DELHI PUBLIC SCHOOL, BHILAI

DATE : 21.02.2023   ANNUAL EXAMINATION – 2022 – 23   Time : 3 Hrs.

CLASS : IX   SUBJECT – ENGLISH LANGUAGE AND LITERATURE   Max. Marks : 80

General Instructions:

➢ The question paper is divided into 3 sections:

     Section A : Reading (20 marks)

     Section B : Writing and Grammar (20 marks) and

     Section C: Literature (40 marks)

➢ All questions are compulsory.

➢ Any section can be attempted at a time.

➢ All the questions of that particular section must be attempted in the correct order

SECTION – A: READING (20 Marks)

Q.1 Read the passage given below carefully and answer the questions that follow: **(10 Marks)**

1. The difference in the ways of thinking and perception in the people of two different generations, which results in behavioural differences and sometimes, conflict among them is usually called generation gap.

2. Generation gap is generally seen in the family between parents and their children. It is not only because of the gap in age, but also because of the way parents react to a particular situation. Children being very young and immature do not understand the way of thinking of their parents. In many cases, the parents, even if they are matured, do not empathise with the changing values and thinking patterns of the modern world. This creates a communication gap between these two generations.

3. Generation gap between parents and children is mostly caused by parents themselves. They do not talk openly to their children and do not take part in solving their problems. This behaviour gives the impression about parents being authoritative persons, because they only dictate without understanding the problems faced by their children. As a result, the children become mentally isolated from their parents. Some parents become so busy with their work that they don't spend quality time with their family, which makes them completely unaware of how their children are growing, what kind of mentality is being developed in them, and so on. This ultimately creates a gap between them. They only realise it when it is too late.

4. Changes in technology have led to the generation gap in this modern world. Children tend to spend most of their time with their digital devices and are so busy with social media, that they do not discuss their problems with their parents. The internet provides solutions to most of the worldly problems. So, children instead of contacting their own parents, seek the help of internet in case of any problem, thus again reducing the communication, leading to a generation gap between them.

5. The generation gap has greatly increased these days because the time is changing fast and people find it difficult to cope up with this change. To overcome this problem, parents should show interest in all matters of their children and deal with them positively instead of just scolding them and leaving them alone to deal with their problems. Giving time to the children, having open communication, and allowing the child to feel free and not in any kind of pressure, will eventually reduce the generation gap to a tolerable extent.

Based on your understanding of the passage, answer the questions given below.

(i) **Different ways of .... leads to generation gap.**

     (a) thinking   (b) talking   (c) solving a problem   (d) creating problem

(ii) **Generation gap is usually created by**

     (a) lack of family time   (b) parents   (c) children   (d) Both (a) and (b)

(iii) **Parents have been described as .... in the above passage.**

     (a) timid   (b) authoritative   (c) reliable   (d) honest

(iv) **Some parents become so busy that they don't:**

     (a) have leisure   (b) feel free

     (c) spend quality time with their family   (d) meet other people

(v) **Where do children tend to spend most of their time?**

     (a) playing   (b) studying   (c) sleeping   (d) with digital device

(vi) **What has also led to the generation gap in the modern world?**

     (a) Society   (b) Age group   (c) Work load on parents   (d) Change in technology

(vii) **The correct way(s) to reduce generation gap is /are:**

     1. by being authoritative.

     2. spending quality time with children.

     3. by having an open discussion about life and the problem involved.

     4. by doing work all the time.

     (a) Only 2   (b) Both 2 and 3

     (c) Both 1 and 4   (d) Only 3

(viii) **According to the passage, the reason(s) for generation gap is/are:**
   (1) difference in ages
   (2) different thinking
   (3) lack of time
   (4) different ways of solving a problem
      (a) Both 1 and 3   (b) Both 2 and 3
      (c) Both 1 and 2   (d) All of these

(ix) **How can the parents overcome the generation gap problem?**
      (a) showing movies only   (b) showing interest in all matters of their children
      (c) always scolding them   (d) leaving them alone to solve their problems

(x) **Select an appropriate word from the extract to complete the analogy.**
   Immature: children:: _____ : parents
      (a) Empathize   (b) Mature   (c) React   (d) Create

(xi) **The word 'isolated' in para 3 means:**
      (a) impression   (b) authoritative   (c) separated   (d) realised

(xii) **Find a word from the passage (para 1) which is the antonym of 'harmony'-**
      (a) perception   (b) conflict   (c) difference   (d) behavioural

Q.2 Read the passage given below: **(10 Marks)**

1. Since the beginning of the last century, high school students have been taking standardized tests called college entrance exams. Colleges and universities have traditionally used the results of these tests as a basis for determining college admission. The original purpose of these tests was to increase fairness in the whole admission process. Many people believe that there are benefits of college entrance exams. Perhaps the greatest of the benefits is that they treat students from across the country uniformly. All students, going into the exam know, what the lowest qualifying score for admission into a specific college or university is. This testing criterion will not change. How much fairer could that be? Opponents, of course, argue that high school grades are not a uniform measure of performance because some high schools have more stringent academic standards than others. Individual schools and classes within the school have their own grading scales. A grade 'B' student in one high school might be performing at the level of a grade 'A' student in another.

2. A student interested in pursuing advanced education in a creative field such as art or music might have lower test scores but a superior imagination. However, the creativity necessary for success in certain fine arts fields is not tested in these exams. Other factors come into play as well. Students whose first language is other than English may attain lower scores because of the language difficulties, while their knowledge of the subject may be superior.

3. Arguments are being made to allow colleges and universities to allow alternative determiners to be used for admission decisions. Portfolios of work selected by the students to illustrate their individual strengths and interests are suggested. While the debate continues, students from all over the world are still being asked to take the required tests. Students do have choices as they can decide which colleges they wish apply to.

On the basis of your reading of the passage, answer the following questions.
Attempt any four questions: **(1x4=4)**
(i)   According to the passage, what exams the high school students have been taking?
(ii) What does the given passage focuses on?
(iii) What is the greatest benefit of the college entrance exams?
(iv) What is needed to be successful in fine arts fields?
(v)   What problem is faced by the students whose first language is other than English?
(vi) What is suggested by the author as an alternative determiner to be used for admission decisions?

Attempt all the questions given below: **(1x6=6)**
(vii) **Standardized tests are conducted in**
      (a) Japanese Language   (b) English Language   (c) Hindi Language   (d) Dutch Language

(viii) **Based on your understanding of the passage, choose the option that lists the problems associated with Standardised tests.**

1. Not uniform	2. No creativity	3 Demotivates
4. Raises expectations	5. Problem of language	6. Ignores ethics

      (a) 1,3,5   (b) 2,4,6   (c) 1,2,5   (d) 3,4,6

(ix) **Opponents argue that standardized tests do not test the**

    (a) vocabulary of a student.   (b) academic standard of a student.

    (c) creativity of a student.   (d) communication skills of a student

(x) **From the given passage, it can be said that the author**

    (a) supports standardised tests.

    (b) argues against standardised tests.

    (c) supports the need to change the concept of standardised tests.

    (d) argues against the other determinant to be considered for admissions.

(xi) **According to the author, standardized tests completely ignores a student's -**

    (a) first language   (b) imagination   (c) schooling   (d) All of these

(xii) **Which of the following is not a Standardized test?**

    (a) JEE   (b) NEET   (c) Class test   (d) SAT

SECTION – B : WRITING AND GRAMMAR (20 Marks)

Q.3 **Attempt <u>any one</u> of the following:**   **5 marks**

Write a descriptive paragraph on Dr. Radhakrishnan, former President of India and a great Indian Scholar and Philosopher, in about 100-120 words, using the clues given below:

Birth : Born in Tirutani near Madras, 1888- **Family** : Belonged to a poor Brahmin family **Education** : Graduated from Madras Christian College-**Teaching** : Taught Philosophy at Madras, Career Mysore and Calcutta Universities; - Professor of Eastern Religions at Oxford in 1936.- **Later life** : Indian Ambassador to the U.S.S.R in 1949; Vice-President of India in 1952; President of India from 1962 to 1967.- **Works** : Written many books: The Hindu Way of Life, The Indian Philosophy, Eastern Religion and Thought are among his famous books - **Death** : 1975

OR

Write a descriptive paragraph on the personality shown in the picture given below in about 100-120 words.

Q.4 **Attempt <u>any one</u> of the following:**   **(5 Marks)**

You are Sushant, a student of Class IX. Your elder brother /sister has shifted to some other city due to his new job. You miss him /her a lot. Describe your feelings in about 100-120 words through a diary entry.

