VIDYA DEVI JINDAL SCHOOL, HISAR

Aptitude Assessment For Admission (2024-25)

Class: X

Sample Paper

Subject: English

Time: 30 Minutes   **Maximum   Marks: 20**

General Instructions:
1. *All questions are compulsory.*
2. *Adhere to the word limit mentioned against each question.*

SECTION 'A' (READING SKILLS)   7 MARKS

I**. Read the passage given below.**

1. Nature is our mother, our first teacher. The greatest lesson that she teaches us is to maintain an equilibrium in life. We learn to maintain composure through our joys, sorrows and fears. In fact, there are a thousand lessons that nature can teach us, provided we look for them.

2. With time, a sapling grows into a full-grown tree; something so tiny and delicate develops into a strong tree capable of supporting others. No matter how tall it grows, how much it may flourish, or how many animals and birds it may support, its roots are firmly buried from where it once rose. That's a lesson - to keep ourselves grounded, respect and embrace our roots, and give something back to those humble beginnings that nurtured us into who we are.

3. Then there is the message of peaceful coexistence. 'I am because we are.' Nature provides every creature a chance to exist. However, the existence of one creature or being depends on the existence of the other. The tiger eats the antelope; without the antelope, the tiger wouldn't survive. Likewise, without tigers, the over-abundance of antelopes would cause them to starve to death.

4. I wonder if you have noticed that when birds or squirrels see a predator, they give out an alarm call to their fellow creatures, of the lurking danger. They put themselves in danger to save the lives of others. Many animals, like the salmon, usually die after they spawn, but this doesn't stop them. One life extinguished for the betterment of others is a small price to pay.

5. The snow melts in the warmth of spring to give birth to fresh green leaves. In autumn these leaves age into shades of gold only to be buried in the cold grave of winter. Change is inevitable; the sooner we embrace this, the better it is for us. We must also understand that even in pain there is growth. If you cut a hole in the tree, it will grow around it. No matter what may come in its way, a river will continue to flow. Similarly, no matter what grief may break your heart, nature teaches us that life goes on.

6. Keep in mind life isn't about making lists and trying to be one step ahead of others. Life is to live. Take a break-stop being a workaholic, and smell the roses, do whatever makes you feel happy and most of all spend some time with nature to pick up invaluable lessons.

Based on your understanding of the passage, answer the following questions.

i. According to the author, what, from the following, is the greatest lesson being taught by nature?
   A. balanced in our emotions.   B. partial to joys in life.
   C. afraid of unhappiness.   D. indifferent to fears.

ii. Complete the dialogue suitably with reference to paragraph 2.

   Jai: I've done well for myself in this school. I'm the best they have. I can get admission anywhere. This is my moment!
   Sid: Congratulations! Just remember, we should _____.

iii. What does the expression **'I am because we are.'** in paragraph 3 mean?

iv. What qualities do the birds and squirrels display when they warn others of possible danger?

v. Select the option with the underlined words that can suitably replace lurking   (paragraph 4).

   A. The policeman pulled up the person who was wandering aimlessly through the city.
   B. The thief knew that remaining hidden was the best strategy to avoid being caught.
   C. The policeman was caught on camera while pouncing with force, to grab the fleeing culprit.
   D. The thief was walking boldly into the house thinking it was devoid of residents.

vi. Select the qualities from paragraph 3, that the author wants us to imbibe.

   (1) acceptive (2) passionate (3) emotional (4) resilient (5) perceptive

   A. (2), (4) and (5)   B. (1), (3) and (4)
   C. (1), (4) and (5)   D. (3), (4) and (5)

vii. A Portmanteau words like smog (smoke + fog), is a blend of words in which parts of multiple words are combined into a new word. Find a Portmanteau word that appears in the paragraph 6.

WRITING SKILLS   5 MARKS

2. A. Develop a short story with the help of starting line .Give a suitable title to your story. (120 words)   5marks
   It was an amazing day, full of fun and frolic. We all stood aghast to see a strange flying object over our heads. We started guessing …
                              OR
   B. Taking the information given below ,develop it into a descriptive paragraph, in about 100-120 words. You can invent your own details.

