

# **GOLDEN GATE GLOBAL SCHOOL**

# Summer Holiday Homework 2024-25

# Dear Students,

Children are amazing...cherish them They are believable...trust them They are childlike...let them They are energetic...nourish them Here now, be with them... Innocent, delight in them... Magical, fly with them...

# **BONDING TIME**

Holiday is the time that we all eagerly wait for. We all make plans to enjoy, to relax and to empower ourselves during these gala days. This summer vacation the Holiday Homework so designed by the mentors of the school is a medium for you all to achieve the motto of "Fun and Learn" The activity-based assignments will foster curiosity, develop creativity, enhance knowledge and instil the joy of learning among you all. They will certainly help you discover a new you who is more enriched and confident and performs every action to perfection. As it is well recognized that Golden Gate Global School not only focuses on academics but lay equal importance on Co-scholastic Competencies. The school also desires you to adhere to the following guidelines for a fulfilling break:

# REMEMBER

 Neatness and presentation are common parameters for most of the activities assigned.

• Please maintain the quality of work done.

• Complete and submit the holiday homework according to the dates given. Note down these dates carefully as late submission after these dates is not acceptable and you will be losing the marks/grades for the same if you miss the date.

• Holiday homework will be assessed on certain parameters and marks/grade will be awarded accordingly.

• Make sure that all syllabus done till May must be revised thoroughly in the last two weeks of June as it will help you to retain and adjust after the long break.

### **BE A WONDERFUL HUMAN BEING:**

• Follow a schedule during holidays. Be a good time manager.

• Read newspapers daily and stay updated with current affairs.

 Do the homework independently, only ask for assistance from your parents or guardians.

• Give time to pursue your hobby.

• Appreciate nature and go for "Nature Walks", plant trees and spread the message of Nature Conservation.

•Watch some good movies with your ward on love, compassion, humanity, kindness, forgiveness etc.

• Talk about the importance of parents and elders. Have at least 4-5 meals together.

Remember

"EVERY ACTION IS IMPORTANT AND EVERY DEED IS VITAL....."

# Wishing all the students a joyful learning and Happy Holidays. EXPLORE LEARNING TOGETHER...

# Important points to remember

- The school will reopen on-GRADES IX-XII on 04/07/2024
- The school office will remain OPEN during the summer vacation on all working days.
- Clear all kind of your dues (if any) at the earliest to avoid late fine and further inconvenience.

Dates for submission of Holiday homework GRADES IX-XII 08/07/2024- English & Computers 09/07/2024- Physics & Biology

NOTE: Holiday Homework will not be accepted after the dates assigned for each.

# **PHYSICS**

**Research Project:** Choose a topic of interest within the realm of your Grade physics, such as quantum mechanics, electromagnetism, or nuclear physics. Conduct in-depth research on the topic and prepare a presentation or report detailing your findings. You could explore recent advancements, historical background, and practical applications.

#### OR

**Concept Mapping:** Create concept maps or mind maps to visually organize and connect key concepts covered in Grade 12 physics. This visual representation will help you see the relationships between different topics and enhance your understanding of the overall structure of the subject.

**Problem Sets:** Work on a set of challenging physics problems related to your Grade 12 curriculum. You can find problem sets in textbooks, online resources, or create your own based on the topics covered in class. Solving problems will reinforce your understanding of key concepts and improve problem-solving skills.

# **ENGLISH**

#### **English Links**

Reading Comprehension – Worksheet – 1,2,3,20,21 and 22 Writing – Worksheet – 16 Q1&2, 17 Q1 &2 Along with it the CBSE Project File Read carefully and follow the Instructions:

#### **ENGLISH PROJECT**

- **1.** MARKING SCHEME:
- ➤ The project consists of 10 MARKS.
- > Out of which, 5 MARKS will be allotted for the PROJECT

FILE, ≻ and remaining 5 MARKS for the VIVA based on the file.

The viva will be conducted by the INTERNAL /EXTERNAL EXAMINER.

#### **2.** CONTENT OF THE PROJECT FILE:

The project file may include the following:

• Cover page, with the title of the project, school details and details of the student

- Certificate of Completion under the guidance of the teacher
- **Objectives of the topic**

• Action Plan for the completion of assigned tasks (steps involved in doing the project)

• The 800-1000 words essay/report

• Student reflections (what new learning experience/outcome you have achieved after completing the project)

• If possible, photographs that capture positive learning experience of the students (collages/pics from various online sources)

• List of Resources/Bibliography (Last page of the project file) STUDENTS HAVE TO PICK THE TOPICS AS PER THEIR CHOICE

# **3.** INSTRUCTIONS:

✓ Listen to the podcasts, documentaries, interviews etc. on the given topics

 $\checkmark$  Do a thorough research on the topic assigned

✓ Prepare a report/essay in about 800-1000 words describing the topic/issue/giving your own

opinion/suggestions/measures/viewpoints/it's impact on people/your learning experience

 $\checkmark$  You can also state the name of various speakers/people , quote them and express their viewpoints

 $\checkmark$  The project should be neat, legible, with an emphasis on quality of content, accuracy of information, creative expression, proper sequencing and should be relevant as per your assigned topic

 $\checkmark$  Don't share your work with anyone. If the examiner points out any repetition or copying of the project, the consequences would be severe.

