

SEEK EXCELLENCE - EVERYTIME, EVERYWHERE

SUMMER VACATION HOMEWORK







Class: XII Raman

ENGLISH CORE

A) Work to be done in English Notebook:

1. Read English Newspaper daily. Either The Hindu or Indian Express. Write only two words with their meanings & pronunciations daily in your English notebook. Write date-wise.

2. Write short notes in 60 to 80 words on each of the following in your English notebook with reference to the chapters mentioned:

- a) Linguistic chauvinism (The last Lesson),
- b) A daughter's thoughts about her ageing parents (My Mother at Sixty Six)
- c) The impact of child labour on children & society (Lost Spring),
- d) The tendency to escape from the anxiety of modern life (The Third Level)
- e) Conceit & arrogance of those in power (The Tiger King).

3. Solve the Reading Comprehension Passages. Write answers in your English Notebook.

4. Read any one of the following books & write its book review in about 80 words: Animal Farm by George Orwell, The Catcher in the Rye by J. D. Salinger, Holes by Louis Sachar, To Kill a Mockingbird by Harper Lee, The Book Thief by Markus Zusak, 1984 by George Orwell, Feluda Series by Satyajit Ray, The Perks of Being a Wallflower by Stephen Chbosky, The Giver by Lois Lowry, A Wrinkle in Time by Madeleine L'Engle, Little Women by Louisa May Alcott, A Wizard of Earthsea by Ursula K. Le Guin, Persepolis by Marjane Satrapi, Me and Earl and the Dying Girl by Jesse Andrews, Anne of Green Gables by L M Montgomery.

5. Watch any one of the following movies & write a movie review in 80 words in your English Notebook: Good Will Hunting (1997), Dead Poets Society (1989), Back to the Future (1985), Whiplash (2014), Ferris Bueller's Day Off (1986), Life of Pi (2012), Stand by Me (1986), Life is Beautiful (1997), The Boy in the Striped Pyjamas (2008), A Beautiful Mind (2001), Into the Wild (2007), E.T. the Extra Terrestrial (1982), The Karate Kid (1984), Inside Out (2015), Spirited Away (2001), The Princess Bride (1987), Paddington (2015), The Pursuit of Happiness (2006), Whale Rider (2002), Up (2009).

6. Explore the music of the following musical bands/ artists & write a 80-word article on any one band/artist out of these greats: The Beatles, Queen, The Rolling Stones, Led Zeppelin, Pink Floyd, Nirvana, Radiohead, The Who, The Doors, The Beach Boys, Bob Dylan, Stevie Wonder, Jimi Hendrix, Prince, Al Green, Marvin Gaye, Whitney Houston.

B) Work for learning, exploration & growth. Not to be written in English notebook:

7. Study the following topics: The Last Lesson, Lost Spring, The Third Level, The Tiger King, My Mother at Sixty-six, and Notice Writing.

8. Read all the chapters & poems in your syllabus at least once. From NCERT textbooks. Complete texts.

9. Stay away from screens & social media as much as possible. Observe No Screen & No Social Media days every week during weekends.

10. Take care of your health. Jog, run, play daily.

11. Spend quality time with your family.

- 12. Learn to cook any five recipes. Try to cook once a week, at least.
- 13. Keep your surroundings clean & well organized.

14. Plan your holidays. Plan your days. Follow the plans rigorously.

15. Learn to sing a song in your mother tongue & translate it in English. Now sing in English with the same tune.

16. What is fake news? Find about it. Learn how to identify fake news.

17. What are logical fallacies? Find about them. Train your mind to spot various logical fallacies.

18. Listen to the following famous speeches: I Have A Dream by Martin Luther King Junior and Tryst With Destiny by J L Nehru.

19. Read the following poems: If by Rudyard Kipling, Where the Mind is Without Fear by Tagore, Still I Rise by Maya Angelou, Rashmirathi by Dinkar.

20. Explore various AI tools.

Happy vacations. May you keep growing. Best wishes.

PHYSICS

- 1 Solve all the questions of NCERT text book exercise of chapter-9 (Ray optics)
- 2 Write notes of all the lectures of chapter-9 (Ray optics)
- 3 Decide the investigatory Project of Physics and prepare project report (Soft copy only).
- 4 Prepare one marks 20 questions and 5 questions of two marks from ray optics
- 5 Redraw all the related ray diagrams of ray optics

CHEMISTRY

- 1. To prepare investigatory project on given topic for AISSCE 2025 practical examination chemistry.
- 2. Prepare lab record.