OR

Write a story in about 100-120 words with the help of the following outline:

Returning home- suddenly a car stopped- looked for help- saw a woman- her dog pounced – I ran for life- woman suddenly disappeared – car started on its own- very frightened- fled from that place.

Q.5 **Complete the following passage <u>(any four)</u> by choosing the most appropriate options given below:**

                (1x4=4)

When I (i) .... home yesterday, I (ii)............ that an old friend of mine (iii) .... for me. I (iv) ...... him for the last ten years. He (v) .... a very good friend of mine. He (vi)....... thick spectacles.

(i)	(a) returns	(b) returned	(c) were returning	(d) am returning
(ii)	(a) saw	(b) seen	(c) was seen	(d) had saw
(iii)	(a) were waiting	(b) have waited	(c) was waiting	(d) waits
(iv)	(a) not see	(b) is not see	(c) has not seen	(d) had not seen
(v)	(a) had been	(b) is been	(c) have been	(d) are been
(vi)	(a) were wearing	(b) was wearing	(c) wearing	(d) have wear

Q.6 **The following paragraph has not been edited. There is an error in each line. Write the error along with its correction in the space provided.**   **(1x3=3)**

		Incorrect	Correct
A first Indian woman physician Anandibai Joshi	eg.	A	The
graduated at 1886. About 125 years later,	(a)	....	....
Indian women had start to outnumber men in	(b)	....	....
admissions about medical colleges.	(c)	....	....

Q.7 **Read the following conversation and complete the given passage:**   **(1x3=3)**

Animesh : Where can we meet tomorrow?

Atul : I may not be able to meet you tomorrow.

Anmesh : Are you going to be busy?

Animesh asked Atul (a) .... Atul replied, (b) ....

Animesh then asked him (c) ....busy.

SECTION – C : LITERATURE (40 Marks)

Q.8 **Read the extracts given below and answer the questions that follow:** (1x5=5)

A. I inherited honesty and self-discipline from my father; from my mother, I inherited faith in goodness and deep kindness and so did my three brothers and sister. I had three close friends in my childhood - Ramanadha Sastry, Aravindan and Sivaprakasan. All these boys were from orthodox Hindu Brahmin families.

(a) Who does 'I' refer to?
(b) What did the writer inherit from his father?
(c) What did he inherit from his mother?
(d) Find a word in the passage which means 'conservative'.
(e) Name the lesson.

OR

She had not yet celebrated her tenth birthday when she was packed off to train in the United States. That trip to Florida with her father Yuri launched her on the path to success and stardom. But it also required a heart-wrenching two-year separation from her mother Yelena.

(a) Who does 'She' refer to in this extract?
(b) What was her purpose of going to the United States?
(c) What was the significance of the trip to Florida with her father?
(d) What was the 'heart-wrenching' thing about the trip?
(e) Why could her mother not accompany her?

B. Remember they have eyes like ours that wake (1x5=5)
   Or sleep, and strength that can be won
   By love. In every land is the common life
   That all can recognise and understand.

(a) Who are 'they' in the given lines?
(b) According to the poet, how can we win other people?
(c) What can we recognize and understand?
(d) What is the essence of these given lines?
(e) Name the poem and the poet.

OR

A slumber did my spirit seal-
I had no human fears.
She scented a thing that could not feel
The touch of earthy years.
No notion has she now, no force-
She neither hears nor sees,
Rolled round in earth's diurnal course
With rocks and stones and trees.

(a) What does 'slumber' refer to in the first line?
(b) Who does 'I' refer to in this stanza?
(c) Who does 'she' refer to in this poem?
(d) Why can't she hear or see?
(e) What does '**earth's diurnal course**' refer to?

Q.9 **Answer <u>any four</u> of the following questions in 40 -50 words each:** (4x3=12)
(a) What is written on the signboard outside the Pashupatinath temple? What does the proclamation signify?
(b) What kind of a woman did the doctor want to marry?
(c) What moral does the poem, 'The Legend of the Northland' teach us?
(d) What gives a bliss to the poet when it rains?
(e) What is the meaning of 'bleeding bark'? What makes it bleed?

Q.10 **Answer <u>any two</u> of the following questions in 40-50 words:** (2x3=6)
(a) Why does Sue rush down to meet Mr.Behrman?
(b) Why did the town councilors decide to pull down the statue of the Happy Prince?
(c) In what way is Iswaran an asset to Mahendra?

Q.11 **Answer <u>any one</u> of the following questions in 100-120 words.** (6)
Albert Einstein was an unusual child. He was different from others in many ways. Do you think that those who think differently succeed in life like Einstein? Justify.

OR

Presence of mind and patience are the two values that help a person at the time of adversity and danger. How did these two attributes of Gerrard help him to get rid of the intruder? Elaborate.

12. **Answer <u>any one</u> of the following questions in about 100-120 words.** (6)
Hasty decisions are often wrong decisions. Discuss with reference to the story "In the Kingdom of Fools".

OR

Sergei's sympathy was as important as Olga's noble deeds that reformed Lushkoff. Discuss with reference to the story 'The Beggar'.

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सामान्य निर्देश :

(i) इस प्रश्नपत्र में दो खण्ड हैं – खण्ड 'अ' और खण्ड 'ब'।

(ii) निर्देशों को बहुत सावधानी से पढ़िए और उनका पालन कीजिए।

(iii) प्रश्नों की कुल संख्या **19** है। दोनों खण्डों के प्रश्नों के उत्तर देना अनिवार्य है।

(vi) यथासंभव दोनों खण्डों के प्रश्नों के उत्तर क्रमशः लिखिए।

खण्ड – 'अ' (वस्तुपरक प्रश्न)

प्रश्न 1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए –
(1x5=5)

मनुष्य का अपने कर्म पर अधिकार है। वह कर्म के अनुसार फल प्राप्त करता है। अच्छे कर्म करने से फल भी अच्छा मिलता है। बुरे कर्म का परिणाम बुरा होता है। कर्म करना बीज बोने के समान है। जैसा बीज होता है वैसा ही पेड़ और वैसे ही फल होते हैं। एक कहावत है –'बोया पेड़ बबूल का तो आम कहाँ से होय?' इसलिए बड़े-से-बड़े अपराधी अंततः बुरी मौत मरते हैं। जो बेईमानी से धन कमाते हैं, उनके बच्चे बेईमान और दुश्चरित्र बनते जाते हैं। उनकी बुराई का परिणाम उन्हें मिल ही जाता है। हमारा व्यक्तित्व हमारे कर्मों का ही प्रतिबिंब है। अगर हम आजीवन कुछ पाने के लिए भागदौड़ करते हैं तो इससे हमारा जीवन ही अशांत होता है। एक छात्र परिश्रम की राह पर चलता है तो उसे सफलता तथा संतुष्टि का फल प्राप्त होता है। दूसरा छात्र नकल और प्रवंचना का जीवन जीता है। उसे जीवन भर चोरों, ठगों और धोखेबाजों के बीच रहना पड़ता है। दुष्ट लोगों के बीच जीना भी तो एक दंड है, अशांति है। अतः मनुष्य को पुण्य कर्म करने चाहिए। इसी से मन में सच्चा सुख जागता है, सच्ची शांति मिलती है।

1. मनुष्य का किस पर अधिकार है ?
  (क) कर्म पर   (ख) फल पर   (ग) परिणाम पर   (घ) इनमें से किसी पर नहीं

2. कर्म को किसके समान माना गया है ?
  (क) फल के समान   (ख) फूल के समान   (ग) पेड़ के समान   (घ) बीज बोने के समान

3. बेईमानी से धन कमाने वालों के साथ क्या होता है ?
  (क) बुरी मौत मरते हैं   (ख) बच्चे बेईमान और दुश्चरित्र बनते हैं
  (ग) बुरे काम का बुरा परिणाम होता है   (घ) इनमें से कोई नहीं

4. परिश्रम की राह पर चलने वाला छात्र क्या प्राप्त करता है ?
  (क) सफलता व संतुष्टि   (ख) दंड   (ग) खुशी का जीवन बिताता है   (घ) अशांत जीवन बिताता है

निम्नलिखित कथन (A) तथा कारण (R) को ध्यानपूर्वक पढ़िए। उसके बाद दिए गए विकल्पों में से कोई एक सही विकल्प चुनकर लिखिए -

5.   कथन (A) : बुरे कर्म का परिणाम बुरा होता है।
  कारण (R) : 'बोया पेड़ बबूल का तो आम कहाँ से होय ?'

