



**DELHI PUBLIC SCHOOL**  
**VISAKHAPATNAM STEEL PLANT**  
**ASSIGNMENT NOVEMBER – DECEMBER 2020**

**Class: IX**

**Subject: ENGLISH**

Read the following passage and answer the questions that follow.

Wangari Maathai devoted her life in protecting our planet and serving its people. As an academic, an activist and the founder of the Green Belt Movement, Wangari believed that saving our planet and changing our world went hand in hand. Through her work with the Green Belt movement, Wangari provided thousands of women with job training and opportunities and was responsible for the planting of millions of trees in her native country, Kenya. Wangari died of ovarian cancer in 2011, but not before leaving a substantial mark on the world she loved so much.

Wangari was born in a small village in Kenya in 1940. When she was eight years old, her family decided to send her to school. This was an unusual opportunity for girls in Kenya at this time but Wangari soon began to excel academically. In 1960, she earned a scholarship that allowed her to travel to the United States and attend college. She studied at a small Catholic school in Kansas where, in 1964, she earned her bachelor's degree in biology. From there, she moved to the University of Pittsburgh, where she earned a master's degree in biological sciences. After completing her master's degree, Wangari briefly studied in Germany before returning to Africa, where she continued her education at the University of Nairobi in her home country of Kenya. In 1971, she earned her doctorate in veterinary anatomy, making her the first woman in all of East and Central Africa to earn a doctorate degree. She continued to make history throughout her career in academics, eventually becoming the first woman in the region to chair a department and the first to become an associate professor.

In addition to her work as a professor, Wangari was also extremely active with the National Council of Women. In 1976, the same year she began chairing the Veterinary Anatomy department at the University of Nairobi, Wangari began talking to the Council of Women about an idea that would form the basis of the Green Belt Movement.

On the basis of your reading and understanding of the above passage, answer the following:

- (i) The main purpose of Wangari Maathai's life was to protect our....
- (ii) At what age, did Wangari Maathai go to school?
- (iii) In which subject did Wangari Maathai pursue her higher education?
- (iv) In 1976 Wangari Maathai seeded the idea of Green Belt Movement. (True/False)
- (v) Wangari believed that the world couldn't be changed without
  - (a) women's involvement
  - (b) Green Belt Movement
  - (c) saving the planet
  - (d) her contribution
- (vi) Identify the word from para 2 whose antonym is 'common'.
  - (a) unusual (b) small (c) opportunity (d) excel
- (vii) Wangari could travel and attend college in the United States because
  - (a) she was academically excellent.
  - (b) she had earned a scholarship for her academic excellence in Kenya.
  - (c) her family had sent her to school.
  - (d) had worked to save the planet.
- (viii) State True/False. Wangari was the first woman to earn a doctorate degree in all of East and Central Africa.

Reading a newspaper regularly is significant for the development of writing skills. Write an article in 100-150 words explaining how reading of a newspaper regularly helps to develop writing skills.

Read the sentence given below and fill in the blanks by choosing the most appropriate options from the ones that follow.

Writing (i) ..... always been the medium of expression for those (ii) ..... are shy and nervous. But, today, writing is more than that. It is one of the most important (iii) ..... to judge the academic merit of a learner. No wonder, every learner has set his or her mind (iv) ..... becoming a great 'writer'.

(i) (a) had (b) is (c) has (d) have

(ii) (a) which (b) who (c) that (d) whoever

(iii) (a) parameters (b) parameter (c) none of the above (d) both (i) and (ii)

(iv) (a) at (b) in (c) on (d) with

Rewrite the sentences according to the given instruction.

(i) This is a pen stand. My uncle gifted it to me on my birthday. (Join the sentences.)

(ii) He should consult a doctor. It shouldn't be too late. (Join the sentences using 'before')

(iii) Radha knew the way to the new library. She didn't show us. (Join the sentences with 'although')

(iv) Joe said to me, "Go and meet the principal tomorrow." (Change the sentence into a reported

Read the extract given below and answer the questions that follow.

Or pulled out entirely,

Out from the earth-cave,

And the strength of the tree exposed

The source, white and wet,

The most sensitive, hidden

For years inside the earth.

(i) What is the theme of the poem from which the above stanza is taken?

(ii) When is the strength of the tree exposed?

(iii) What does 'The source' refer to?

(iv) What is a synonym for the word 'sensitive'?

So, I did not go back home; instead, I headed straight for the training. I had to write a letter of apology to my father without whose permission I had got myself enrolled at Uttarkashi."

(i) Who does 'I' refer to here?

(ii) What did 'I' do before going for the training?

(iii) Which training at Uttarkashi is 'I' talking about?

(iv) 'I' wrote a letter of apology to his or her father. Does this mean that he or she was scared of his or her father? What does this tell us about him or her?

**Note: Complete words and Expression Unit 5**

**Subject: MATHEMATICS**

1.the length of the diagonal of a square is 8cm, then find its area.