MATHS (Raman Only)

Revise and practice Differentiation and Integral from RD Sharma .

Do the 10 activities in a practical note book .

FINE ARTS

40 Sketches on A3 paper (Portrait, landscape, cityscape, hand , leg gesture, bird, animal, human figures, perspective drawing, caricature, foliage study etc)

2 Indian folk art

2 Modern art/ contemporary art

Holiday Homework

Class-12

Subject-Hindi

पूरक पाठ्यपुस्तक

वितान- भाग-2.

1. सिल्वर वेडिंग

2. .जूझ

3. अतीत में दबे पांव

तीनों पाठों का गम्भीरता से पढ़कर, पीछे दिए गए प्रश्नों के उत्तर कॉपी में करने है।

4.आलेख लेखन-कोई 5 विषयों पर आलेख लिखना है।

5.फ़ीचर लेखन-कोई 5 विषयों पर फ़ीचर लेखन करना है।

BIOLOGY (Kalam Only)

To complete practical file and project file on the assigned topics.

Write the answers of following Questions in classwork/ Homework notebook.

1. A tall Pea plant with yellow seeds (heterozygous for both) is crossed with a dwarf Pea plant with green seeds. Using a Punnet square workout the cross to show the phenotypes and the genotypes of F1 generation.

2. During his studies on genes in Drosophila that were sex-linked T.H. Morgan found F2 population phenotypic ratios deviated from expected 9:3:3:1. Explain the conclusion he arrived at.

3. Why are F2 phenotypic and genotypic ratios same in a cross between red flowered Snapdragon and white flowered Snapdragon plants? Explain with the help of a cross.

- 4. Why are Grasshopper and Drosophila said to show male heterogamety? Explain.
- 5. Explain female heterogamety with the help of an example.
- 6. Explain the sex determination mechanism in humans. How is it different in birds?
- 7. Explain the mechanism of sex determination in Honeybees.

8. Work out a cross between true breeding red and white flowered Dogflower (Snapdragon) plants up to F2 progeny. Explain the results of F1 and F2 generations.

9. How are dominance, codominance and incomplete dominance patterns of inheritance different from one another?

10. Sickle cell anemia in humans is a result of point mutation. Explain. Write the genotypes of both the parents who have produced a sickle celled anemic offspring.

11. A Pea plant with purple flowers was crossed with a plant having white flowers. The progeny produced only purple flowers. On selfing, these plants produced 482 plants with purple flowers and 162 plants with white flowers. What genetic mechanisms account for these results? Explain.

12. Explain the phenomenon of multiple allelism and codominance taking the ABO blood group as an example.

13. Explain how trisomy of 21st chromosome occurs in humans. LIst any four characteristic features in an individual suffering from it.

14. Name the phenomenon that leads to situations like 'XO' abnormality in humans. How do humans with 'XO' abnormality suffer? Explain.

15. A true breeding Pea plant homozygous for axial violet flowers is crossed with another Pea plant with terminal white flowers (aavv). (a) What would be the phenotype and genotype of F1 and F2 generation? (b) Give the phenotypic ratio of F2 generation. (c) List the Mendel's generalizations which can be derived from the above cross.

16. A homozygous tall Pea plant with green seeds is crossed with a dwarf Pea plant with yellow seeds. (i) What would be the phenotype and genotype of F1? (ii) Work out the phenotypic ratio of F2 generation with the help of Punnet square.

17. A snapdragon plant homozygous for red flowers when crossed with a white flowered plant of the same species produced pink flowers in F1 generation. (a) What is this phenotypic expression called? (b) Work out the cross to show the F2 generation when F1 was self pollinated. Give the phenotypic and genotypic ratios of F2 generation. (c) How do you compare the F2 phenotypic and genotypic ratios with those of Mendelian monohybrid F2 Ratios..

18. Inheritance pattern of flower colour in Garden Pea and Snapdragon differs. Why is this difference observed? Explain showing the crosses uptoF2 generation.

Hint. Red Pea plants can be homozygous or heterozygous. Red Snapdragon is homozygous).

19. A particular garden pea plant produces only violet (a) Is it homozygous dominant for the trait or heterozygous? (b) How would you ensure its genotype? Explain with the help of crosses.

20. How does chromosomal disorder differ from a mendelian disorder?

PHYSICAL EDUCATION

Practical file work

1. Fitness test administration

(a) SAI Khelo India test

(b) Brockport fitness test

(c) Rikli & Jones senior citizen fitness test

(d) Cardiovascular fitness test - Rockport 1 mile test & Harvard step test

COMPUTER SCIENCE