

KENDRIYA VIDYALAYA SANGATHAN, Bhopal Region
Competency Based Test (2024-25)
Class XI April-2024 Topic: Basic

Section A (English)

1. Q1. Choose the correct option to complete the suitable reply on behalf of the son.

- (a) I shall be careful in future.
- (b) I should be careful in future.
- (c) I would be careful in future.
- (d) I could be careful in future.

Answer: (a) I shall be careful in future.

Q2. Choose the order in which the following jumbled words/phrases should come in sentences.

- (a) These car are safe and fuel efficient
 - (b) Driverless cars will be available in the next five years.
 - (c) It sounds like a dream come true.
 - (d) These cars will have voice command system.
- (i) abcd (ii) bacd (iii) dabc (iv) badc

Answer: (iv) badc

Q3. Which of the following reported speech is written in past continuous tense?

- (a) The daughter told her mother that their school was arranging a trip to Goa in summer vacation.
- (b) The mother asked her what were the dates of the trip.
- (c) The daughter replied that the trip would be between May 10 to 20
- (d) The mother further told OK to the daughter

Answer: (c) The daughter replied that the trip would be between May 10 to 20

Q4. Fill in the blank by choosing the correct option to complete an online update.

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

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

Answer: B. blew up

Q5. Select the correct option to fill in the blank for the given line, from an educational website.

He _____ be very tired. He's been working all day long.

- (a) should
- (b) will
- (c) must
- (d) can

Answer: (c) must

Q6. Complete the given write-up on global warming by filling in the blank with the correct option:

If current rates of warming _____, the "Hothouse Earth" scenario, which assumes that most of the planet will become uninhabitable, may become a reality.

- (a) continues
- (b) continue
- (c) will continue
- (d) continued

Answer: (b) continue

Q7. Complete the following excerpt from an inter-house music competition with the correct option as given below.

The students of Don Bosco Primary School, Matunga, indeed know how to fly. On 25th July, 2022, the Singing Competition was held for the students of Stds III and IV. They did take us to a world _____ music was the language.

- (a) when
- (b) where
- (c) how
- (d) whom

Answer: (b) where

Q8. Identify the sequence in which the following jumbled words can be written in meaningful sentences.

(iii) Every T.V channel wants to telecast a reality show.

(i) Life has become difficult in metro cities.

(iv) It increases their T.V rating in prime time.

(ii) Reality shows have become popular on T.V.

- (a) (iii/i/iv/ii)
- (b) (i/ii/iii/iv)
- (c) (ii/iv/i/iii)
- (d) (i/iii/iv/ii)

Answer: (b) (i/ii/iii/iv)

Q9. Identify the sequence in which the following gaps can be filled to form a meaningful paragraph.

Jaipur is known as the 'Gulabi Nagari' because (i) _____. It is a very popular tourist destination (ii) _____. Jaipur can be approached easily (iii) _____.

- (a) by train or bus
 - (b) as it has many historical buildings
 - (c) the people have painted the buildings in pink colour
- (i) cba (ii) abc (iii) bca (iv) acb

Answer: (ii) abc

Q10. Identify the part of the underlined sentences which contains errors.

The third phase of (a) metro in Nagpur had begun. It shall be completed in 2023 . In this phase, the (b) metro will cover almost the whole city. There will be diversion on several roads due to construction there. (c) Diversion on the road causes traffic jams in many areas. This difficult (d) phase will be a boon in future for the citizen.

Answer: (a) metro in Nagpur had begun

Section B(Hindi)

1. उद्धव के व्यवहार की तुलना किस से की गई है?

- I. कमल के पत्ते से
- II. गुलाब के पत्ते से
- III. गेंदे के पत्ते से
- IV. गुलमोहर के पत्ते से

उत्तर: कमल के पत्ते से

2. निम्नलिखित पंक्तियों में प्रयुक्त अलंकार पहचानकर लिखिए
बालकु बोलि बधौं नहि तोही।

- i. यमक
- ii. रूपक
- iii. अनुप्रास
- iv. उत्प्रेक्षा

उत्तर: अनुप्रास

3. "मुरझाकर गिर रहीं पत्तियाँ" किसका प्रतीक हैं?

- i दुख और निराशाओं
- ii खुशी का
- iii क्रोध का
- iv हास्य का

उत्तर: i दुख और निराशाओं

4. कवि ने क्रांति लाने के लिए किसका आह्वान किया है ?