2.Factorise:  $a^7 + ab^6$

3.Find the value of  $8x^3 + y^3 - 18xy$  if  $2x + 3y = -3$

4.If  $(2m, m-1)$  is a solution of  $2x + 3y - 9 = 0$ , find the value of  $m$ .

5.If the area of an equilateral triangle is  $16\sqrt{3}\text{cm}^2$

6. Two coins are tossed simultaneously 500 times and we get

Result	2 Heads	1 Head	No Head
Frequency	105	275	120

Find the probability of occurrence of (i) two heads (ii) all tails.

7.  $x = 4 + \sqrt{15}$ , then find the value  $(x + \frac{1}{x})^2$

8. Show by long division that  $2x+3$  is a factor of  $4x^4 + 8x^3 + 5x^2 + x - 3$ .

9. If the diagonals of a parallelogram are equal, then show that it is a rectangle.

10. The height of a cone is 16cm and the base radius is 12cm. Find curved surface area and volume of cone.  
( $\pi = 3.14$ )

11. Express  $2.3\bar{6} + 0.\bar{23}$  as a fraction in simplest form.

12. Simplify:

$$\frac{2}{\sqrt{5} + \sqrt{3}} + \frac{1}{\sqrt{3} + \sqrt{2}} - \frac{3}{\sqrt{5} + \sqrt{2}}$$

13. The perimeter of a triangular field is 144m and its sides are in the ratio 3 : 4 : 5.

Find the length of the perpendicular from the opposite vertex to the side whose length is 60m.

14. A metal pipe is 77cm long. The inner diameter of a cross-section is 4 cm, the outer diameter being 4.4cm. Find its (i) inner curved surface area, (ii) outer curved surface area

15. The surface area of a sphere of radius 5 cm is 5 times the area of the curved surface of a cone of radius 4cm. Find the height and volume of the cone.

16. Find the value of  $8x^3 + y^3 - 18xy$  if  $2x + 3y = -3$

### Subject: PHYSICS

1. What kind of energy transformation takes place in the following gadgets?

- Electromagnet
- Electric dynamo
- Microphone
- Photoelectric cell

2. (a) Derive the formula for kinetic energy:  $K.E = \frac{1}{2}mv^2$

(b) Calculate the kinetic energy of a body of mass 2Kg moving with a velocity of 0.2m/s.

3. Explain each of the following:

- A moving cricket ball can do work
  - A striking hammer can do work
  - A compressed spring can do work
4. What happens its potential energy of a body if
- Its mass is tripled?
  - Its mass reduced to one-fourth?
  - It is raised four times the original height?
  - It is lowered to half of its original height?
  - The body is taken from the poles to the equator?

5. If an electric bulb of 100W is lighted for 20 hours, how much is the electrical energy will be consumed?  
Also find the cost, if 1 unit costs 4/-.

### Subject: CHEMISTRY

1. What are isotopes? Give examples.

2. The average atomic mass of a sample of an element x is 16.2 u. What are the percentages of isotopes  $X_8^{16}$  and  $X_8^{18}$  in the sample.?

3. What are the limitations of Rutherford's model of an atom.?

4. Compare all the proposed models of an atom.

5. How will you find the valency of chlorine, sulphur and magnesium?

6. Write the electronic configuration of the following elements – sodium, fluorine, potassium, calcium

7. Name the element and give the number of electrons, protons, and neutrons in oxygen, hydrogen, carbon, nitrogen.
8. What is the mass of 1 mole of nitrogen atoms?
9. Calculate the Molar mass of HCl.
10. What are poly atomic ions? Give examples.

**Subject: BIOLOGY**

1. Read the following passage and answer the questions given below:

**Get a drop, stop the strop**

Immunization is a global health and development success story, saving millions of lives every year.

Vaccines reduce risks of getting a disease by working with your body's natural defences to build protection. When you get a vaccine, your immune system responds.

- a) A Vaccines contain-
  - A. microorganism or virus in a weakened, live or killed state
  - B. proteins or toxins from the organism
  - C. Both A and B
  - D. Antibodies against the infections
- b) vaccination is largely responsible for the worldwide eradication of-
  - A. Polio
  - B. SmallPox
  - C. Chicken Pox
  - D. Tetanus
- c) DPT vaccine is given for the disease-
  - A. diphtheria, TB, and polio
  - B. diphtheria, tetanus, and whooping cough (pertussis)
  - C. diarrhea, tetanus, and whooping cough (pertussis)
  - D. diphtheria, tetanus, and polio
2. Why a cell is considered as structural and functional unit of life?
3. How does the cork act as a protective tissue?
4. What are the functions of parenchyma?( Any three)
5. What is osmosis?
6. Complete the following with appropriate kind of tissue:
  - a) Fluid connective tissue\_\_\_\_\_
  - b) Filling of space inside the organs\_\_\_\_\_
  - c) Striated muscle\_\_\_\_\_
  - d) Adipose tissue\_\_\_\_\_
  - e) Surface of joints\_\_\_\_\_

**Subject: SOCIAL SCIENCE**

1. What social indicators are used to estimate poverty?
2. Describe the objectives of the following anti-poverty programmes: SGSY and PMGY.
3. What are the common animals found in montane forests?
4. How are forests important for human beings?
5. What do you mean by rain shadow area?
6. The monsoon is known for its uncertainties. Explain.
7. Write about the 3 categories of ministers which constitute the council of ministers.
8. Give brief description of the appointments made by the President of India.
9. What was a scorched earth policy?
10. What is deforestation? Mention the causes of deforestation during the colonial period in India.