  (क) कथन (A) तथा कारण (R) दोनों गलत है।
  (ख) कथन (A) गलत है लेकिन कारण (R) सही है।
  (ग) कथन (A) सही है लेकिन कारण (R) उसकी गलत व्याख्या करता है।
  (घ) कथन (A) तथा कारण (R) दोनों सही हैं तथा कारण (R) कथन (A) की सही व्याख्या करता है।

प्रश्न 2. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर इसके आधार पर सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए -
(1x5=5)

हँसी भीतरी आनंद का बाहरी चिह्न है। जीवन की सबसे प्यारी और उत्तम-से-उत्तम वस्तु एक बार हँस लेना, तथा शरीर को अच्छा रखने की अच्छी-से-अच्छी दवा एक बार खिलखिला उठना है। पुराने लोग कह गए हैं कि हँसो और पेट फुलाओ। हँसी कितने ही कला-कौशलों से भली है। जितना ही अधिक आनंद से हँसोगे, उतनी ही आयु बढ़ेगी। एक यूनानी विद्वान कहता है कि सदा अपने कर्मों पर खीझने वाला हेरीक्लेस बहुत कम जिया, पर प्रसन्न मन डेमाक्रीटस 109 वर्ष तक जिया। हँसी-खुशी का नाम जीवन है। जो रोते हैं, उनका जीवन व्यर्थ है। कवि कहता है– "जिंदगी जिंदादिली का नाम है, मुर्दा दिल क्या खाक जिया करते हैं।' मनुष्य के शरीर के वर्णन पर एक विलायती विद्वान ने पुस्तक लिखी है। उसमें वह कहता है कि उत्तम सुअवसर की हँसी उदास-से-उदास मनुष्य के चित्त को प्रफुल्लित कर देती है। आनंद एक ऐसा प्रबल इंजन है कि उससे शोक और दुख की दीवारों को ढहा सकते है। प्राण-रक्षा के लिए सदा सब देशों में उत्तम-से-उत्तम उपाय मनुष्य के चित्त को प्रसन्न रखना है। सुयोग्य वैद्य अपने रोगी के कानों में आनंदरूपी मंत्र सुनाता है। एक अंग्रेज डॉक्टर कहता है कि किसी नगर में दवाई लदे हुए बीस गधे ले जाने से एक हँसोड़ आदमी को ले जाना अधिक लाभकारी है।

1. हँसी क्या है –
  (क) एक पागलपन है   (ख) भीतरी आनंद का बाहरी चिह्न है
  (ग) दुख की अभिव्यक्ति है   (घ) दूसरों का उपहास है

2. शरीर को स्वस्थ रखने की सबसे अच्छी दवा क्या है –
   (क) व्यायाम   (ख) अच्छा भोजन   (ग) खिलखिला कर हँसना   (घ) ताज़ी हवा का सेवन

3. पुराने समय में लोगों ने हँसी को महत्त्व क्यों दिया ?
   (क) हँसी से धन-दौलत प्राप्त होती है   (ख) हँसी से यश-प्रतिष्ठा की प्राप्ति होती है
   (ग) हँसी से आयु बढ़ती है   (घ) हँसी से सभी कार्य सिद्ध हो जाते हैं

4. हँसी को एक शक्तिशाली इंजन के समान क्यों कहा गया है ?
   (क) इससे कठिन-से-कठिन कार्य किया जा सकता है
   (ख) इससे शोक और दुख की दीवारों का ढहा सकते हैं
   (ग) इससे हम आत्मरक्षा कर सकते हैं
   (घ) इससे शत्रुओं पर विजय प्राप्त की जा सकती है

5. 109 वर्ष तक कौन जीवित रहा –
   (क) हेरीक्लेस   (ख) अरस्तू   (ग) डेमाक्रीट्स   (घ) जॉनसन

प्रश्न 3. निर्देशानुसार 'शब्द और पद' पर आधारित तीन बहुविकल्पीय प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर दीजिए –(1x2=2)
   (1) शब्द किन के मेल से बनते हैं ?
       (क) पदों के   (ख) वाक्य के   (ग) स्वर तथा व्यंजन ध्वनि के   (घ) इनमे से कोई नहीं

   (2) शब्द जब वाक्य में प्रयुक्त होते हैं तो क्या कहलाते हैं ?
       (क) स्वर ध्वनि   (ख) वाक्य   (ग) पद   (घ) वर्ण

   (3) शब्द भाषा की स्वतंत्र इकाई क्यों है ?
       (क) वाक्य के नियमों से मुक्त होने के कारण
       (ख) वाक्य के लिए नियम बनाने के कारण
       (ग) वाक्य पर आश्रित होने के कारण
       (घ) वाक्य के नियम शब्द को नियंत्रित करते हैं।

प्रश्न 4 निर्देशानुसार पाँच बहुविकल्पीय प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए –   (1x4=4)
   (1) निम्नलिखित में से किस शब्द में अनुस्वार का सही प्रयोग किया गया है ?
       (क) सतुंलन   (ख) श्रृंगार   (ग) तबूं   (घ) इनमें से कोई नहीं

   (2) निम्नलिखित में से किस शब्द में अनुस्वार का सही प्रयोग नहीं किया गया है ?
       (क) ठंडी   (ख) हिमपुंज   (ग) घंटे   (घ) बिदुं

   (3) निम्नलिखित में से किस शब्द में अनुनासिक का सही प्रयोग किया गया है ?
       (क) धुँआ   (ख) सँभावना   (ग) आँकड़ा   (घ) बँदर

   (4) अनुनासिक के सही प्रयोग वाला शब्द छाँटिए –
       (क) सकूँगा   (ख) शाँत   (ग) कुआँ   (घ) इनमें से कोई नहीं

   (5) किसके उच्चारण में वायु मुख के साथ-साथ नाक से भी बाहर निकलती है ?
       (क) अनुस्वार   (ख) अनुनासिक   (ग) (क) तथा (ख) दोनों   (घ) इनमें से कोई नहीं

प्रश्न 5. निम्नलिखित पाँच बहुविकल्पीय प्रश्नों मे से किन्हीं चार प्रश्नों के उत्तर दीजिए –   (1x4=4)
   (1) 'अन्' उपसर्ग से बना शब्द कौन-सा है ?
       (क) अनेक   (ख) अनजान   (ग) अनिच्छा   (घ) अनपढ़

   (2) 'निस्संकोच' में प्रयुक्त उपसर्ग तथा मूल शब्द है –
       (क) निस् + संकोच   (ख) निस + संकोच   (ग) निसं + कोच   (घ) इनमें से कोई नहीं

   (3) 'प्रोत्साहित' शब्द में प्रयुक्त प्रत्यय है –
       (क) ईत   (ख) इत   (ग) हित   (घ) त

   (4) 'ई' प्रत्यय से बना शब्द निम्नलिखित में से कौन-सा नहीं है ?
       (क) निजी   (ख) भौतिकी   (ग) पढ़ाई   (घ) दुखी

   (5) निम्नलिखित किस शब्द में उपसर्ग एवं प्रत्यय दोनों का प्रयोग हुआ है ?
       (क) लोभी   (ख) मित्रता   (ग) स्वतंत्रता   (घ) बचपन

प्रश्न 6. निर्देशानुसार 'संधि' पर आधारित छह बहुविकल्पीय प्रश्नों मे से किन्ही तीन प्रश्नों के उत्तर दीजिए –   (1x3=3)
   (1) स्वर संधि के कितने भेद होते हैं ?
       (क) दो   (ख) तीन   (ग) चार   (घ) पाँच

   (2) 'सूर्यास्त' का सही संधि विच्छेद क्या है ?
       (क) सूर्या + स्त   (ख) सू + र्यास्त   (ग) सूर्य + अस्त   (घ) इनमें से कोई नहीं

   (3) 'भावुक' का सही संधि विच्छेद है –
       (क) भौ + उक   (ख) भा + उक   (ग) भाव + उक   (घ) भा + आउक

   (5) 'स्वागत' स्वर संधि का कौन-सा भेद है ?
       (क) दीर्घ संधि   (ख) वृद्धि संधि   (ग) यण संधि   (घ) अयादि संधि

प्रश्न 7. निम्नलिखित चार प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर दीजिए – (1x3=3)

(1) 'उफ तुम कब जाओगे अतिथि' में उचित विराम चिह्न है –

(क) उफ तुम कब जाओगे अतिथि।   (ख) उफ! तुम कब जाओगे, अतिथि ?

