students. It will be included as your ART

INTEGRATION

2021-2022)

ECONOMICS :

1. Complete all the notes given in the class.
2. Write all the questions and answers of Indian Economy in your copy.
3. Revise the chapters completed.

Video assignment: (on any one topic given below)

- a) With the help of a short video explain the situation before and after independence in the agriculture sector.
- b) With the help of a short video explain the function of the Central bank.
- c) With the help of a short video explain the measures to control credit creation by the Central bank.
- d) Make a short documentary video on “Explaining the GST”.
- e) Make a short video explaining the concept of ‘Demonetization’.

ART INTEGRATION-

Prepare Ppt For Any Emerging Topic Initiated By State Of Gujarat And Chhattisgarh Like-

1. Skill India Approach
2. Startup India
3. Atmanirbhar Bharat
4. How This Pandemic Has Affected These States' Economy, Its Positive Effect And Negative Effects.

Prepare 10 - 15slides For Ppt.

Important-

You Can Also Prepare Charts, Collage Work Or Can Write An Essay Over The Following Topics For 300 - 400 Words.

(This project is mandatory for all students. It will be included as your ART INTEGRATION 2021-2022)

PHYSICAL EDUCATION:

1. Project on Volleyball (In a stick file)

Content of project:

- *History
- *Specifications (court measurements)
- *Governing Body in India
- *Skills
- *Terminology
- *National & international tournaments
- *Famous sports personalities of the game.
- * Sports gears/ safety equipment.
- *Injuries in Volleyball
- *Conclusion.

Important Note for students

- * Paste the related pictures in your project.
- * Do complete the notes provided to you in your physical education fair copy.

Video Assignment

Record yourself performing any one Yoga Asana and explain their advantages & contradictions with it.

(Dress code- School sports uniform).

LEGAL STUDIES:

1. Write all the questions and answers of the following in your copy.
 - a. Judiciary
 - b. Property Law
2. Pick any 10 most spoken cases in the country in the past few years. Write a brief summary of the cases in your copy.
3. Activity : Study the landmark case of Keshavanand Bharti v/s State of Kerala. Write the details of the case.

- a. What was the judgement in the case?
- b. Why is it referred to as a landmark case?
- c. Explain the Doctrine of the Basic Structure of the Indian Constitution.

Video assignment: (on any one topic given below):

1. Make a short video explaining the characteristics of Public Interest Litigation.
2. Make a short video explaining the Doctrine of Separation of Powers.
3. Make a short video on the different roles of the Supreme Court of India.
4. Make a short video explaining the Doctrine of Election.
5. Make a short video explaining the Doctrine of Lis Pendens

APPLIED MATHEMATICS –

I) Activity based question:

1. Each day the newspaper tells us about maximum temperature , minimum temperature & humidity . Collect the data for a period of 20 days & represent graphically . Compare it with the data available for the same time period for the previous year . Draw your own conclusions and after analyzing graphs write a report in your words .(In Activity copy).
2. Prepare a questionnaire to collect information about money spent by your friends in a month on activities like recharging of mobiles , Internet costs , cable TV recharge , medical expenses etc. and draw interesting conclusions. (In Activity copy)

II) Video Assignment : (on any one topic given below)

1. Make a collaborative video (of at least 5 students) explaining “ How to improve Mathematics skills”.
2. Make a short video explaining - How to apply Cramer’s Rule or Leontief Input-Output Model to Business & Economics .
3. Make a short video on - How you can use linear equations in 3 variables in your daily life.

III)Textbook Assignments:

1. Solve miscellaneous examples & exercises of NCERT Book on Matrices & Determinants in Maths copy.

IV)ART INTEGRATED PROJECT:

Prepare PPT on Analysis of Covid – 19 situations in India by Any one of the following methods. (Max.10 slides)

- 1.Matrix method
- 2.Histogram
- 3.Pie chart

COMPUTER SCIENCE:

- 1) Solve the SQL questions given in your textbook from Pg 560-564,591(application based question).
- 2) Define :

Tuple , Relation, View, Attribute, Degree , Cardinality

- 3) Explain different types of keys in MySQL?
- 4) Explain various categories of SQL statements with examples?
- 5) Practice Conceptual and Application based questions of Python Revision tour I and II of your textbook.

Video Assignment (on any one topic)

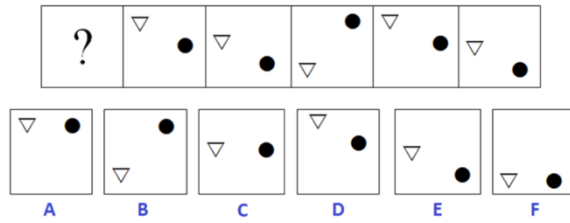
- a) Explain various keys in MySQL with the help of a table?
- b) Explain the basic elements of SQL with example?
- c) What is SQL? Explain the classification of SQL statements with example?