✓ No marks will be awarded for a casual approach of completing the project

#### Submission Date : 10 JULY '24

Given below is a list of the suggestive topics for the project.

1. Mental Health and Social Media

2. Indian Cinema : Analysing Indian cinema and it's cultural significance.

**3.** Animal Rights : Raising awareness about their Rights and ways to protect them from cruelty

**4. AI - Understanding AI, It's impact on various fields and discussing it's potential, benefits and drawbacks** 

- **5.**Language Chauvinism
- **6.** Transforming lives through Kindness and Empathy Gandhian Principals and relevance with today's world
- 7. Over coming fear and phobias
- 8. Circumstances that leads to crime- Case Study based
- 9. OTT platform vs conventional cinema
- **10.** Paperless Currency- The future of the World Economy
- **11.** Designer Babies : Boon or Bane (\*for Bio students preferably\*)
- **12.** Karma : The Infinite Loop
- **13.** Domestic Violence: Going notoriety each passing day

# Biology

**1.** These pictures show the gynoecium of (A) Papaver and (B) Michelia flowers. Write the difference in the structure of their ovaries. (Delhi 2015C)

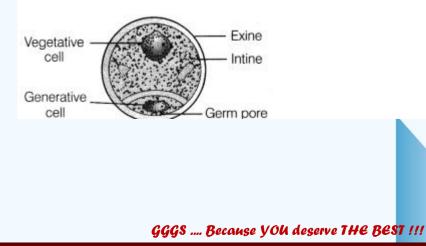


2. Name the parts of the flower which the tassels of corn cob represent. (All India 2014)

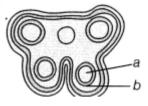
3.Draw a diagram of a mature microspore of an angiosperm. Label its cellular components only.)

Or

Draw a labelled diagram of at mature pollen grain. (Delhi 2013C)



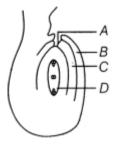
4.In the TS of a mature anther given below, identify 'a' and 'b' and mention their functions. (All India 2019)



5. In a flowering plant, a microspore mother cell produces four male gametophytes while a megaspore mother cell forms only one female gametophyte. Explain. (Delhi 2017)

6,Draw a diagram of a section of a megasporangium of an angiosperm and label funiculus, micropyle, embryo sac and nucellus. (All India 2016)

7. Identify and label the parts in the given anatropous ovule. (All India 2010C)



8.Name the organic material exine of the pollen grain is made up of. How is this material advantageous to pollen grain?

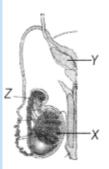
(ii) Still it is observed that it does not form a continuous layer around the pollen grain. Give reason.

(iii) How are 'pollen banks' useful? (All India 2016C

9.Draw a diagram of a mature embryo sac of an angiosperm and label the following parts in it. (Delhi 2013)

(i) Filiform apparatus
(ii) Synergids
(iii) Central cells
(iv) Egg cell
(v) Polar nuclei
(vi) Antipodals

10. The below diagram shows human male reproductive system (one side only).

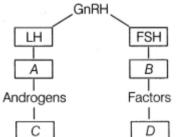


11.What happens to corpus luteum in human female if the ovum is (i) fertilised, (ii) not fertilised? (Delhi 2015)

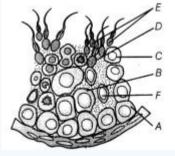
Or

Mention the fate of corpus luteum and its effect on the uterus in the absence of fertilisation of the ovum in human female. (Foreign 2010)

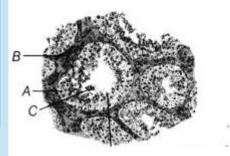
12.Identify A, B, C and D with reference to gametogenesis in humans, in the flow chart given below. (All India 2012C)



*C* 13.Name the labels A, B, C, D, E and F in the diagram of seminiferous tubule. (Delhi 2011)



14.Study the sectional view of human testis showing seminiferous tubules given below.



15.Explain the events in a normal woman during her menstrual cycle on the following days (Delhi 201

(i) Ovarian event from 13-15 days.

(ii) Ovarian hormones level from 16-23 days.

(iii) Uterine events from 24-29 days.

16.Explain the events in a normal woman during her menstrual cycle on the following days

(i) Pituitary hormone levels from 12 days.

(ii) Uterine events from 13-15 days.

(iii) Ovarian events from 16-23 days.

17.i) Arrange the following hormones in the sequence of their secretion in a pregnant woman. hCG, LH, FSH, Relaxin.