Bismillah learnt from uncle All Bux Vishnu temple of Benaras Balaji and Iviangia Maiya temples on Ganga — favourite places for Bismillah — selected for All India Radio (1938) — honour of playing shehnai on 15th August 1947 — 'Gurtj Uthi Shehnai film — songs famous — performed in USA, Canada, etc. — fond of Benaras symbol of India's composite culture — awarded Bharat Ratna in 2001

GRAMMAR   5 MARKS

3. **Do as directed.**

i. Fill in the blank by choosing the correct option to complete an online update.   0.5

   The climate control comment by an activist _____ on social media yesterday.

   A. blow up   B. blew up   C. is blown   D. will be blown

ii. Read the conversation between a doctor and his patient. Complete the sentence by reporting the patient's reply correctly.   1

   Doctor: Do you feel down from time-to-time Mr. Gopalan?
   Patient: Yes, I do not stay in a good mood.

   The doctor, while trying to figure out his patient's ailment, asked about his well-being, to which, the patient affirmed _____. that he does not stay in a good mood.

iii. Select the correct option to fill in the blank for the given line, from a health magazine.   0.5

   The advertisement read, "If you smoke, statistically your story _____ end 15% before it should."

   A. must   B. should   C. will   D. ought to

iv. Select the option that identifies the error and supplies the correction for the following line, from a news report.   1

   Last week a child was not allowed to board the plane at Ranchi airport. The / a

Option no.	error	correction
A.	child	children
B.	last	previous
C.	the	a
D.	at	in

v. Complete the given narrative, by filling in the blank with the correct form of verb given in the bracket.   1

   As I was standing on the dock, looking out at the lake for the last time, a feeling of emptiness _____ over me like darkness. **(wash)**

vi. Identify the error on a shop's hoarding and supply the correction, for the following sales offer: 1

Use the given format for your response.

Error	Correction

4. Rearrange the following word or phrases to make meaningful sentences.   3x1=3

   i. enters / millions tons / the/ every year / of / ocean /plastic
  ii. are / waters/ sightings / junk – filled /of /common
 iii. population / middle-class / increasing / is / coastlines / along
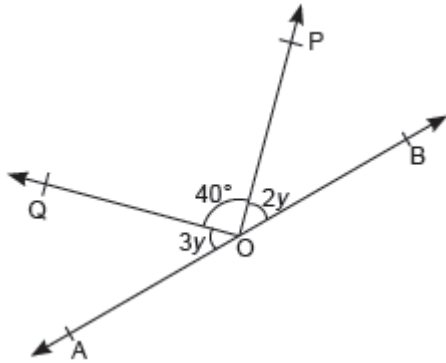

SUBJECT: MATHEMATICS

Time: 30 Minutes   **Maximum Marks: 20**
Instruction: Each question carry 2 marks.
_____

All the questions are compulsory.
1. Find the value of $x^{a-b} \times x^{b-c} \times x^{c-a}$.   (2)

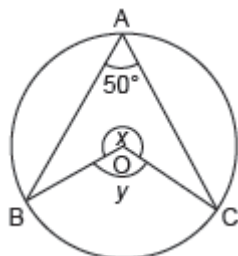2. In the given figure, find the value of y.

(2)

3. Find the total surface area of a cone whose radius is $\dfrac{r}{2}$ units and slant height is $2l$ units.   (2)

4. If the radius of sphere is doubled. Find the ratio of volume of the new sphere to the original sphere.   (2)

5. What is the value of polynomial $x^2 + 8x + k$, if -1 is a zero of the polynomial?   (2)

6. Examine whether $x – 1$ is a factor of the given polynomial:
    $2x^3 – 5x^2 + x + 2$ (2)
7. In which quadrant, will the point lies, if   (2)

    (i) the ordinate is 2 and the abscissa is -3
    (ii) the abscissa is -4 and the ordinate is -2

(iii) the ordinate is – 3 and the abscissa is 4

(iv) the ordinate is 3 and the abscissa is – 2

8. In a parallelogram, show that the angle bisectors of two adjacent angles intersect at right angles. (2)

9. Find x in the adjoining figure.

(2)