- i आकाश का
- ii बादलों का
- iii सूर्य का
- iv तारों का

उत्तर: ii बादलों का

5. यह दंतुरित मुसकान कविता में 'बाँस और बबूल' किसके प्रतीक बताए गए हैं?

- i कठोर और निष्ठुर हृदय वाले लोग
- ii कोमल हृदय वाले लोग
- iii छल कपट वाले लोग
- iv दुष्ट प्रवृत्ति वाले लोग

उत्तर: i कठोर और निष्ठुर हृदय वाले लोग

6. संगतकार किन्हें कहा जाता है?

- i मुख्य गायक होते हैं
- ii मुख्य गायक के सहायक होते हैं
- iii मुख्य गायक के सहायक नहीं होते हैं
- iv इनमें से कोई नहीं

उत्तर: ii मुख्य गायक के सहायक होते हैं

7. नगरपालिका द्वारा किसकी मूर्ति को लगवाने का निर्णय लिया गया ?

- i सरदार पटेल की मूर्ति
- ii महात्मा गांधी की मूर्ति
- iii नेहरू जी की मूर्ति
- iv नेताजी सुभाषचंद्र बोस की मूर्ति

उत्तर: iv नेताजी सुभाषचंद्र बोस की मूर्ति

8. भगत ने अपने बेटे की मृत्यु पर अपनी भावनाएँ किस तरह व्यक्त कीं ?

- i कबीर के पद गाकर
- ii ज़ोर -ज़ोर से रोकर
- iii संगीत बजाकर
- iv हंस हंस कर

उत्तर: i कबीर के पद गाकर

9. 'लखनवी अंदाज़' पाठ के आधार पर बताइए कि लेखक यशपाल ने यात्रा करने के लिए सेकंड क्लास का टिकट क्यों खरीदा?

- i लेखक महंगे टिकट खरीदने में सक्षम नहीं थे
- ii अन्य क्लास के टिकट महंगे थे
- iii. उन्हें अधिक दूरी की यात्रा नहीं करनी थी
- iv इनमें से कोई नहीं

उत्तर: iii. उन्हें अधिक दूरी की यात्रा नहीं करनी थी

10. " एक कहानी यह भी" की लेखिका के व्यक्तित्व पर किन-किन व्यक्तियों का प्रभाव पड़ा?

i. पिता का एवं प्राध्यापक का

ii नाना का

iii मामा का

iv दादा का

उत्तर: i. पिता का एवं प्राध्यापक का

Section C(Maths)

MATHEMATICS CLASS X

Q1 If two positive integers a and b are expressible in the form $a = pq^2$ and $b = p^3q$, p and q being prime numbers, then LCM(a, b) is

(a) pq

(b) p^3q^3

(c) p^3q^2

(d) p^2q^2

Answer: (c) p^3q^2

Q2. A girl purchased a pair of earrings as shown below. The ring consisted of four circles marked C1, C2, C3, and C4 from the innermost circle to the outermost circle. The diameter of the innermost circle C1 is 14 cm and the radius of each of the next circles is double the radius of the preceding inner circle.

The length of a colorful thread used to decorate the boundary of the outermost



circle C4 is:

(a) 352 cm

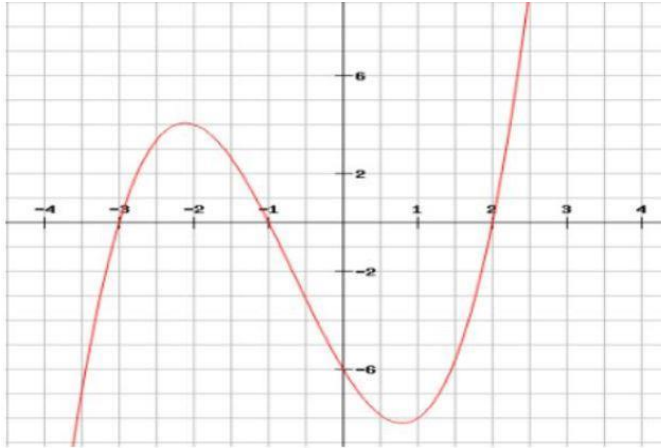
(b) 704 cm

(c) 176 cm

(d) 88 cm

Answer (a) 352 cm

Q3. Observe the following graph and answer



The three zeroes in the above shown graph are

- (a) 2, 3, -1
- (b) -2, 3, 1
- (c) -3, -1, 2
- (d) -2, -3, -1

Answer: (c) -3, -1, 2

Q4. A test consists of 'True' or 'False' questions. One mark is awarded for every correct answer while $\frac{1}{4}$ mark is deducted for every wrong answer. A student knew answers to some of the questions. Rest of the questions he attempted by guessing. He answered 120 questions and got 90 marks.

