

# GREENWAY MODERN SCHOOL DILSHAD GARDEN, NEW DELHI-95

Holiday Home Work
Class-XI (2021-22)
Stream- Science

#### Dear children,

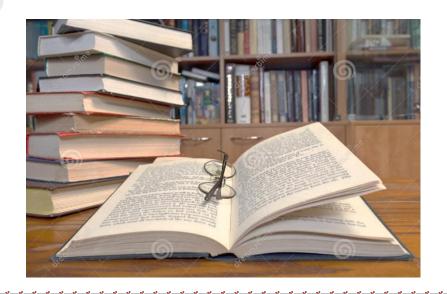
The long-awaited summer vacation is here, bringing with it the gift of enjoyment that is spend in playing games and exploring books, hobbies etc.

To keep your energies well directed and engaged positively, holiday homework has been designed for you, to keep you connected with the syllabus, to enhance your creativity and engage you constructively and to bring out innate potential in you.

It is a sincere request to all to complete holiday projects and home assignment on time.

You matter us most and we all Miss You.

**Stay Safe** 



### **Subject- English**

- 1. Prepare posters with impressive slogans on the following topics
  - (a) Back to nature; need of the hour.
  - (b) Virtual teaching: merits and demerit
- 2. Prepare a short documentary (1.5 to 02 minutes) on "Tutankhamen and his mysteries" to be shared in English club groups
- 3. Read about sea voyages on internet and write a short informative passage on any one voyage: as well as paste/draw picture of a ship and label all its different parts for further use
- 4. You are the secretary of English club of your school, you have got an opportunity to give a speech in the morning assembly on the topic "Need of emotional and family support- brought to forefront during present pandemic". Write the speech in 150 words.

### **Subject-Physics**

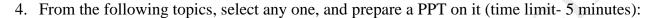
1. Find the range and least count of the following measuring instruments.



### 2. Art Integrated Activity

Observe the given picture of the ballet dancer carefully and:

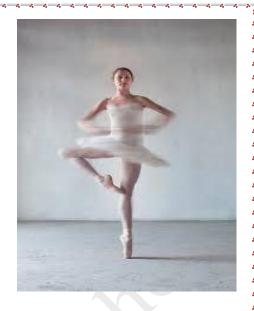
- i) Mark the point of application of force
- ii) Apply law of conservation of angular momentum to change the rate of spinning.
- iii) How do you co-relate the concept of rotational equilibrium here.
- 3. Make a paper scale having a least count of your choice in PPT format.



- i) Physics- Foundation of all Sciences (Agree or Disagree)
- ii) Physics and Technology
- iii) Nobel Prize in Physics for the year 2020
- iv) Physics and Society

## **Subject- Chemistry**

- 1. Collect the information on any four scientists who have worked in the field of development of atomic structure, Law of chemical combinations and discovery of sub-atomic particles. Your answer must include:
  - a) Name
  - b) DOB
  - c) Work/ Theory/ formula given
  - d) Prizes won (if any)
  - e) Example
- 2. Revise all the topics till date.
- 3. Prepare a PPT on any three topics given below:
  - a) Concentration of solution
  - b) Photo electric effect
  - c) Rutherford's model of atom
  - d) Mole concept
- 4. Prepare an art integrated project other than PPT on any topic from chemistry related to daily life.



### **Subject- Mathematics**

- 1. Collect the information on any four mathematician who have worked in the field of algebra, calculus and statistics. Your answer must include:
  - a) Name
  - b) DOB
  - c) Work/ Theory given
  - d) Prizes won (if any)
  - e) Example of Theory that mathematician gave.
- 2. Revise all the topics till date.
- 3. Prepare a separate PPT on any three topics given below: (Minimum 10 slides)
  - a) Linear Inequation
  - b) Probability
  - c) Coordinate Geometry
  - d) Quadratic Equation.
- 4. Prepare an art integrated project of your own choice.

Note: Submit your assignment project in the created assignment section only. No files will be accepted in personal chat.