(ग) उफ तुम कब; जाओगे अतिथि।   (घ) उफ तुम, कब, जाओगे ? अतिथि!

(2) दिए गए विराम चिह्न (;) का क्या नाम है ?

(क) हंस पद   (ख) पूर्ण विराम   (ग) अर्ध विराम   (घ) अल्प विराम

(3) 'वह मुझे देखकर हक्का बक्का रह गया' सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए –

(क) वह, मुझे देखकर हक्का बक्का रह गया!   (ख) वह मुझे देखकर! हक्का बक्का रह गया ?

(ग) वह मुझे देखकर; हक्का बक्का रह गया।   (घ) वह मुझे देखकर हक्का-बक्का रह गया।

(4) निम्नलिखित में से कौन-सा विराम चिह्न 'उद्धरण' चिह्न के लिए प्रयुक्त होता है ?

(क) !   (ख) " "   (ग) –   (घ) ।

प्रश्न 8. निर्देशानुसार 'अर्थ के आधार पर वाक्य भेद' पर आधारित तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर दीजिए – (1x2=2)

(1) अर्थ की दृष्टि से वाक्य के कितने भेद हैं ?

(क) तीन   (ख) पाँच   (ग) आठ   (घ) सात

(2) 'ल्हाटू एक नायलॉन की रस्सी लाया था' वाक्य अर्थ के आधार पर किस प्रकार का वाक्य है ?

(क) विस्मयवाचक   (ख) संदेहवाचक   (ग) इच्छावाचक   (घ) विधानवाचक

(3) 'जवान बेटे के मरने पर तेरह दिन का सूतक होता है' वाक्य का संदेहवाचक वाक्य है –

(क) अरे! जवान बेटे के मरने पर तेरह दिन का सूतक होता है।

(ख) शायद जवान बेटे के मरने पर तेरह दिन का सूतक हो।

(ग) क्या जवान बेटे के मरने पर तेरह दिन का सूतक होता है ?

(घ) तेरह दिन का सूतक तो जवान बेटे के मरने पर होता है।

प्रश्न 9. निम्नलिखित पद्यांश को पढ़कर पूछे गए प्रश्नों के सर्वाधिक उपयुक्त विकल्पों का चयन लिखिए – (1x5=5)

अग्नि पथ! अग्नि पथ! अग्नि पथ!

वृक्ष हों भले खड़े,

हों घने, हों बड़े,

एक पत्र-छाँह भी माँग मत, माँग मत, माँग म्त!

अग्नि पथ! अग्नि पथ! अग्नि पथ!

(1) 'वृक्ष' किसका बोध कराते हैं ?
(क) सुखों का   (ख) परिश्रम का   (ग) दुखों का   (घ) इनमें से कोई नहीं

(2) 'अग्नि पथ से क्या तात्पर्य है ?
(क) आग का रास्ता   (ख) चुनौतियों से परिपूर्ण संघर्ष का रास्ता

(ग) अग्नि-युक्त   (घ) सुखों से भरा

(3) किसकी माँग न करने की चर्चा की गई है ?
(क) बेलों की छाया   (ख) बड़े-बूढ़ों की छाया

(ग) पत्तों की घनी छाया सुख के रूप में   (घ) सुविधा रूपी छाया

(4) कविता में कवि ने शब्दों की पुनरावृत्ति क्यों की है ?
(क) सुंदरता के लिए   (ख) अपनी बात को प्रभावशाली बनाने के लिए
(ग) झगडा करने के लिए   (घ) कवि को नए-नए शब्द नहीं मिले

(5) 'पत्र' शब्द का अर्थ है –
(क) पेड़   (ख) फल   (ग) पत्ता   (घ) फूल

प्रश्न 10. निम्नलिखित प्रश्नों के उत्तर देने के लिए उचित विकल्प का चयन कीजिए – (1x2=2)

(1) रहीम कवि किस धागे को कभी न तोड़ने के लिए कहते हैं ?
(क) रेशमी   (ख) सूती   (ग) टूटे हुए   (घ) प्रेमरूपी

(2) 'खुशबू रचते हैं हाथ' कविता में पीपल के पत्तों से किन हाथों की तुलना की गई है ?
(क) बच्चों के हाथों की   (ख) बड़े बूढ़ों के हाथों की
(ग) नवयुवतियों के कोमल हाथों की   (घ) बूढ़ी स्त्रियों के कोमल हाथों की

प्रश्न 11. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर के लिए सही विकल्प का चयन कीजिए –   (1x5=5)

आकाश के तारों में शुक्र का कोई जोड़ नहीं। शुक्र चंद्र का साथी माना गया है। उसकी आभा-प्रभा का वर्णन करने में संसार के कवि थके नहीं। फिर भी नक्षत्र मंडल में कलगी-रूप इस तेजस्वी तारे को दुनिया या तो ऐन शाम के समय, बड़े सवेरे घंटे-दो-घंटे से अधिक देख नहीं पाती। इसी तरह भाई महादेव जी आधुनिक भारत की स्वतंत्रता के उषाकाल में अपनी वैसी ही आभा से हमारे आकाश को जगमगाकर, देश और दुनिया को मुग्ध करके, शुक्रतारे की तरह ही अचानक अस्त हो गए। सेवाधर्म का पालन करने के लिए इस धरती पर जन्मे स्वर्गीय महादेव देसाई गांधीजी के मंत्री थे। मित्रों के बीच विनोद में अपने को गांधीजी का 'हम्माल' कहने में और कभी-कभी अपना परिचय उनके 'पीर-बावर्ची-भिश्ती-खर' के रूप में देने में वे गौरव का अनुभव किया करते थे।

(1) आकाश के तारों में सबसे अनोखा तारा किसे कहा गया है ?
   (क) मंगल   (ख) शुक्र   (ग) चंद्रमा   (घ) सूर्य

(2) शुक्रतारे को किसका साथी माना गया है ?
   (क) चंद्रमा का   (ख) प्रातःकाल का   (ग) सांयकाल का   (घ) सूर्य का

(3) शुक्रतारे की तरह अचानक कौन अस्त हो गया ?
   (क) महादेव देसाई   (ख) महात्मा गांधी   (ग) जवाहरलाल नेहरू   (घ) स्वामी आनंद

(4) महादेव देसाई का महात्मा गांधी के साथ क्या संबंध था ?
   (क) वे गांधी जी के भाई थे   (ख) वे गांधी जी के मंत्री थे
   (ग) वे गांधी जी के विरोधी थे   (घ) वे गांधी जी के पिता थे

(5) 'पीर-बावर्ची-भिश्ती-खर' वाक्य में 'भिश्ती' से क्या अभिप्राय है ?
   (क) मार्गदर्शक   (ख) खाना बनाने वाला
   (ग) खच्चर   (घ) मशक से पानी ढोने वाला

प्रश्न 12. निम्नलिखित प्रश्नों के उत्तर देने के लिए उचित विकल्प का चयन कीजिए –   (2x1=2)

(1) लेखक किसके रोने का कारण नहीं जान सका ?
   (क) बच्चे के   (ख) बूढ़ी स्त्री के   (ग) दुकान वाले के   (घ) निम्न वर्ग के

(2) समाज में मनुष्यों का अधिकार और दर्ज़ा कैसे सुनिश्चित होता है ?
   (क) व्यवहार से   (ख) पोशाक से   (ग) खान-पान से   (घ) रहन-सहन से

खण्ड – 'ब' (वर्णनात्मक प्रश्न)

प्रश्न 13. निम्नलिखित प्रश्नों में से किन्हीं दो के उत्तर लगभग 60 शब्दों में दीजिए –   (3x2=6)

(1) 'रामन प्रभाव' की खोज से वैज्ञानिक क्षेत्र किस प्रकार लाभान्वित हुआ ?

(2) अतिथि को जाने के लिए लेखक ने किस-किस तरह के संकेत किए ?

(3) 'एवरेस्ट : मेरी शिखर यात्रा' पाठ की लेखिका पर मृत्यु का संकट कैसे आया ? उसकी रक्षा किसने और कैसे की ?

प्रश्न 14. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 60 शब्दों में दीजिए -   (3x2=6)

(1) कवि रैदास ने स्वयं को प्रभु के निकट किन-किन रूपों में पाया है ?

(2) 'गीत-अगीत' कविता का मूल भाव क्या है ?