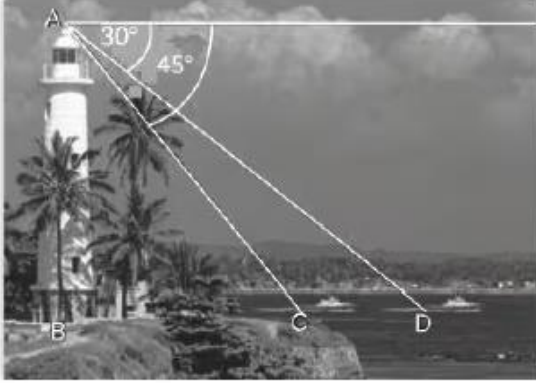
If answer to all questions he attempted by guessing were wrong, then how many questions did he answer correctly?

- (a) 92
- (b) 94
- (c) 96
- (d) 98

Answer: (c) 96

Q5. An observer on the top of a 30 m tall lighthouse (including the height of the observer) observes a ship at an angle of depression 30°

coming towards the base of the lighthouse along a straight line joining the ship and the base of the lighthouse. The angle of depression of the ship changes to 45° after 10 seconds.



The distance of the ship from the base of the lighthouse when the angle of depression is 30° is:

- (a) $30\sqrt{3}\text{m}$
- (b) $100\sqrt{3}\text{m}$
- (c) 30 m
- (d) $10/3 \sqrt{3}\text{m}$

Answer: (a) $30\sqrt{3}\text{m}$

Q6. A circle passes through point P on a circle. How many tangents and secants to the circle are possible that pass through P?

- (a) Tangent: 1; Secant: 1
- (b) Tangent: Infinite; Secant: 1
- (c) Tangent: 1; Secant: Infinite
- (d) Tangent: Infinite; Secant: Infinite

Answer: - (c) Tangent: 1; Secant: Infinite

CASE BASED QUESTIONS

Your friend Veer wants to participate in a 200 m race. He can currently run that distance in 51 seconds and with each day of practice, it takes him 2 seconds less. He wants to do it in 31 seconds.

Q7. Which of the following terms are in A.P. for the given situation?



- (a) 251, 53, 55.....
- (b) 51, 49, 47.....
- (c) -51, -53, -55.....
- (d) 51, 55, 59.....

Answer: - (b) 51, 49, 47.....

Q8. Which of the following terms is not in the A.P. of the above-given situation?

- (a) 41
- (b) 30
- (c) 37
- (d) 39

Answer: - (b) 30

Q9. What is the minimum number of days he needs to practice till his goal is achieved

- (a) 10
- (b) 12
- (c) 11
- (d) 9

Answer: - (c) 11

Q10. The value of x , for which $2x$, $x + 10$, $3x + 2$ are three consecutive terms of an

- (a) 6
- (b) -6
- (c) 18
- (d) -18

Answer: - (a) 6

Section D(Science)

A. Rishaan experienced muscular cramps during the training session for his up-coming football match. Mr. Sen, his coach advised him on a schedule of some aerobic exercises to overcome his problem of muscular cramps. Rishaan followed his coach's advice and did not face the problem of muscular cramps again during his match.

1. The proteins and lipids, essential for building the cell membrane, are manufactured by the process of

- (a) respiration
- (b) digestion
- (c) nutrition
- (d) membrane biogenesis

Answer: (d) membrane biogenesis

2. Anaerobic respiration in muscles often leads to cramps due to

- (a) Conversion of pyruvate to ethanol
- (b) Conversion of glucose to pyruvate
- (c) Conversion of pyruvate to glucose
- (d) Conversion of pyruvate to lactic acid

Answer: (d) Conversion of pyruvate to lactic acid

3. The respiratory pigment in human beings is:

- (a) carotene
- (b) chlorophyll
- (c) haemoglobin
- (d) mitochondria

Answer: (c) haemoglobin

4. In which part of the respiratory system, gaseous exchange takes place?

- (a) Alveoli
- (b) Pharynx
- (c) Larynx

(d) Trachea

Answer: (a) Alveoli

B. Galvanisation is a process of coating iron articles with a layer of zinc to prevent the iron from rusting. The iron is protected even if the zinc coating is scratched and iron is exposed.

5. Which of the following is true about how zinc prevents the rusting of iron?

P) A galvanised iron article does not undergo oxidation.

Q) The zinc coating prevents contact of iron with air.