### **Subject- Computer Science**

Write a program in Python that create a menu for "Mathematical Calculator "As given below and performs the specific task as for the user choice: (use if else)

Mathematical Calculator Menu

- (i) Addition (+)
- (ii) Subtraction (-)
- (iii) Multiplication (\*)
- (iv) Division (/)
- (v) Integer division (//)
- (vi) Modulus (%)
- (vii) Exponential (\*\*)
- (viii) Exit

Note: Make the PDF of the above python program and its output and submit in the assignment on the teams app.

### **Subject- Psychology**

#### • INSTRUCTIONS FOR COMPILATION OF HOLIDAY HOMEWORK

All homework is to be done on A4 size sheets and compiled in a hard bound file / folder. Design an attractive cover for your file / folder. You may use different colour A4 size sheets for different page. Have a labelled cover page for each Caption. All sheets of a subject should be put together / tied/ stapled together and handed over to the respective subject teacher.

• The written part should be neatly presented in your own handwriting. Presentable "Holiday Home Work" will be appreciated.

#### LAST DATE OF SUBMISSION OF HOLIDAY HOMEWORK: 28 June 2021

- PREPARE ' A Case Study on A Life of an Adolescent '.
- Your Subject age should be in b/w 15 to 19.
- Detailed format with Interview Questions is given. Fill all the Questions by being loyal to your work.
- In this study student will use Interview method and Observation method for analysis.
- Prepare at least 25 pages as minimum.

#### **Format**

#### PRELIMINARIES INFORMATION/Subject Information:

- Name
- Age
- Gender
- Birth order
- Number of siblings
- Education
- Locality of residence
- Religion
- Parental education and occupation
- Family income
- Subject's medical history
- Introspective report

#### **INTERVIEW:**

#### SUBJECTS INTERVIEW (15 TO 20 QUESTIONS)

#### **Examples of questions:**

- 1. Who is your role model?
- 2. Do you enjoy the company of your family?
- 3. What stream you have chosen and why?
- 4. How often do you go out with your family?
- 5. Do you enjoy your studies?
- 6. What kind of entertainment you like?
- 7. In what kind of environment do you enjoy the most?

- 8. What are your hobbies?
- 9. Is there any kind of restriction put on you by your family?
- 10. Do you feel shy in talking to people in a group?
- 11. Do you share your problems with your family
- 12. What is your aim in life
- 13. Whom do you trust the most in your family
- 14. Will you do something that your family objects to?
- 15. How much time do you take out for your family
- 16. Do you trust your friends?
- 17. What kind of looks interests you the most?
- 18. Are you short tempered?

#### **PARENT INTERVIEW:**

#### **MOTHER: -**

- 1. Do you trust your son / daughter?
- 2. Do you force him/her to do anything which he/she wouldn't do?
- 3. Do you trust his /her friends?
- 4. Do you take him/her out on outing regularly?
- 5. Do you force him/her in terms of studies?
- 6. Do you believe in giving pocket money to your child?
- 7. Is he/she very moody?
- 8. How often do you allow your son/daughter to go out with his/her friends?
- 9. Are you satisfied with the company of your friends?
- 10. What kind of passion do you see in your child?
- 11. Does your child listen to you?
- 12. Does he /she hesitate in sharing problems with you?
- 13. Have you ever allowed your child to drive your vehicle?
- 14. Do you think mobile phone is necessary for your child?
- 15. Are you possessive about your child?
- 16. What qualities of him / her do you like the most
- 17. Are you aware of his /her hobbies?
- 18. What is his /her attitude towards life?

#### **FATHER: -**

- 1. Do you trust your son / daughter?
- 2. Do you force him/her to do anything which he/she wouldn't do?
- 3. Do you trust his /her friends?
- 4. Do you force him/her in terms of studies?
- 5. Do you believe in giving pocket money to your child?
- 6. Is he/she very moody?
- 7. How often do you allow your son/daughter to go out with friends?
- 8. Are you satisfied with the company of your friends?
- 9. Does your child listen to you? Does he /she hesitate in sharing problems with you?
- 10. Have you ever allowed your child to drive your vehicle?
- 11. Do you think mobile phone is necessary for your child?
- 12. Are you possessive about your child? What qualities of him / her do you like the most?
- 13. Are you aware of his /her hobbies?
- 14. What is his /her attitude towards life?

