

Name : \_\_\_\_\_

# The Ideal New Star English School

## Varanasi

### Homework for Summer Holidays

Session : 2024-25

Class – XII (Biology)

Kids, the much awaited holidays are here and it's time to play and have fun!! We have planned some work for you to make the optimum use of your energy and give a vent to your creativity so that you continue learning during the holidays.

- ❖ Parents are requested to encourage their ward to do the homework independently.
- ❖ They can help the child if he/she needs help.
- ❖ Creativity and originality of the work will be appreciated.
- ❖ Complete the homework of each subject in a thin notebook, separate report file, stick file or scrapbook as per requirement of the subject and the activity.

### Subject – English Core

#### A. Flamingo

(i) Find out difficult words and write their meanings from the following lessons:

- (a) The Last Lesson
- (b) Lost Spring
- (c) Deep Water
- (d) The Rattrap

Note: At least twenty (20) from each lesson.

(ii) Write the summary of the following lessons:

- (a) The Last Lesson
- (b) Lost Spring

(iii) Write the Central Theme of the Poem “My Mother at Sixty Six”.

(iv) State all the poetic devices used in the above mentioned poem, along with the lines.

(v) Answer the following questions in about 30-40 words:

- (a) How does the story (The Last Lesson) indicate that the people of Alsace-Lorraine had not taken their language seriously?
- (b) Would you say that M. Hamel was a dedicated teacher?
- (c) Where do the families of the ragpickers of Seemapuri come from? What has prompted them to come here?

#### B. Vistas

(i) Write the summary of the lesson “The Third Level”.

(ii) Answer the following questions:

- (a) What does the third level refer to?
- (b) What convinced Charley that he had reached the ‘Third Level’ at Grand Central Station and not the second level?
- (c) How did Sam reach Galesburg? What did he advise Charley to do?

#### C. Write Section

(i) Write articles of 150-200 words on the following topics:

- (a) Child Labour
- (b) Road Safety : A National Concern
- (c) Rising Religious Intolerance in a Secular Nation
- (d) Advantage of Co-education

- (ii) Attempt the format of 'Notice' with two examples.
- (iii) **Attempt at least two Classified Advertisements based on the following topics:**
  - (a) Situation Vacant
  - (b) Sale/Purchase
  - (c) Missing Person
- (iv) Attempt format of Formal letter with two examples.
- (v) Attempt format of 'formal' and 'informal' invitations with example.
- (vi) Format of job application with example.

**D. Creativity based**

- (i) Make a file of important newspaper heading from any of English Daily – 'The Times of India', 'The Hindustan Times' or 'The Hindu'.

**Biology**

**Project:**

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|--|--|
| 1. Human and disease   | 16. Stem cell technology   |
| 2. Gene Therapy  | 17. Immune system – Immunity, Vaccination and immunization               |
| 3. Microbes in human welfare                                   | 18. Detailed study an infertility its causes and treatment               |
| 4. Cancer  | 19. Avoidance of Biological solution                                     |
| 5. Affection of biotechnology in health & Agriculture          | 20. Pedigree   |
| 6. Biodiversity and conservation                               | 21. Stem cell technology   |
| 7. AIDS  | 22. DNS Fingerprint  |
| 8. Human Evolution   | 23. Sex detraction in plants & Animals                                   |
| 9. Embryonic Development in humans                             | 24. Enzymes  |
| 10. Polymerase Chain Reaction (PCR)                            | 25. Origin in life   |
| 11. Chromosomal mutation and its consequences                  | 26. Alcohol and drug abuse   |
| 12. Mutation and its consequences                              | 27. Special modes of reproduction apomixis , parthenocary & polyembryony |
| 13. Drug Addaction   | 28. Sexual reproduction in flowering plant                               |
| 14. Origin of life   | 29. Gene Therapy   |
| 15. To study of drugs assistance in bacteria using antibiotics | 30. Microbes in Human Welfare  |
| 31.  |  |

**Physics**

**Note:**

- (i) **Complete the allowed project work.**
- (ii) **Write all the activity in your activity note book. Total six activity.**
  - 1. Complete six activity in activity notebook. Three activity from section A and three from section B. From section A, activity no. 3, 4 and 6, from section B, activity no. 1, 4 and 6.
  - 2. Complete your project work according to roll no. allowed to you.

Roll No.	Project No.
1 to 6	1
7 to 12	2
13 to 18	3
19 to 24	4
25 to 30	5
31 to 36	6
37 to 42	7
43 to 50	8

### 3. Activities

- (1) To assemble a household circuit comprising three bulbs, three (on/off) switches, a fuse and a power source.
- (2) To assemble the components of a given electrical circuit.
- (3) To draw the diagram of a given open circuit comprising at least a battery, resistor/rheostat, key, ammeter and voltmeter. Mark the components that are not connected in proper order and correct the circuit and also the circuit diagram.
- (4) To identify a diode, an LED, a resistor and a capacitor from a mixed collection of such items.
- (5) To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab.
- (6) To study the nature and size of the image formed by a (i) convex lens, or (ii) concave mirror, on a screen by using a candle and a screen (for different distances of the candle from the lens/mirror).