(3) 'नए इलाके में' कविता का प्रतिपाद्य लिखिए।

प्रश्न 15. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 60 शब्दों में दीजिए –   (3x2=6)

(1) गिल्लू लेखिका को किस परिस्थिति में मिला था ? लेखिका ने उसका उपचार किस संवेदनशीलता के साथ किया ?

(2) लेखक को अपनी लाइब्रेरी स्थापित करने की प्रेरणा किस प्रकार मिली ? स्पष्ट कीजिए।

(3) कल्लू कुम्हार का नाम उनाकोटी से किस प्रकार जुड़ गया ?

प्रश्न 16. निम्नलिखित में से <u>किसी एक</u> विषय पर संकेत–बिन्दुओं के आधार पर <u>लगभग 100 शब्दों</u> में अनुच्छेद लिखिए– (5x1=5)

   (1) स्वच्छ भारत : स्वच्छता की ओर बढ़ते कदम

      (क) स्वच्छ भारत अभियान का आरंभ एवं लक्ष्य

      (ख) वर्तमान समय में स्वच्छता को लेकर भारत की स्थिति

      (ग) उपसंहार

   (2) विज्ञापनों से भरी दुनिया

      (क) विज्ञापन का युग

      (ख) विज्ञापन का प्रभाव

      (ग) विज्ञापन के लाभ व हानि

   (3) साक्षरता अभियान

      (क) साक्षरता का अर्थ

      (ख) साक्षरता : एक जरूरत

      (ग) साक्षरता का महत्त्व

प्रश्न 17. पशु-पक्षियों का मानव-जीवन में महत्त्व बताकर उनके प्रति क्रूर व्यवहार न करने की हिदायत देते हुए अपने छोटे भाई को एक पत्र लिखिए। (शब्द सीमा लगभग 100 शब्दों में) (5x1=5)

<center>अथवा</center>

छात्रावास में रह रही छोटी बहन के द्वारा की गई मोबाइल फोन की माँग पर अभी इसका उपयोग न करने की सलाह देते हुए पत्र लिखिए। (शब्द सीमा लगभग 100 शब्दों में)

प्रश्न 18. चित्र में दिखाए गए दृश्य/घटना का कल्पनाशक्ति के आधार पर से लगभग 100 शब्दों में वर्णन कीजिए। (5)

प्रश्न 19. आपने अपना गृहकार्य नहीं किया है। इसका कारण बताते हुए शिक्षक के साथ होने वाली बातचीत को लगभग 100 शब्दों में संवाद के रूप में लिखिए। (5x1=5)

<center>अथवा</center>

स्कूल जाते हुए बच्चों को देखकर काम पर जाते हुए कुछ श्रमिक बच्चों (बाल-श्रमिक) के बीच हुए संवाद को लगभग 100 शब्दों में लिखिए।

<center>ঙ্গ৪ঙ্গ৪ ৪৪৪৪</center>

DELHI PUBLIC SCHOOL, BHILAI

Date : 25.02.2023   ANNUAL EXAMINATION - 2022 - 2023   Time : 3 Hours
Class : IX   SUBJECT : MATHEMATICS   Max. Marks : 80

General Instructions –
- 01. This Question Paper has 5 sections A – E.
- 02. Section A has 20 MCQs carrying 1 mark each.
- 03. Section B has 5 questions carrying 2 marks each.
- 04. Section C has 6 questions carrying 3 marks each.
- 05. Section D has 4 questions carrying 5 marks each.
- 06. Section E has three case based integrated units of assessment (4 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
- 07. All questions are compulsory. However, an internal choice in 2 questions of 5 marks, 2 questions of 3 marks and 2 questions of 2 marks has been provided. An internal choice has been provided in the 2 marks questions of Section E.
- 08. Draw neat figures wherever required. Take $\pi = \frac{22}{7}$ wherever required is not stated.

SECTION – A

Directions (Q.Nos. 1 – 20) : Section A consists of 20 questions of 1 mark each.
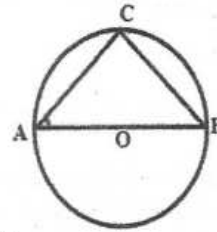
01. Which of the following is an irrational number ?
    (a) $\sqrt{\frac{9}{4}}$ (b) $\frac{\sqrt{12}}{\sqrt{3}}$ (c) $\sqrt{7}$ (d) $\sqrt{81}$

02. In $\Delta ABC, BC = AB$ and $\angle B = 80°$, then $\angle A$ is equal to :
    (a) 50°   (b) 80°   (c) 40°   (d) 100°

03. $\sqrt{2}$ is a polynomial of degree:
    (a) 2   (b) 0   (c) 1   (d) 1/2

04. $2\sqrt{3} + \sqrt{3}$ is equal to :
    (a) $2\sqrt{6}$ (b) 6   (c) $3\sqrt{3}$ (d) $4\sqrt{6}$

05. The decimal representation of a rational number can not be :
    (a) terminating   (b) non-terminating, repeating
    (c) non-terminating, non-repeating   (d) none of these

06. $\sqrt{10} \times \sqrt{15}$ is equal to :
    (a) $5\sqrt{6}$ (b) $6\sqrt{5}$ (c) $10\sqrt{5}$ (d) 25

07. The perpendicular distance of the point $P(3,4)$ from $Y - axis$ is :
    (a) 4   (b) 5   (c) 7   (d) 3

08. The value of $\sqrt[3]{\frac{54}{250}}$ is equal to
    (a) $\frac{9}{25}$ (b) $\frac{3}{5}$ (c) $\frac{27}{125}$ (d) $\frac{\sqrt[3]{2}}{5}$

09. Which of the following is not a polynomial ?
    (a) $\frac{1}{5x^{-2}} + 5x + 7$ (b) 8   (c) $a^3 - 2\sqrt{3}\, a^2 + 4$ (d) $x^2 + 2\sqrt{x}$

10. Zero of the polynomial $P(x) = 2x + 5$ is :
    (a) $\frac{-5}{2}$ (b) $\frac{-2}{5}$ (c) $\frac{5}{2}$ (d) $\frac{2}{5}$

11. Abscissa of a point is positive in :
    (a) I and II quadrant   (b) I and IV quadrant   (c) I quadrant only   (d) II quadrant only

12. The length of each side of an equilateral triangle having an area $9\sqrt{3}$ cm^2 is :
    (a) 8 cm   (b) 36 cm   (c) 4 cm   (d) 6 cm

13. Which of the following is not true for a parallelogram ?
    (a) Opposite sides are equal   (b) Opposite angles are equal
    (c) Opposite angles are bisected by the diagonals   (d) Diagonals bisect each other

14. The equation of $X - axis$ is of the form :
    (a) $y = 0$ (b) $x = 0$ (c) $x + y = 0$ (d) $x = y$

15. A quadrilateral whose diagonals are equal and bisect each other at right angles is :
    (a) a rhombus   (b) a rectangle   (c) a square   (d) a kite

16. In the given figure, O is the centre of the circle and AC=BC.
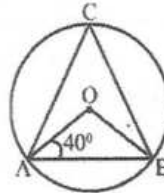   The measure of $\angle CAB$ is :
    (a) 60°   (b) 45°   (c) 30°   (d) *none of these*

17. The class mark of the class interval $130 - 150$ is :
    (a) 130   (b) 135   (c) 140   (d) 145

18. In the given figure, O is the centre of the circle
    and $\angle OAB = 40°$. Then the measure of $\angle ACB$ us :

    (a) 50°   (b) $6 = 80°$ (c) 100°   (d) none of these

Directions (Question nos. 19 – 20) : In the following questions, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option.
    (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A).
    (b) Both Assertion (A) and Reason (R) are true but Reason (R) is not the correct explanation of Assertion (A).
    (c) Assertion (A) is true but Reason (R) is false.
    (d) Assertion (A) is false but Reason (R)is true.

19. (A) : All the three angles of triangle cannot be less than 60° each.
    (R) : Sum of the three angles of a triangle is greater than 180° .

20. (A) : $5x - 3y + 8 = 0$ is written in the standard form of linear equation $ax + by + c = 0$.
    (R) : $a = 5$, $b = -3$, $c = 8$

SECTION – B

Directions : Question Nos. 21 to 25 carry 2 marks each.