R) Zinc undergoes corrosion more easily than iron.

(a) only P

(b) only Q

(c) only P and Q

(d) only Q and R

Answer: (d) only Q and R

6. Patient X was suffering from a pancreatic condition due to which the pancreas was not functioning adequately.

Which of the following is a doctor likely to suggest to such an individual?

(a) including a large amount of protein in the diet

(b) eating a diet with low-fat content

(c) eating only carbohydrates

(d) including only liquid foods

Answer: (b) eating a diet with low-fat content

7. When an object was kept at position X in front of a concave mirror, an enlarged and virtual image was formed. Which among the following identifies 'X' correctly?

(a) anywhere between the centre of curvature and principal focus

(b) anywhere between the pole and principal focus

(c) exactly at the centre of curvature

(d) exactly at the principal focus

Answer: (b) anywhere between the pole and principal focus

8. The face of the moon that is visible to us is called as the near side and the face of the moon which is invisible to us is called as far side. What colour would the sky appear to an astronaut standing on the "far side" of the Moon and why?

(a) blue, as the Moon's atmosphere scatters sunlight just like Earth

(b) white, as the Moon's surface reflect all the light that falls on it

(c) black, as there is no atmosphere on Moon to scatter sunlight

(d) black, as sunlight does not fall on the far side of the Moon

Answer: (c) black, as there is no atmosphere on Moon to scatter sunlight

9. Plants receive energy from the Sun which they utilise for several processes. The energy utilized for which of the following plant processes gets transferred to the next trophic level that consumes plants?

(a) only growth

(b) only respiration and transport of substances

(c) only transport of substances and reproduction

(d) all - growth, photosynthesis, respiration and transport of substances

Answer: (a) only growth

10. Three resistances of 2, 3 and 5 ohm are connected in parallel to a 10 V battery of negligible internal resistance. The potential difference across the 3 ohm resistance will be:

a) 2 V

b) 3 V

c) 5 V

d) 10 V

Answer: d) 10 V

Section E(Social Science)

1. Under the presidency of Jawahar Lal Nehru, the Lahore Congress Session of 1929 formalised the demand of

(a) abolition of Salt Tax

- (b) 'Puma Swaraj' or complete independence
 - (c) boycott of Simon Commission
 - (d) separate electorate for the 'dalits'
- Answer: b 'Puma Swaraj' or complete independence

- 2.The 'Simon Commission' was boycotted because
- (a) there was no British Member in the Commission.
 - (b) it demanded separate electorates for Hindus and Muslims.
 - (c) there was no Indian Member in the Commission.
 - (d) it favoured the Muslims over the Hindus.

Answer: c) there was no Indian Member in the Commission.

- 3.Who made the famous remark, 'When France sneezes, the rest of Europe catches a cold'?

- a) Metternich
- b) Mazzini
- c) Garibaldi
- d) Louis Philippe

Answer: Option (a) – Metternich

- 4.The earliest kind of print technology was developed in _____, Japan and Korea, which was a system of hand printing.

- a) India
- b) Britain
- c) China
- d) Germany

Answer: Option c) China

- 5.Literacy rate measures the proportion of the literate population in the _____ age group.

- a) 10 and above
- b) 21 and above
- c) 7 and above
- d) 18 and above

Answer: Option (c) 7 and above

- 6.Human Development Report published by UNDP compares countries based on _____.

- a) health status

- b) per capita income
- c) educational levels of the people
- d) all of the above

Answer: Option (d) all of the above

7. Under NREGA 2005, all those who are able to and are in need of work are guaranteed _____ of employment in a year by the government.

- a) 180 days
- b) 50 days
- c) 200 days
- d) 100 days

Answer: Option (d) 100 days

8. The Rio Convention endorsed the Global Forest Principles and adopted _____ for achieving sustainable development in the 21st century.

- a) Agenda 20
- b) Agenda 21
- c) Agenda 19
- d) Agenda 22

Answer: Option (b) Agenda 21

9. _____ was the famous Indian freedom fighter who made an important observation about resource conservation – “There is enough for everybody’s need and not for anybody’s greed”.

- a) Mahatma Gandhi
- b) Jawaharlal Nehru
- c) Subash Chandra Bose
- d) Dr B. R. Ambedkar

Answer: Option (a) Mahatma Gandhi

10. Border Roads Organisation (BRO) was established in _____ for the development of roads of strategic importance in the northern and northeastern border areas.

- a) 1965
- b) 1955
- c) 1960
- d) 1970

Answer: Option c) 1960