St. Marks Sr. Sec. Public School

Recognized by Directorate of Education, Delhi

Affiliated to CBSE upto XII Arts, Commerce and Science

SUMMER HOLIDAYS HOME WORK 2024-25

CLASS – XII B

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SUBJECT: ENGLISH

NOTE: Make a separate notebook for holidays homework

BOOK NAME----FLAMINGO (2 chapters completed)

FIRST chapter--THE LAST Lesson

1. What did Franz notice that was unusual about that day?
2. What had been put up on the Bulletin board?
3. What changes did the order from Berlin cause in the school that day?
4. How did Franz's feelings about M. Hamel and school change?
5. How were the parents and M. Hamel responsible for children's neglect of the French language?
6. What are m. Hamel's views about the French language?
7. What was the Berlin Order?
8. What had been put up on the bulletin--board?
9. What was Franz expected to be prepared with for school that day?
10. What did Franz notice that was unusual about the school that day?
11. What changes did the order from berlin cause in school that day?
12. Who were present in school on that day?
13. What were the feelings of Franz about an Hammel?
14. What was the importance of native language for Fanz and an Hammel?
15. Which lesson you learn from the last lesson?

Lesson no 2----LOST SPRING

1. What is Saheb looking for in the garbage dumps?
2. Where is he and where has he come from?
3. What explanations does the Author offer for the children not wearing footwear?
4. Is Saheb happy working at the tea-stall?
5. What makes the city of Firozabad famous?

6. Mention the hazards of working in the glass Bangle industry.
7. How is Mukesh's attitude to the situation different from that of his family?
8. What could be some of the reasons for the migration of people from village to cities?
9. What could be some of the reasons for the migration of people from village to cities?
10. What forces conspire to keep the workers in Bangle industry of Firozabad in poverty?
11. How, in your opinion, can Mukesh realize his dream?
12. Tell the hazards of working in the bangles industry.
13. Why should child labour be eliminated and how?
14. Would you agree that promises made to the poor children are rarely kept?
15. Why do you think this happens in the incidents narrated in the text?

POETRY (First poem---my mother at sixty- six)

1. What is the kind of pain and ache that the poet feels?
2. Why are the young Trees described as" sprinting"?
3. Why has the poet brought in the image of the merry children "spilling out of their homes"?
4. Why has the mother been compared to the "late winter's moon"?
5. What do the parting words of the poet and her smile signify?
6. What is the relationship between the poet and her mother?
7. What lesson we got from this poem "my mother at sixty-six"?

Grammar

1. Write a letter to the Editor for a job of " sales officer".
2. A letter to the divisional superintending Engineer/ Regional Head/ manager for breakdown of Electricity in your Local colony
3. Revision of tense/ Models/ clauses/ vocabulary of 2 chapters and first poem.

SUBJECT: PHYSICS

NOTE: Learn the following definitions, laws and units:

1. Electric field Intensity, Electric dipole moment, Electric flux, Electric potential.
2. State gauss's law.
3. What are electric lines of force. State all the properties of electric lines of force.
4. What is equipotential surface? What are the properties of equipotential surface.
5. Learn all the formulae from chapter 1 & 2
6. Derive the Expression for electric field intensity for the following:

   On axis of an electric dipole, on equator of dipole, due to a linear charge, due to charged thin sheet, due to spherical shell
7. Electric potential at any point of an electric dipole
8. Electric potential energy of a system of two charges
9. Capacity of parallel plate capacitor when dielectric slab is introduced partially
10. Practice the numericals from NCERT, Exercise 1.1 & 1.2

SUBJECT: CHEMISTRY

NOTE: Learn the following definitions, laws:

1. State Raoult's law.
2. What are colligative properties?
3. What is osmotic pressure?
4. What are isotonic solutions?

5. What is ideal and non- ideal solutions? Write the condition for the two?
6. What is standard electrode potential?
7. What are Faraday's laws of electrolysis?
8. What is salt bridge. Write the functions of salt bridge?
9. Explain all the colligative properties (also learn).
10. Define conductivity and molar conductivity.
11. State Kholrausch's law of independent migration of ions.
12. Learn the reaction on anode and cathode in the following cells: Dry cell, mercury cell, lead storage cell
13. What are fuel cells? Explain hydrogen-oxygen fuel cell.
14. Practice all the numericals based on Nernst equation, Faradays laws, conductance, cell constant, from NCERT chapter 2.
15. Practice all numericals based on colligative properties from NCERT chapter 1

SUBJECT: BIOLOGY

1. What is funiculus?
2. What is the type of pollination when a snail pollinates the flower?
3. An embryo sac is formed directly from a nucellar cell. What is it called?
4. The meiocyte of rice has 24 chromosomes. How many chromosomes are present in its endosperm?
5. A bilobed, dithecous anther has 100 microspore mother cells

per microsporangium. How many male gametophytes this anther can produce?