21. Simplify : $\frac{1}{\sqrt{5}+\sqrt{3}} + \frac{1}{2} (\sqrt{5} - \sqrt{3})$

22. Write any two Euclid's axioms.

23. The radius of a spherical balloon increases from 7 cm to 14 cm as air is being pumped into it. Find the ratio of the surface area of the balloons.
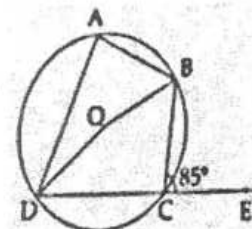
    OR

    A right triangle with sides 6 cm, 8 cm and 10 cm is revolved about the side 8 cm. Find the curved surface area of the solid so formed (Leave the answer in π).

24. If a point C lies between two points A and B such that AC=BC, then prove that AC= ½ AB.

25. Prove that a cyclic parallelogram is a rectangle.

    OR

    In the given figure, O is the centre of the circle and $\angle BCE = 85°$.
    Find the measure of $\angle BOD$.

SECTION – C

Directions : Question Nos. 26 to 31 carry 3 marks each.

26. For what value of m is $x^3 - 2mx^2 + 16$ divisible by $(x + 2)$?

27. Show that the line segments joining the mid-points of the opposite sides of a quadrilateral bisect each other.

28. If $\frac{x}{y} + \frac{y}{x} = -1$, find the value of $x^3 - y^3$.

    OR

    Factorise : $8a^3 - b^3 - 12a^2b + 6ab^2$

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

30. If the non-parallel sides of a trapezium are equal, then prove that it is cyclic.

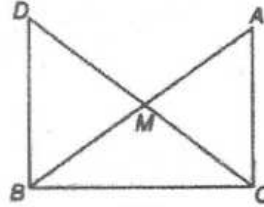<div align="center">OR</div>

A chord of a circle is equal to the radius of the circle. Find the angle subtended by the chord at a point on the minor arc and also at a point on the major arc.

31. Give the geometrical representation of $2x + 9 = 0$ as an equation in two variables.

<div align="center">SECTION – D</div>

<div align="center">Directions : Question Numbers 32 to 35 carry 5 marks each.</div>

32. In right ΔABC , right angled at C, M is the mid-point of hypotenuse AB. C is joined to M and produced to a point D such that DM=CM. Point D is joined to point B as shown in figure. Prove that $\angle DBC$ is a right angle.

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

ΔABC is an isosceles Δ in which AB=AC. Side BA is produced to D such that AD=AB.
Prove that $\angle BCD$ is a right angle.

33. It is given that $\angle XYZ = 64°$ and XY is produced to point P. Draw a figure from the given information. If ray YQ bisects $\angle ZYP$, find $\angle XYQ$ and reflex $\angle QYP$.

34. A cone is 8.4 cm high and radius of its base is 2.1 cm. It is melted and recast into a sphere. Find the radius of the sphere.

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

Monica has a piece of canvas whose area is $551m^2$. She uses it to have a conical tent made with a base radius of 7 m. Assuming that all stitching margins and the wastage incurred while cutting amounts to approximately $1m^2$, find the volume of tent that can be made with it.

35. The following table gives the life times of 400 neon lamps :

LIFE TIME (IN HOURS)	NUMBER OF LAMPS
300 – 400	26
400 – 500	60
500 – 600	68
600 – 700	96
700 – 800	80
800 – 900	70

(i) Represent the given information with the help of a histogram.
(ii) How many lamps have a life time of more than 700 hours ?

<div align="center">SECTION – E</div>

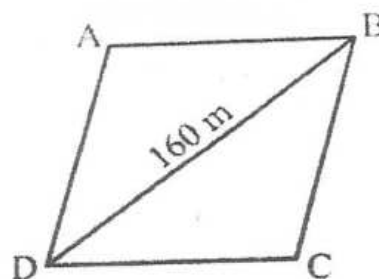**Direction : Case study based questions are compulsory.**

36. Sanya has a piece of land which is in the shape of a rhombus. The perimeter of the land is 400 m and one of the diagonals is 160 m. She divided the land in two equal parts as shown in figure so that her one daughter and one son can work on the land to produce different crops.
Based on the above information answer the following questions :
   (i) What is the measure of each side of the land ?
   (ii) What is the length of the second diagonal ?
   (iii) How much area will the son and daughter each get for growing crops ?

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

How many meters of barbed wire will be required for fencing each of the triangular parts ?

37. At a welfare camp, different stalls are set up for providing nutritious food to a section of needy people. In one of the food counters a big hemispherical vessel of thickness 0.5 cm and inner radius 10 cm is filled with soup. The soup is served in small conical glasses of radius 2 cm and height 5 cm.

Based on the above information, answer the following questions : (Leave the answer in terms of π)
   (i) What is the total capacity of the hemispherical vessel ?
   (ii) How much soup can be served in each conical vessel ?
   (iii) How many people could consume the whole soup if each person is served one glass ?

OR

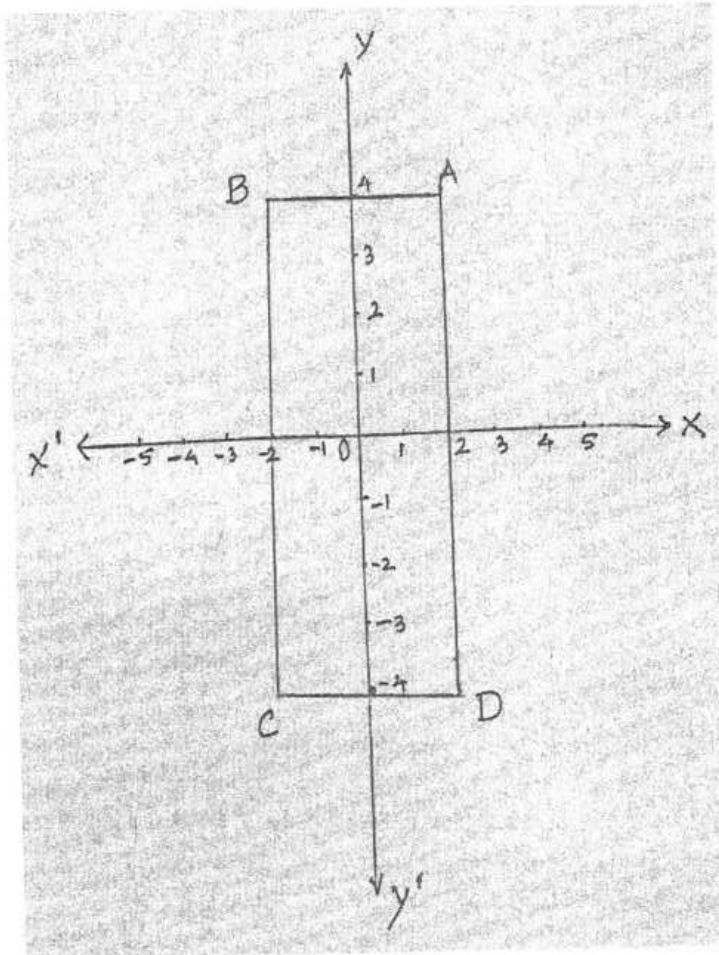How much soup is left after 50 glasses were already distributed ?

38. Ram, Rahim, John and Jagdeep are best friends and decide to permanently stay in nearby areas in the same city. They buy their houses located at $A(2, 4)$, $B(-2, 4)$, $C(-2, -4)$ and $D(2, -4)$ respectively with reference to a temple situated at the origin.

Based on the above information and the given graph answer the following questions :

   (i) Name the type of quadrilateral obtained by joining the points A, B, C and D.
   (ii) In which quadrant is John's house located ?
   (iii) How far is John's house from Ram's house ?

OR

How much distance does Rahim cover to take
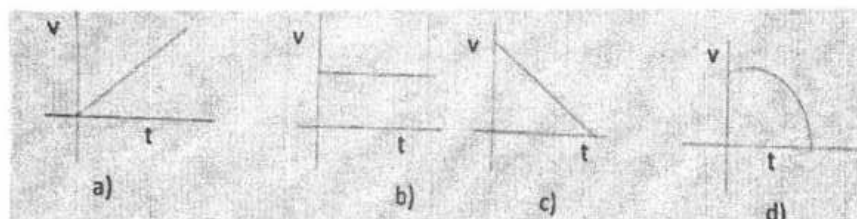one complete round of the quadrilateral ABCD ?