10. The base of an isosceles triangle is 10 cm and one of its equal sides is 13 cm. Find its area using Heron's formula. (2)
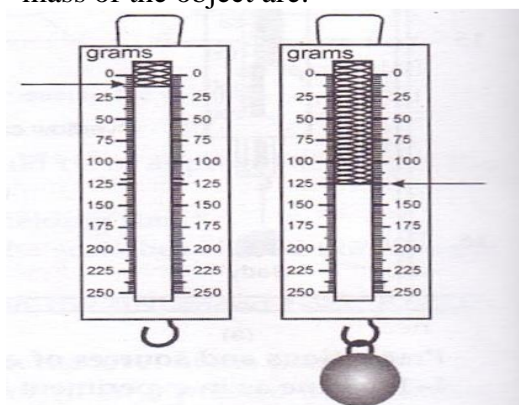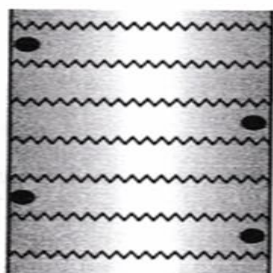
SUBJECT: SCIENCE

Time: 30 Minutes   **Maximum Marks: 20**

1. A particle is moving in a circular path of radius r. The displacement after half a circle would be:

   a. Zero   c. 2лr

   b. лr   d. 2r

2. Two objects of different masses falling freely near the surface of the moon would:

   a. have same velocities at any instant

   b. have different accelerations

   c. experience forces of same magnitude

   d. undergo a change in their inertia

3. What type of chemical reactions take place when electricity is passed through water?

   a. Displacement   b. Combination

   c. Decomposition   d. Double displacement

4. What is formed when zinc reacts with sodium hydroxide?

   a. Zinc hydroxide and sodium   b. Sodium zincate and hydrogen gas

   c. Sodium zinc-oxide and hydrogen gas   d. Sodium zincate and water

5. Which of the following are covered by a single membrane?

   a. Mitochondria   b. Vacuole   c. Golgi apparatus   d. Plastids

6. Chromosomes are made up of:

   a. Protein   b. DNA   c. DNA and Protein   d. None

7. There are 10 divisions between 0 and 25 in the given spring balance. The least count and the mass of the object are:

   a. 2g and 125 g
   b. 2.5g and 112.5g
   c. 12.5g and 125g
   d. 12.5g and 112.5g

8. Three beakers labelled as A, B and C each containing 25 mL of water were taken. A small amount of NaOH, anhydrous $CuSO_4$ and NaCl were added to the beakers A, B and C respectively. It was observed that there was an increase in the temperature of the solutions contained in beakers A and B, whereas in case of beaker C, the temperature of the solution falls. Which one of the following statement(s) is(are) correct?

   a. In beakers A and B, exothermic process has occurred.

   b. In beakers A and B, endothermic process has occurred.

   c. In beaker C exothermic process has occurred.

   d. In beaker C endothermic process has occurred.

       i. a. only   ii. b. only

       iii. a. and d   iv. b. and c

9. For how much time should a force of 500N be exerted on a body of mass 10kg to increase its velocity from 100m/s to 300m/s?

10. Why should the metal sulphides and carbonates be converted to metal oxides in the process of extraction of metal from them?

11. Write a note on Lysosomes and the functions it performs.

12. . A student identified the following figure as striated muscles. Write three features of these muscles to support the answer given by

SUBJECT: SOCIAL STUDIES

Time: 30 Minutes   **Maximum Marks: 20**

1. The leader of the Jacobins was_____.   1

2. The eastern most state of India is _____.   1

3. Read the cartoon below and answer the questions 3,4 and 5:

   3.Which country is this cartoon about?   1

4. Who is seen here behind the bar?   1

5. What message is given by the Cartoonist?   1

6. The Electoral Constituency we'll come across, if we start our journey from the southern

      tip of India is _____.   1

   i) Thrissur   ii) Tiruchirappalli   c) Thiruvananthapuram   d) Madurai

   7.The Constitution of India _____.   1

   i) divided powers between centre and states in three lists.   ii) divided powers
between centre and states in two lists.   iii) listed the powers of the states and left the
undefined powers to the state.   iv) Specified the powers of the states and left the residuary
powers with the centre.

8. In India the Election dates are announced by the _____.   1

   i) Prime minister   ii) Union Cabinet
iii) Chief Justice   iv) Chief Election Commissioner of India.