### 4. Project Work

- (1) To study various factors on which the internal resistance/EMF of a cell depends.
- (2) To study the variations in current flowing in a circuit containing an LDR because of a variation in
  - (a) the power of the incandescent lamp, used to 'illuminate' the LDR (keeping all the lamps at a fixed distance).
  - (b) the distance of a incandescent lamp (of fixed power) used to 'illuminate' the LDR.
- (3) To find the refractive indices of (a) water (b) oil (transparent) using a plane mirror, an equiconvex lens (made from a glass of known refractive index) and an adjustable object needle.
- (4) To investigate the relation between the ratio of (i) output and input voltage and (ii) number of turns in the secondary coil and primary coil of a self-designed transformer.
- (5) To investigate the dependence of the angle of deviation on the angle of incidence using a hollow prism filled one by one, with different transparent fluids.
- (6) To estimate the charge induced on each one of the two identical Styrofoam (or pith) balls suspended in a vertical plane by making use of Coulomb's law.
- (7) To study the factor on which the self-inductance of a coil depends by observing the effect of this coil, when put in series with a resistor/(bulb) in a circuit fed up by an A.C. source of adjustable frequency.
- (7) To study the earth's magnetic field using a compass needle -bar magnet by plotting magnetic field lines and tangent galvanometer.

### Chemistry

1. Project based on solution and electrochemistry.
2. Complete the exercise question of lesson 1 and 2.

#### Solve the following questions.

3. A 6.9 M solution of KOH in water contains 30% by mass of KOH. Calculate density of KOH solution.
4. An Antifreeze solution is prepared from 222.6 g of ethylene Glycol ( $C_2H_6O_2$ ) and 200 g of water. Calculate the molality of the solution? If the density of the solution is 1.0702 g/ml, then what should be the molarity of the solution?
5. What is molality of 1 M solution of sodium nitrate if its density is 1.25 g/cm<sup>3</sup>.
6. The vapour pressure of ethanol and Methanol are 44.5 and 88.7 mm of Hg-respectively. An ideal solution is formed at the same temperature by missing 60 g of ethanol and 40 g of methanol. Calculate total vapour pressure of the solution.
7. Find the Van't Hoff factor 'i' for the following compound in solution?
  - (i)  $AlCl_3$
  - (ii)  $K_2SO_4$
  - (iii)  $K_3[Fe(CN)_6]$

8. What is molar concentration of solute particles in Human blood, if the osmotic pressure is 7.2 atm at normal body temperature  $37^{\circ}C$ ?

### Physical Education

1. What is the concept of Sports Management?
2. Write about any four committees and their responsibility.
3. What is a Tournament? Write about its kind.
4. What is the Intramural and Extramural Tournaments?
5. What is the Merits and Demerits of knock-out Tournaments?
6. What is the Fixture?
7. Write a short note on Sports Day.
8. Write the merits and Demerits of League Tournaments.
9. Write the factors which is effecting the Specific Sports Programme.
10. Write a short note on 'Run for Unity'.

### Music

निर्देश: सभी विद्यार्थी अपनी उत्तर पुस्तिका में लिखकर दिखायें।

1. राग भैरव का परिचय।
2. राग भैरव के छोटा ख्याल की स्वरलिपि, दो आलाप, दो ताल के साथ।
3. ताल झपलिल का लयकारी ठाह, दुगुन, तिगुन।
4. धमार ताल का परिचय।
5. कृष्ण शंकर राव पंडित का जीवन परिचय।
6. झपताल का दुगुन, तिगुन, चौगुन।

### Hindi

1. फीचर लेखन क्या है? फीचर के महत्वपूर्ण बिंदुओं पर प्रकाश डालते हुए किसी एक फीचर लेखन का सचित्र वर्णन करें।
  - (i) स्वच्छ भारत स्वस्थ भारत
  - (ii) मुझे जन्म से पहले मत मारो माँ
  - (iii) महँगाई के बोझ तले मजदूर
  - (iv) प्रशासन में बढ़ता भ्रष्टाचार
  - (v) जी-20 संगठन
2. रेडियो नाटक का आरंभ किस प्रकार हुआ "नाटक स्वयं में जीवंत माध्यम हैं—इस कथन को आलोक पर प्रकाश डालिए।
3. कहानी का नाट्य-रूपांतरण करते समय दृश्य विभाजन कैसे करते हैं?
4. बीट रिपोर्टिंग और विशेषीकृत रिपोर्टिंग में अंतर स्पष्ट कीजिए।
5. 'सिंधु की सभ्यता पूर्ण विकसित मानव सभ्यता थी' इस विचार से आप कहाँ तक सहमत हैं और क्यों?

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