General Instructions:
(a) The question paper consists of **three sections** A, B and C. You have to solve all the sections.
(b) There are **39** questions in all and all the questions are compulsory.
(c) Internal choice has been given in some questions. You have to solve any one of them.
(d) For **Assertion** and **Reason** type question no. 7, 21, 30 and 31 following are the options.
   (a) Both A and R are true and R is the correct explanation of A.
   (b) Both A and R are true but R is not the correct explanation of A.
   (c) A is true but R is false.
   (d) A is false but R is true.
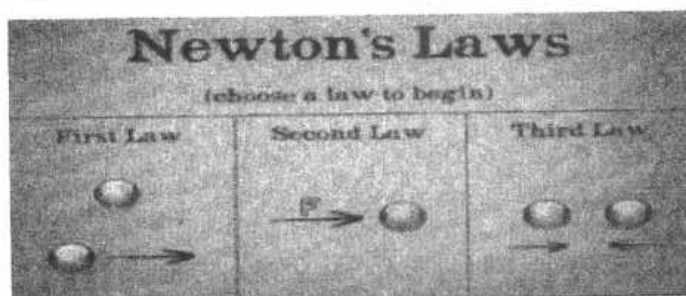
SECTION – A : PHYSICS (27 Marks)

Q.1 Which of the following velocity – time graphs shows uniform retardation of a body. (1)

Q.2 Value of acceleration due to gravity on earth is- (1)
(a) same at equator and poles   (b) least on poles
(c) least at equator   (d) can not say.

Q.3 How much force should be applied on an area of $1cm^2$ to get a pressure of 15 Pa? (1)
(a) 15 N   (b)1500 N   (c) 6.66×10^{-2} N   (d) 1.5×10^{-3} N

Q.4 If both force and displacement of a body are doubled, then the new work done will be- (1)
(a) doubled   (b) 4 times   (c) halved   (d) ¼ times

Q.5 Mobile charger converts- (1)
(a) sound energy to electric energy   (b) electric energy to chemical energy
(c) electric energy to mechanical energy   (d) chemical energy to electric energy

Q.6 What is linear momentum of a toy car of mass 300 gram, moving with a speed of 18km/h – (1)
(a) 1.5 kg-m/s   (b) 5.4 kg-m/s   (c) 1.5g-m/s   (d) none of these

Q.7 **Assertion** (A) : Loudness is response of the ear to the intensity of sound.
Reason : It is the ear which gives meaning to the term loudness. (1)

Q.8 **Give reason.** Why? (2)
(a) Weight of an object is less on a mountain than that at the sea level.
(b) When we drop a heavier body and a lighter body together from same height then they hit the earth's surface at the same time.
                    OR
(a) State Archimedes' Principle.
(b) Why is it easier to swim in sea water than that in the river water?

Q.9 (a) Write one point of difference between uniform velocity and uniform acceleration.
 (b) A train starting from rest moves with an uniform acceleration of $0.2m/s^2$ for 5 minute.
 Calculate the speed acquired and the distance travelled in this time. (3)

Q.10 (a) Define Density of a substance. What is its SI unit?
 (b) The volume of a 500 g sealed packet is 350 cm^3. Will the packet float or sink in water? What will be the mass of the water displaced by the packet? Find the value. (3)

Q.11 (a) Write two differences between Transverse waves and Longitudinal waves.
 (b) What do you mean by wavelength of a wave motion. (3)
                    OR
(a) What is meant by Echo of a sound? Also mention two conditions required for echo to be heard.
(b) Write two methods to reduce reverberation.

Q.12 Newton investigated further the ideas put forth by Galileo regarding motion of the objects. He formulated three fundamental laws that govern the motion of the objects. These Three laws are known as Newton's laws of motion. Study the symbols shown below and answer the questions based on the above laws- **(4)**

(a) Which law states that Action and Reaction forces do not act on the same body but they act on two different bodies.

(b) Which law explains inertia – the basic properties of the objects.

(c) Which would require a greater force (i) accelerating 2 kg mass at $5m/s^2$ or 4 kg mass at $2m/s^2$

OR

Which Newton's law measures the force? Calculate acceleration produced by a force of 12 N exerted on the object of mass 3 kg.

Q.13 (a) What do you mean by the terms **(i)** Intensity of sound and **(ii)** pitch? .

(b) Draw two waveforms whose loudness is same but pitches are different.

(c) How does a bat catch its prey?

(d) frequency of a source of sound is 100 Hz. How many times does it vibrate in a minute?

(e) Write any two applications of ultrasound waves in daily life. **(5)**

SECTION – B : CHEMISTRY (25 Marks)

(1)

Q.14 During the boiling of a liquid

(a) Temperature increases   (b) Temperature decreases

(c) Temperature remains constant   (d) None of these

(1)

Q.15 Dry ice consists of –

(a) frozen ice   (b) liquid oxygen   (c) liquid nitrogen   (d) solid carbon dioxide

(1)

Q.16 The tyndall effect is exhibited by

(a) tap water   (b) salt solution   (c) blood   (d) soda water

(1)

Q.17 Alloy is a mixture of

(a) solid and liquid   (b) liquid and liquid   (c) gas and gas   (d) solid and solid

(1)

Q.18. Which of the following is not a polyatomic ion –

(a) Phosphate   (b) Fluoride   (c) Carbonate   (d) Nitrate

(1)

Q.19 The ratio by mass of oxygen and carbon in CO_2 is

(a) 3:4   (b) 4:3   (c) 3:8   (d) 8:3

(1)

Q.20 Alpha particles are composed of

(a) Helium nuclei   (b) Hydrogen nuclei   (c) Sodium nuclei   (d) Lithium nuclei

(1)

Q.21 Assertion **(A)** : Inert elements shows zero valency.

Reason (R) : Atoms of inert elements have fully filled outermost shell.

(1)

Q.22 The relative abundance of two isotopic forms of copper - $^{63}_{29}Cu$ and $^{65}_{29}Cu$ are 70% and 30% respectively. Calculate the average atomic mass of copper. **(2)**

OR

(a) State one drawback of Rutherford's nuclear model.

(b) Draw schematic atomic structure of sodium ion [Atomic No. of Na=11]

Q.23 (a) Oxygen is a gas. Justify the given statement by giving two reasons.   **(3)**

(b) Explain any two factors affecting evaporation.

Q.24(a) Name the dispersed phase and dispersion medium in emulsion.

(b) What volume of ethyl alcohol and water must be mixed together to prepare 250 ml of 40% by volume of alcohol in water?   **(3)**

Q.25 The number of electrons, proton and neutrons in chemical species A, B, C and D are given below :

Chemical Species	Electrons	Protons	Neutrons
A	2	3	4
B	10	9	8
C	8	8	8
D	8	8	10

Now Answer the following questions :

(a) What is the mass number of A and B.   **(1)**

(b) State the atomic number of B and valency of C.   **(1)**

(c) Which two chemical species represent a pair of isotopes and why?   **(2)**

OR

(c) State any two applications of isotopes.

Q.26 **(a)** State law of conservation of mass.

(b) Calculate the molecular masses of (i) C_2H_5OH (ii) $C_{12}H_{22}O_{11}$
[Atomic masses of C=12 u, H=1 u, O=16 u]

(c) An element Y has a valency of 2. Write the chemical formula for its (i) Chloride (ii) Carbonate **(5)**

OR

(a) Define chemical formulae.

(b) Write the chemical formulae of the following –
(i) Calcium Chloride   (ii) Sodium Sulphate

(c) Identify the cations and anions in (i) K_2SO_4 (ii) $FeCl_3$

SECTION – C : BIOLOGY (28 Marks)

Q.27 The structure/organelle of a cell that functions as a passage for intercellular transport as well as a manufacturing surface is **(1)**
(a) Ribosome   (b) Endoplasmic reticulum   (c) Plastids   (d) Plasma membrane

Q.28 Intestine absorb the digested food materials. What type of epithelial cells are responsible for that? **(1)**
(a) Stratified Squamous epithelium   (b) Columnar epithelium
(c) Spindle fibres   (d) Cuboidal epithelium

Q.29 Identify the group among the following, which contains only micronutrients : **(1)**
(a) Nitrogen, Iron, Manganese, Boron   (b) Copper, Calcium, Chlorine, Molybdenum
(c) Manganese, Zinc, Copper, Iron   (d) Manganese, Iron, Copper, Calcium

Q.30 **Assertion (A) :** Robert Brown discovered nucleus.
Reason (R) : Nucleoplasm and cytoplasm of a living cell together form the protoplasm. **(1)**

Q.31 **Assertion (A) :** Apical meristem is present at the stem and the root.
Reason (R) : Apical meristem increases the length of the stem and the root. **(1)**

Q.32 Which type of muscles are found in the iris of the eye, smooth or striated. Why smooth muscles are called involuntary muscles? **(2)**

Q.33 How many membrane is present in a vacuole? Mention the role of vacuole in a plant cell. **(2)**

Q.34 Name the tissue that makes the husk of coconut. Write any three characteristic of this tissue. **(2)**

Q.35 How is green manure different from ordinary manure? **(2)**

Q.36 (a) Draw a well labelled diagram of a bacterial cell and label the following :
cell wall, plasma membrane, nucleoid and ribosomes.