(ii) Mention their source and the function they perform. (Delhi 2017)

18 Mention the sites where syngamy occurs in amphibians and reptiles respectively. (C.B.S.E 2010)

19.Offspring derived by asexual reproduction are called clones. Justify giving two reasons. (C.B.S.E 2010)

20 Mention the characteristic features and a function of zoospores in some algae. (C.B.S.E 2010

21. Name an organism where cell division is itself a mode of reproduction. (C.B.S.E 2010

21. In Yeast and Amoeba, the parent cell divides to give rise to two new individual cells. How does the cell division differ in these two organisms? (C.B.S.E 2010)

22. Name the type of cell division that takes place in the zygote of an orgnaism exhibiting haplontic life cycle. (C.B.S.E 2010)

Q.23How does Penicillium reproduce asexually? (C.B.S.E 2011)

Q.24 Name the phase all organisms have to pass through before they can reproduce sexually. (C.B.S.E 2011)

Q.25 Name the group of orgnisms that produces non-motile male gametes. How do they reach the female gamete for fertilization (C.B.S.E 2011)

Q.26 Mention the unique flowering phenomenon exhibited by Strobilantheskunthiana. (C.B.S.E 2012

27. Cucurbits and Papaya plants bear staminate and pistillate flowers. Mention the categories they are put separately on the basis of type of flowers they bear. (C.B.S.E 2012)

28.Give reason : some organisms like honeybees are called parthengenetic animals. (C.B.S.E 2012)

Q.29 A moss plant produces a large number of antherozoids but relatively only a few egg cells. Why? (C.B.S.E 2010) polyembryony. How are they different from each other with respect to seeds? (C.B.S.E 2009)

Q30. Name the cell from which the endosperm of Coconut develops. Give the characteristic features of endosperm of coconut. (C.B.S.E 2009) of a mature embryo sac. (C.B.S.E 2009, 2010) (b) Why does a pollen grain possess two male gametes ? (C.B.S.E 2009)

Q.31 (a) Trace the development of embryo after synagmy in a dicot plant. (b) Endosperm development precedes embryo development. Explain. (c) Draw a diagram of a mature dicot embryo and label cotyledons, plumule, radicle, hypocotyl in it. (C.B.S.E 2009

Q.32 Describe in sequence the events that lead to the development of a 3-celled pollen grain from microspore mother cell in angiosperms. (C.B.S.E.2010

Q.33 (a) Draw a labelledlongisectional view of an alubumnious seed ? (C.B.S.E 2010) (b) How are seeds advantageous to flowering plants ? period and during puberty? (C.B.S.E. 2007

34.. What is pregnancy hormone? Why is it so called? Name two sources of the hormone in a human female.

35.Where are fimbriae present in a human female reproductive system? Give their function. (C.B.S.E. 2009)

36. Where are Leydig cells present ? What is their role in reproduction? 8 (C.B.S.E. 2009)

37.. Name the source of gonadotropins in human females. Explain the changes brought about in the ovary by these hormones during menstrual cycle. (C.B.S.E. 2009)

38. Placenta acts as an endorine tissue. Justify. (C.B.S.E. 2010

# **Computer Science**

**Prepare the documents in Ms Word on the following topics. Page should be well formatted with the following-**

- 1. Page Number
- 2. Page Border
- 3. Page color
- 4. Formatted table showing the different types of file functions.
- 5. Insert 2-3 relevant output of the program.

# **Python Programming**

- 1. Read a text file line by line and display each word separated by a #.
- 2. Read a text file and display the number of
  - vowels/consonants/uppercase/lowercase characters in the file.
- 3. Remove all the lines that contain the character 'a' in a file and write it to another file.
- 4. Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.
- 5. Create a binary file with roll number, name and marks. Input a roll number and update the marks.
- 6. Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).
- 7. Write a Python program to implement a stack using list.
- 8. Create a CSV file by entering user-id and password, read and search the password for given user id.
- 9. Write a program that prompt the user for a file name and then read and prints the contents of the requested file in the upper case.
- 10. Write a Python program to create a binary file Items.dat to store Item details of some items as per {itemno, name, price, category}.

# Note: Holiday Home Work should be submitted in the printed form on A4 sheet in spiral binding.

# Home Science

**Prepare project on any one of the following :** 

- 1. Study of an integrated community based, nutrition/health programme being implemented in own area, with reference to:
  - Programme objectives
  - Focal Group/ beneficiaries
  - Modalities of implementation
- 2. Visit to the neighbouring areas and interview two adolescents and two adults regarding their perception of persons with special needs.
- 3. Profile any two person (child/adult) with special needs to find out their diet, clothing, activities, physical and psychological needs.
- 4. Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.
- 5. Market survey any five processed foods with their packaging and label information .

General points to keep in mind while preparing the projects:

- Prepare it on a A4 size one size ruled, one side black sheet of paper.
- It should contain Acknowledgement, index and references as well.
- It should be neat and well presented.
- It should contain picture depiction along with the subject material.
- Submit it well on time.