6. What are parthenocarpic fruits? Name the hormone that can induce the formation of such fruits.
7. What is Tapetum? What is its function?
8. Explain the phenomenon of the double fertilisation in flowering plants.
9. Draw a labelled diagram of L. S. of an anatropous ovule of an angiosperm.
10. Trace the development of female gametophyte in a flowering plant with the help of diagram.
11. Draw labelled diagram of a human blastocyst.
12. What is amniocentesis? Justify the statutory ban on it.
13. Explain any three contraceptive devices that can be used by women for their family planning
14. Explain GIFT, ZIFT and ICSI Technique
15. Differentiate between spermatogenesis and oogenesis

SUBJECT: MATHS

1. Let S be the set of all points in a plane and R be the relation on S, defined by R = {(P, Q): distance b/w P and Q is less than 4.5 units}. Show that R is reflexive and symmetric but not transitive.
2. Determine whether the relation R defined on the set **R** of all real numbers as R = {(a,b): a,b$\in$**R** and a - b+$\sqrt{3}\in$S, where S be the set of all irrational numbers}, is reflexive, symmetric and transitive.

3. Let R be a relation on **R** defined as R = {(a,b): 1 + ab > 0; a,b$\in$ **R**}. Show that R is reflexive, symmetric but not transitive.

4. Let R be a relation on **R** defined by R = {(a,b): $a^2 + b^2 = 1$}. Show that R is reflexive, symmetric but not transitive. Show that R is symmetric but neither reflexive nor transitive

5. Check whether relation defined on **R** as R = {(a,b): $a^2 - 4ab + 3b^2 = 0$; a,b$\in$**R**}, is reflexive, symmetric and transitive.

6. If R_1 and R_2 are equivalence relations in a set A, show that $R_1 \cup R_2$ is not an equivalence relation.

7. Let A = {-1,0,1} and $f = \{(x, x^2) : x \in A\}$. Show that $f : A \to A$ is neither one-one nor onto

8. Show that function $f : Q - \{3\} \to Q$ defined by $f(x) = \frac{2x+3}{x-3}$, is not bijective

9. Show that the exponential function $f : R \to R_0^+$ given by $f(x) = e^x$, is bijective (where R_0^+ is the set of all positive integers).

10. Show that the exponential function $f : R \to R$ given by $f(x) = e^x$, is 1-1 but not onto

11. Show that if $f : B \to A$ is defined $f(x) = \frac{3x+4}{5x-7}$ and $g : A \to B$ is defined by $g(x) = \frac{7x+4}{5x-3}$, then $fog = I_A$ and $gof = I_B$, where A = R - $\left\{\frac{3}{5}\right\}$ and B = R - $\left\{\frac{7}{5}\right\}$.

12. If $f : R \to R$ be defined by $f(x) = x^3 - 1$, then prove that f^{-1} exists and find f^{-1}. Hence, find $f^{-1}(26)$ and $f^{-1}(-9)$

13. Evaluate: $\cos^{-1}\left(-\frac{1}{2}\right)+\sin^{-1}\left(-\frac{1}{2}\right)$. and Evaluate: $Sin\left[\frac{\pi}{3}-\sin^{-1}\left(-\frac{1}{2}\right)\right]$.

14. Evaluate: $\sin\left[\cos^{-1}\left(-\frac{1}{2}\right)\right]$., and Evaluate: $\sec^2\left(\tan^{-1}3\right)+\cos ec^2\left(\cot^{-1}2\right)$.

SUBJECT: PHYSICAL EDUCATION

Do all holiday homework in separate notebook.

1. Paste Aasana photograph in holiday home work copy- Savasana, Sarvangasana, Seershasana, Danurasana, Garudasana, vriksshasana, Ardh-Matshyendrasana, Chakrasana
2. Do all unsolved questions from unit 1 and unit 2:
3. Explain the uses and duration of the following Aasana: Savasana, Sarvangasana, Seershasana, Danurasana, Garudasana, vriksshasana, Ardh-Matshyendrasana, Chakrasana