II Language (Tamil)

1. Read the following passage and complete the passage given below.

Ramesh: I have invited my friends at my birthday party.

Renu: Then, I will invite my friends also.

Ramesh: That will be a good idea.

Renu: So, what should we have for dinner?

Ramesh: Let's us decide the menu now.

II Language (Hindi)

Revise Grammar
Revise the FA-1 portions for test
Complete the assessment
Prepare a chart on “Kabir Ke Dhohe”

English

Grammar

1. Read the following conversation and complete the passage given below.

Ramesh: I have invited my friends at my birthday party.

Renu: Then, I will invite my friends also.

Ramesh: That will be a good idea.

Renu: So, what should we have for dinner?

Ramesh: Let's us decide the menu now.
Ramesh told Renu that he had invited his friends on his birthday. Then Renu said that (a)___________ which Ramesh thought (b)________________. When Renu asked (c)________________ Ramesh replied that they should decide the menu then.

II. Complete the news items given below by choosing the correct options from those that follow.

1. 15 year old Ram ______________ against robbers last night.

2. Delhi high court ______________ kite flying in urban areas is Illegal.
   a. declaring that, b. As declared that, c. declares that, d. will declare that.

3. A Killer whale thrashed a Trainer killing him__________________________ a shocked crowd.
   a. at front of, b. in view of, c. at the back of, d. in front of.

Writing Part

A. Sports and fitness play an important role in everybody’s life. But, the majority of students who do not value it and are becoming obese gradually. They are glued to Television or computers, turning into couch potatoes. Write a letter to the editor highlighting the importance of being fit and playing sports. Also, suggest ways to lead a healthy lifestyle. Write your letter in 120-150 words.

B. You are Sanjay or Sheena. You are studying in a boarding school. When your mother came to meet you, she told that your younger brother spends a lot of time in front of the computer and neglects his studies. You decide to send an e-mail to your brother asking him to focus on his studies and other activities.

C. Children today are under a lot of stress-increasing competition, pressure to perform, sky_rocketing expectations of parents and a heavy syllabus. You also feel that these days students are under a lot of stress. Write an article expressing your views on the topic “Stress and Students –Handle it with care.”

Maths
1. Three sets of English, Hindi and Sociology books dealing with cleanliness have to be stacked in such a way that all the books are stored topic wise and height of each stack is the same. The number of English books is 96, the number of Hindi books is 240 and the number of sociology books is 330.

(i) Assuming that the books are of the same thickness, determine the number of stacks of English, Hindi and Sociology books.

(ii) Which mathematical concept is used?

2. Check whether the polynomial $x^2 + 3x + 1$ is a factor of the polynomial $3x^4 + 5x^3 - 7x^2 + 2x + 4$.

3. Find the H.C.F of 12576 and 4052 by Euclid's division lemma.

<table>
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<tr>
<th>Rational Number</th>
<th>Prime factorization of denominator</th>
<th>Decimal expansion will terminate put a tick or a wrong</th>
<th>Decimal expansion will not terminate</th>
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<tr>
<td>1. 13/3125</td>
<td></td>
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<tr>
<td>2. 29/343</td>
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<tr>
<td>3. 120/400</td>
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5. A merchant has 120 litres of oil of one kind, 180 litres of another kind and 240 litres of the third kind. He wants to sell the oil by filling the three kinds of oil in tins of equal capacity what should be the greatest capacity of a such a tin?

6. Prove that the product of three consecutive positive integers is divisible by 6.

7. Prove that the square of any positive integer is of the form $5q, 5q+1, 5q+4$ for some integer $q$.

8. Prove that $n^2 - n$ is divisible by 2 for every positive integer $n$.

9. Solve the pair of linear equation graphically.

\[ 2x + 3y = 12 \]

\[ x - y = 1 \]

10. Due to some technical problems, an aeroplane started late by one hour from its starting point. The pilot decided to increase the speed of the aeroplane by 100 km/h from its usual speed, to cover a journey of 1200 km in time. Find the usual speed of the aeroplane.
1. Why does the colour of copper sulphate solution change when an iron nail is dipped in it? Write chemical equation for the reaction involved?

2. (a) List any two changes which take place when oily food gets oxidized?
   (b) Mention a measure which prevents or slows down oxidation?

3. Convert the following statements into the balanced chemical equation
   (a) Zinc reacts with sulphuric acid to form zinc sulphate and hydrogen gas.
   (b) Magnesium burns in oxygen to form magnesium oxide.

4. Write the balanced chemical equation for the following.
   (a) Silver bromide on exposure to sunlight decomposes to silver and bromide.
   (b) Sodium metal reacts with water to form sodium hydroxide and hydrogen gas.

5. Mention the colour of FeSO₄·7H₂O crystals. How does this colour change on heating? Give the balanced equation for the change.

6. Write the balanced equation for the reaction between magnesium and hydrochloric acid. Name the product obtained, identify the type of reaction.