#### FRIEND'S INTERVIEW

- 1. Since when have you been friends with him /her?
- 2. How far do you trust him /her?
- 3. Do you like his /her company?
- 4. Are you proud of your friend?
- 5. Do you know about his likes and dislikes?
- 6. What is his /her aim in future?
- 7. How often do you meet him /her?
- 8. What do you appreciate the most about him/her?
- 9. Is he/she into habit of smoking or drinking?
- 10. Does he /she listen to his /her parents?
- 11. What kind of sports he likes?
- 12. Whether he/she goes out for parties?
- 13. Is he /she satisfied with the pocket money he /she gets?
- 14. Does he/she takes studies seriously?
- 15. Is he /she ready to face challenges in life?

#### **INTERVIEW ANALYSIS: -**

Subject interview analysis (summary of responses that you have received)

Subject's mother interview analysis (summary of responses that you have received)

Subject's father interview analysis (summary of responses that you have received)

Subject's friend interview analysis (summary of responses that you

### **Subject- Physical Education**

(only for students having physical education as main subject)

#### **Expected Learning Outcome-**

- Learners will become aware of different modalities of Physical Fitness.
- Learners will explore specifically about the game/sport that interest them.
- 1. Labelled diagram of 400 M Track & Field with computations.
- 2. Computation of BMI from family or neighbourhood & graphical representation of the data.
- 3. Labelled diagram of field & equipment of any one game of your choice according to syllabus along with history of the game, terminologies, skills, rules etc.
- 4. Explanation & list of current National Awardees (Dronacharya Award, Arjuna Award & Rajiv Gandhi Khel Ratna Award)
- 5. Pictorial presentation of any five Asanas for improving concentration.

Note: Holiday home work will be done in Physical education Practical file.

### **Subject-Biology**

1. Collect the information on any 3 scientists who has worked remarkably in the field of Human Physiology under the following heads:

(a) Name

(b) DOB-DOE

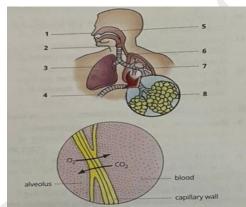
(c) Picture

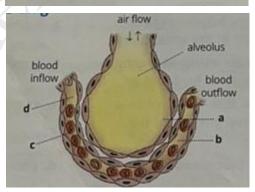
(d)Work/ Achievements

(e) Prizes Won

(f) Exceptional Work

- (g) Current discovery
- 2. Prepare an investigatory project on the current topic/recent advancement in biology to be marked in Annual Examination 20212-22. Topics can be discussed with me on regular basis. (5Marks)
- 3. (i)Identify the parts of respiratory system given in diagram:
- (ii)What drives diffusion of oxygen and carbon dioxide in the lungs between a blood cell to an Alveolus?
- (iii) in the lungs, is carbon dioxide more concentrated in the alveoli or in the blood? Explain your answer.
- (iv) does the exchange of carbon dioxide depend on the concentration of oxygen in the alveoli and the blood? explain your answer.
- 4. The given diagram shows a section through an alveolus and a capillary in the lung. Match 1-4 with the labels a to do in the diagram
  - (i) blood with the high carbon dioxide content
  - (ii) blood with higher oxygen content
  - (iii) contains a red pigment
  - (iv) where gases enter and leave alveolus





- 5. Draw well labelled diagram of the following (i)human respiratory system (ii) oxygen dissociation curve (iii) coronavirus (iv) a bacteriophage.
- 6. Revise all the topics till date.
- 7. Given below is a table showing certain activities of the respiratory system.match the parts given below with the activities described.

Alveoli, diaphragm, rib cage, windpipe

PARTS	DESCRIPTION
1.	Carries air from the throat to the lungs
2.	Flattens to make air move onto the lungs
3.	Protects the lungs
4.	Where carbon dioxide leaves the blood