SPECIALLY DESIGNED TASK FOR ENHANCING GENERAL KNOWLEDGE:

1. Where is the National Stock Exchange? Name the Metal traded in MCX exchange?
2. Which state has the longest coastline in India?
3. Who was India's first Deputy Prime Minister and Who was India's first President?
4. Who was the inventor of electricity?
5. In which year India celebrated its first Republic day?
6. Name the Indian cricket player who scored first one day international century.
7. Name the first education minister of India after independence.
8. Which Indian ruler was known as Indian Napoleon.
9. Name capital of the Union Territory " Dadra and Nagar Haveli"?
10. Who is the CEO of Serum institute of india.
11. Which reaction is mainly responsible for the cause of energy radiation from the sun?
12. The book titled "1283 " illustrates the career of which football legend?
13. Which former United States first lady has written "Becoming"?
14. Which sports is associated with the Ryder Cup?
15. P and Q together have 3 times what Q and R have, while P, Q and R together have thirty rupees more than P. If Q has 5 times R has then what amount does P have ?
16. The first computer was programmed using
17. The instructions for starting the computer are housed in ___?
18. The first completely 64-bit compatible version of Android ?
19. The unit MIPS is used to measure the speed of a___.
20. The Germans call this the 'spider monkey' and the Italians call it the 'snail'.Which symbol is this?
21. Who is the longest serving C.M of West Bengal.
22. Who translated Satyajit Ray's Book "Another Dozen Stories" from Bengali to English.
23. When is National Panchayati Raj Day observed.
24. When was the first fuel cell invented?
25. Which Indian state will vaccinate all its citizens against Covid-19 for free.
26. Which movie has been crowned Best Picture at the 91st Academy Awards?
27. In the flourishing ranking by A Future for the World's Children report, India stands at which rank?
28. .Which State's Chief Minister launched the Online Shramik Employment Exchange, 'Raj Kaushal Portal' developed by the Department of Information and Technology?
29. The Indian Navy has set up an Ultraviolet sanitization Bay at which dockyard to decontaminate the coveralls, tools, personal gadgets, masks, cloths?
30. Who did Shane Warne dismiss with the ball dubbed by the media as the ball of the century?

TASK TO ENHANCE MENTAL ABILITY AND LOGICAL THINKING:

1. Which is the next logical image in the sequence?

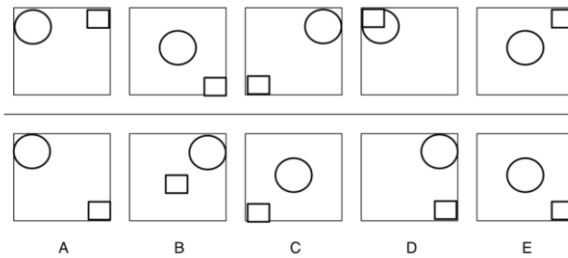


2. Which of the suggested shapes shares a feature with the given shapes?

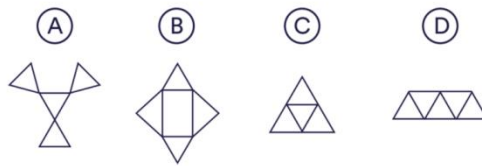
W E Y



3. Which of the boxes comes next in the sequence?



4. Which of the given shapes is the unfolded net of the 3D shape?



5. **583 is related to 293 in the same way as 488 is related to ___**
 A) 291 B) 378 C) 487 D) 581
6. **If FRIEND is coded as HUMJTK, how is CANDLE written in that code ?**
 A) EDRIRL B) DCQHQB C) ESJFME D) DEQJQM
7. **One morning after sunrise, Suresh was standing facing a pole. The shadow of the pole fell exactly to his right. To which direction was he facing?**
 A) East B) West C) South D) Data is inadequate
8. **Book : Publisher :: Film : ?**
 (A) Producer (B) Director (C) Editor (D) Writer
9. **There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers, three brothers and a mother in the group. Who is the mother ?**
 (A) A (B) B (C) C (D) E
10. **A woman introduces a man as the son of the brother of her mother. How is the man related to the woman ?**
 A) Nephew B) Son C) Cousin D) Uncle to Grandson
11. **AK, EO, IS, ?**
 (A) MW (B) MV (C) XW (D) NX
12. **Biped : Quadruped :: Ostrich : ?**
 A) Cat B) Rabbit C) Tortoise D) Rat
13. **In an Exhibition seven cars of different companies - Cadillac, Ambassador, Fiat, Maruti, Mercedes, Bedford and Fargo are standing facing to east in the following order:**
 1. Cadillac is next to the right of Fargo.
 2. Fargo is fourth to the right of Fiat.
 3. The Maruti car is between Ambassador and Bedford.
 4. Fiat, which is third to the left of Ambassador, is at one end.
Which of the cars are on both sides of the Cadillac car ?
 (A) Ambassador and Maruti (B) Maruti and Fiat
 (C) Fargo and Mercedes (D) Ambassador and Fargo
14. **1, 2, 3, 10, ?, 9802**
 (A) 99 (B) 199 (C) 299 (D) 999

15. **In a certain code language,**
'134' means 'good and tasty';
'478' means 'see good pictures' and
'729' means 'pictures are faint'.
Which of the following digits stands for 'see'?
(A) 9 (B) 2 (C) 1 (D) 8
16. **Direction: Three of the words will be in the same classification, the remaining one will not be. Your answer will be the one word that does NOT belong in the same classification as the others.**
.Which word does NOT belong with the others?
(A) tulip (B) rose (C) bud (D) daisy
17. **Sam ranked 9th from the top and 38th from the bottom in a class. How many students are there in the class ?**
(A) 45 (B) 47 (C) 46 (D) 48
18. **Two bus tickets from city A to B and three tickets from city A to C cost Rs. 77 but three tickets from city A to B and two tickets from city A to C cost Rs. 73. What are the fares for cities B and C from A ?**
(A) Rs. 4, Rs. 23 (B) Rs. 13, Rs. 17 (C) Rs. 15, Rs. 14 (D) Rs. 17, Rs. 13
19. **. Pointing out to a lady, a girl said, "She is the daughter-in-law of the grandmother of my father's only son." How is the lady related to the girl ?**
(A) Sister-in-law (B) Mother (C) Aunt (D) Can't be determined
20. **A girl introduced a boy as the son of the daughter of the father of her uncle. The boy is girl's**
(A) Brother (B) Son (C) Uncle (D) Son-in-law

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“Teachers open the door, but you must enter by yourself.”