7. Identify the type of the reaction to the reaction.
   (i) CH₄ + 2O₂ → CO₂ + 2H₂O
   (ii) CO + H₂O →

8. Give the reaction of calcium and magnesium with dilute nitric acid.

9. Why is hydrogen peroxide stored in coloured bottles?

10. A solution of X is used for white washing:
   (a) Name the substance X and write its formula.
   (b) Express the reaction of X with water in the form of a balanced equation.

11. What is rancidity? Mention any two ways by which rancidity can be prevented?
12. In the electrolysis of water:

(i) Name the gas collected at the cathode and anode respectively.

(ii) Why is the volume of one gas collected at one electrode double that at the other? Name this gas.

(iii) How will you test the evolved gas?

13. 2g of lead nitrate powder is taken in a boiling tube. The boiling tube is heated over a flame.

(a) State the colour of the fumes evolved and the residue formed.

TOPIC: Electricity

1. The current passing through a room heater has been halved. What will happen to the heat produced by it?
2. An electric iron of resistance 20 ohm draws a current of 5 amperes. Calculate the heat produced in 30 seconds.
3. An electric heater of resistance 8 ohm takes a current of 15 A from the mains supply line. Calculate the rate at which heat is developed in the heater.
4. A resistance of 40 ohms and one of 60 ohms are arranged in series across 220 volt supply. Find the heat in joules produced by this combination in half a minute.
5. A resistance of 25 Ohm is connected to a 12 V battery. Calculate the heat energy in joules generated per minute.
6. 100 joules of heat are produced per second in a 4 ohm resistor. What is the potential difference across the resistor?
7. An electric iron is connected to the mains power supply of 220 V. When the electric iron is adjusted at minimum heating it consumes a power of 360 W but at ‘maximum heating’ it takes a power of 840 W. Calculate the current and resistance in each case.
8. Ten bulbs are connected in a series circuit to a power supply line. Ten identical bulbs are connected in a parallel circuit to an identical power supply line.
   a) Which circuit would have the highest voltage across each bulb
   b) In which circuit would the bulbs be brighter?
   c) On which circuit, if one bulb blows out, all others will stop glowing?
   d) Which circuit would have less current in it?
9. Calculate the cost of operating a heater of 500 W for 20 hours at the rate of Rs. 3.90 per unit.
10. Which has a greater resistance, a 100 watt bulb or a 60 watt bulb?
11. How much energy is consumed when a current of 5 amperes flows through the filament (or element) of a heater having a resistance of 100 ohms for two hours? Express it in joules.
12. An electric bulb is rated at 220 V, 100 W. What is its resistance?
13. An electric bulb is connected to a 220 V power supply line. If the bulb draws a current of 0.5 A, calculate the power of the bulb.
14. In which of the following cases more electrical energy is consumed per hour?

   X_____________________________X

   BIOLOGY

1. What do the following transport?
   Xylem   (b) Phloem    (c) Pulmonary vein and   (d) vena cava.

2. What are the outside raw materials used by an organism?
3. Why is it advisable to breathe through nose?

4. Match the terms of column (A) with that of column (B).

5. Column (A)                         Column (B)
   Autotrophic nutrition              (i) Leech
   Heterotrophic nutrition            (ii) Paramecium
   Parasitic nutrition                (iii) Deer
   Digestion in food vacuoles         (iv) Green Plant

6. Match the terms of column (A) with that of Column (B)
   Column (A)                         Column (B)
   Trypsin                            (i) Pancreas
   Amylase                            (ii) Liver
   Bile                               (iii) Gastric glands
   Pepsin                             (iv) saliva

7. Name the correct substrates for the following enzymes:
   (a) Trypsin  (b) Amylase  (c) Pepsin  (d) Lipase.

8. Answer the following questions based on the following.
   The organ that produces pepsin
   The alkaline medium, producing organ.
   It helps in the absorption of water of digested food.
   It helps in the absorption of water.
   The part that controls the exit of the waste materials.

9. Which organ is known as master chemist? Why/

10. Fill in the blanks
    Plasma ; Fibrinogen:- RBC:______________
        WBC:______________
    Three organisms ate food in the form of glucose and the end products after respiration are:
        Ethanol + CO2
        CO2 + H2O
        Lactic acid + water

11. Explain how is this possible?

12. Name the following in the human system:
    Balloon like structure richly supplied with blood capillaries.
    Prevents the back flow of blood in the heart.
    Squeeze out the water with amino acids and other wastes and separates from the blood.
    Bring impure blood to the kidney.
    Rhythmic contraction and relaxation of digestive system-walls.
13. Give the role of the following in the plants.
   - Guard Cells
   - Tracheids and vessels.
   - Lymph.
   - Phloem
   - Bio-catalyst.

14. Double Match

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**Social Science**

**History:** Compare the Nationalism in India and Indochina.

**Geography:** Resources and Development _50 Mcq's_ Prepare in four side margin in A4 Paper.