9. Who were the November Criminals in German history? State the reason why were they referred to as November Criminals .   3

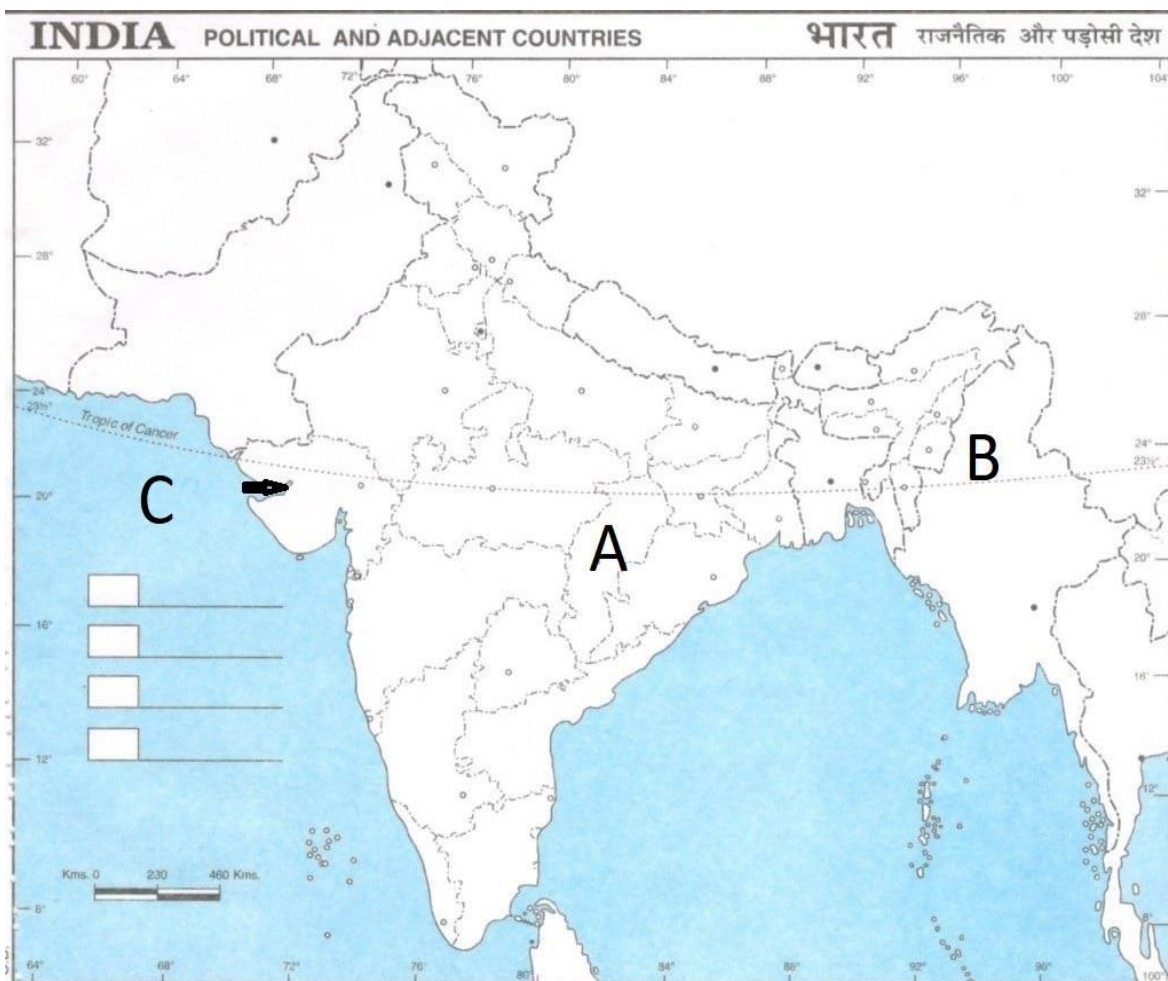<div align="center">OR</div>

What was the April Thesis in Russian revolution?

10. Which House of Parliament is more powerful and why?   3

11. What all physical features would you be flying over if your aeroplane flies from Delhi to Hyderabad (Telengana)   3

12. Identify the following in the outline political map of India.   3

i) A= _____ state   ii) B= _____ our neighbouring country   iii) C= Gulf of _____.