विषय- हिंदी (द्वितीय भाषा)

- 1) 'एवरेस्ट मेरी शिखर यात्रा' और 'धर्म की आड़' पाठों से 10 अनुस्वार और अनुनासिक वाले शब्द को छाँटकर लिखिए।
- 2) 'एवरेस्ट मेरी शिखर यात्रा' और 'धर्म की आड़' पाठों से 10 उपसर्ग वाले शब्द को छाँटकर लिखिए।
- 3) 'एवरेस्ट मेरी शिखर यात्रा' और 'धर्म की आड़' पाठों से 10 प्रत्यय वाले शब्द को छाँटकर लिखिए।
- 4) पर्वतारोहियों को हिमपात के कारण क्या-क्या परेशानी उठानी पड़ती है?
- 5) 'हामिद खाँ' कहानी से क्या शिक्षा मिलती है?
- 6) मित्र को पत्र लिखकर अपने जन्म दिवस मनाने का वर्णन कीजिए।
- 7) विवाद प्रतियोगिता में प्रथम आने पर अपने मित्र को बधाई पत्र लिखिए।
- 8) 'प्रदूषण की समस्या' और 'जीवन में खेल कूद का महत्व' पर 100 शब्दों में अनुच्छेद लिखिए।
- 9) 'समय के महत्व' के विषय में पिता पुत्र के मध्य वार्तालाप को संवाद में लिखिए।
- 10) 'पानी बचाओ', 'गाड़ी धीरे चलाओ' पर स्लोगन लिखिए।

తెలుగు ( ద్వితీయ భాష )

- I. కింది పద్యములకి ప్రతిపదార్థములు రాయండి.
  1. మునుమును బుట్టె నాకు నొక ముద్దుల పట్టి .....  
.....దయా గుణ ముల్లసిల్లగన్.
  2. ఇట్టి మహానుభావులకు హింస యొనర్చి .....  
..... ప్రాణములింతనె పోవుచున్నవే !
- II. కింది ప్రశ్నలకి జవాబులు రాయండి.
  1. మెల్లీ దుందుడుకు స్వభావానికి చెందిన సంఘటనలు తెలపండి.
  2. కరుణ గల విజ్ఞానం అంటే ఏమిటి ? కరుణ కలిగినవారు చేసే పనులు ఏమై ఉంటాయి ?
  3. నందగోపాలుడి గుణగణాలని వర్ణించండి.
  4. నందగోపునికి ఆ ఆవంటే ఎందుకంత ఇష్టం .
- III. కింది వాక్యములకి అర్థ సందర్భములు రాయండి.
  1. "అదీ శిశువు ముందు శిరసోగ్గే నిరహంకారమంటే !"
  2. దేశపు తిండిగింజల సమస్య తీర్చని పరిశోధనలెందుకు ?
  3. ఆళవికి పోతున్నాను బాబు !
  4. ఇంకా భోజన పదార్థాలేమైనా మిగిలి ఉన్నాయా ?
  5. చెప్పెడు వాడు చెప్పినన్ వినియెడివారి కించుక వివేకము పుట్టదె !
  6. ప్రాణములింతనె పోవుచున్నవే ?
- IV. కింది పదములకి పర్యాయ పదములు రాయండి.
 

1. తల్లి =	2. వనం =	3. సుతుడు =	4. శపథం =
5. నేత్రాలు =	6. పాలు =	7. చీకటి =	
- V. కింది పదములకి ప్రకృతి - వికృతులు రాయండి.
 

1. అగ్ని -	2. ధర్మము -	3. ప్రాణము -	4. రత్నము -
5. సంతోషం -	6. పక్షం -	7. భయం -	8. అటవి -
- VI. కింది పదములకి వ్యతిరేక పదములు రాయండి.
 

1. సుకృతము x	2. వివేకము x	3. హింస x	4. సురులు x
5. పుట్టుట x	6. చీకటి x	7. ఆశక్తి x	8. ప్రత్యక్షం x

विषय: - संस्कृतम्

1. मञ्जूषा सहायेन एकस्य विषयस्य उपरि संस्कृते पञ्चवाक्यानि लिखत |
2. रेखाङ्कित पदानां प्रश्ननिर्माणं कुरुत - पाठा: - 6, 10
3. अपठितगद्यांश: |
4. पठितगद्यांश: | ( पाठ: - 6 )
5. पठितपद्यांश: | ( पाठ: - 10 )
6. पठितनाट्यांश: | (पाठ: - 9 )