(b) Write any one difference between a prokaryotic and an eukaryotic cell. **(3)**

OR

(a) Draw a diagram of a plant cell and label the following :
vacuole, nucleus, chloroplast, cell wall.

(b) Mention any one difference between a plant cell and an animal cell.

Q.37 What is genetic manipulation? How is it useful in agricultural practices? **(3)**

Q.38 (a) Mention one function of each of the following :
(a) Areolar tissue   (b) Tendon   (c) Ligament

(b) Write any two differences between bone and cartilage. **(5)**

OR

Write any three characteristics features of meristematic tissues.

(b) Differentiate between Parenchyma and Sclerenchyma (Any two).

Q.39 To keep metabolic activities of different types separate from each other, eukaryotic cells have membrane bound organelles within themselves.

Cell organelles are "small organs" of the cell and are found embedded in the cytosol. They form living part of the cell. Each of them has a definite shape, structure and function. Examples of such organelles are nucleus, mitochondria, chloroplasts, endoplasmic reticulum. **(4)**

(a) Name two organisms in which plasma membrane and cell wall both are found.
(b) State the function of ribosomes.
(c) What is the chemical composition of chromosomes? Where are chromosomes located in the cell?

OR

(c) What is membrane biogenesis? What is the role of cell membrane?

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DELHI PUBLIC SCHOOL, BHILAI

Date : 07.03.2023　　ANNUAL EXAMINATION-2022-'23　　**Time : 3 Hrs.**
Class : IX　　SUBJECT : SOCIAL SCIENCE　　**Max. Marks : 80**

General Instructions:

i. This Question paper is divided into three sections - Section A, B, and C.
ii. All questions are compulsory.
　　Section – A : History and Civics : 40 Marks.
　　Section – B : Geography : 20 Marks.
　　Section – C : Economics : 20 Marks.
iii. Very short answer type questions are of 2 marks each. Answer to each question should not exceed 40 words.
iv. Short answer type questions are of 3 marks each. Answer to each question should not exceed 80 words.
v. Long answer type questions are of 5 marks each. Answer to each question should not exceed 120 words.
vi. Case Based questions are of 4 marks each. Answer these as required.
vii. Map based questions are of 2 and 3 marks (History and Geography). Total 5 marks.
viii. There is no overall choice in the question paper. However, an internal choice has been provided in a few questions. Only one of the choices in such questions has to be attempted.
ix. In addition to this, separate instructions have been given wherever necessary.
x. Attach the map properly.

Section – A : History and Civics - 40 Marks

01. The system of scientific forestry stands for:　　**(1)**
　　(a) system whereby the local farmers were allowed to cultivate temporarily within a plantation
　　(b) system of cutting old trees and plant new ones
　　(c) division of forest into three categories
　　(d) disappearance of forests

02. The Imperial Forest Research Institute was set up at..............　　**(1)**
　　(a) Allahabad　　(b) Darjeeling　　(c) Dehradun　　(d) Shimla

03. Study the picture and answer the question that follows:　　**(1)**

Which of the following option best describes the given picture?
　　(a) Strength lies in unity.　　(b) The act of becoming free.
　　(c) Symbol of royal power.　　(d) Personification of the law

04. **Arrange the following in a chronological order.**　　**(1)**
　　(i) The Bolshevik leader Vladimir Lenin returned to Russia from his exile.
　　(ii) Lenin persuaded the Petrograd Soviet and the Bolshevik Party to agree to a socialist seizure of power.
　　(iii) The uprising began on 24 October 1917.
　　(iv) The Bolsheviks conducted the elections to the Constituent Assembly, but they failed to gain majority support.
　　OPTIONS:
　　(a) (i), (ii) (iii), & (iv)　　(b) (iii), (iv), (i) & (ii)
　　(c) (iii) , (ii), (i), (iv)　　(d) (iv), (iii), (ii) & (i)

05. Consider the following statements with regard to democratic rights and identify the <u>incorrect</u> one from among the following:　　**(1)**
　　(a) Rights are necessary for the very sustenance of a democracy.
　　(b) For democratic elections to take place, it is necessary that citizens should have the right to express their opinion, form political parties and take part in political activities.
　　(c) Rights protect majority from the oppression of minorities.
　　(d) Rights are guarantees which can be used when things go wrong. Things may go wrong when some citizens may wish to take away the rights of others.
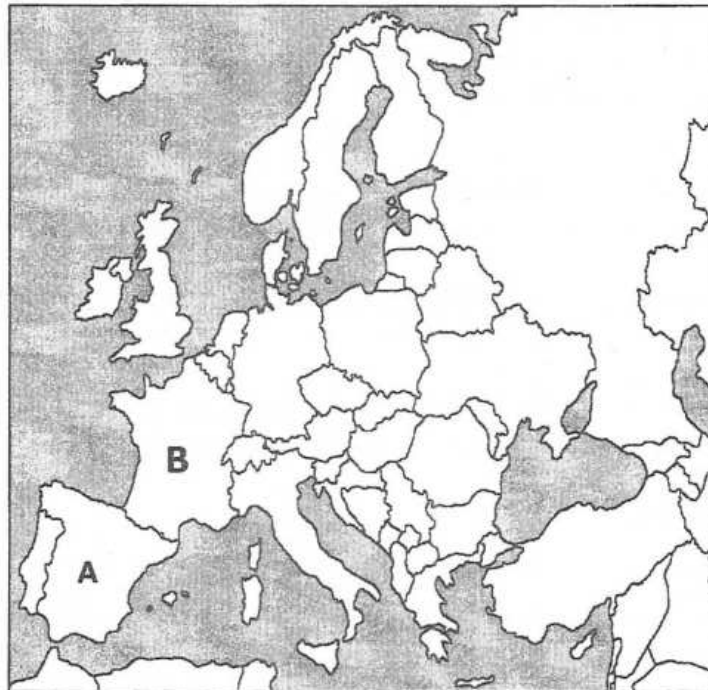
06. An ordinary law needs to be passed by both the Houses, but if there is a difference between the two Houses, then .... **(1)**
    (a) The final decision is taken in a joint session in which members of both the Houses sit together.
    (b) Rajya Sabha takes the decision
    (c) Lok Sabha takes the decision
    (d) President takes the decision

07. Which of the following statements is <u>true</u> about the Chief Election Commissioner of India? **(1)**
    (a) In India, elections are conducted in an independent and fair way by a very powerful constitutional body i.e., Election Commission. It enjoys the same kind of independence that the state government enjoys.
    (b) The Chief Election Commissioner (CEC) is appointed by the President of India.
    (c) But once appointed, CEC is answerable to the Prime Minister.
    (d) EC cannot take decisions on every aspect of conduct and control of elections, from the announcement of elections to the declaration of results.

08. Which one from among the following pairs is correctly matched? **(1)**

List – I	List – II
(a) In Pakistan, General Pervez Musharraf led a military coup	in October 1899.
(b) In a democracy the final decision making power must rest with	those elected by the military.
(c) A democracy must be based on	a free and fair election.
(d) Democracy provides a method to deal with	differences and understandings.

09. There are two statements marked as Assertion (A) and Reason (R). Mark your answer as per the codes given below.
    Assertion (A) : An election is a process through which people choose their representatives at regular intervals.
    Reason (R) : Elections provide a way to the people to assert their voice, opinion and choose the person whose priorities and ideas match the most with them. **(1)**
    (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
    (b) Both (A) and (R) are true, but (R) is not the correct explanation of (A).
    (c) (A) is true, but (R) is false.
    (d) (A) is false, but (R) is true.

10. Who chaired the Drafting Committee of the Constituent Assembly?
    (a) Jawaharlal Nehru   (b) G. Durgabai Deshmukh   (c) Dr. B.R. Ambedkar   (d) H. C. Mookherjee   **(1)**

11. Name any two French philosophers who inspired the French people to revolt. **(2)**

12. What do you mean by the term 'secular'? **(2)**

13. Which incident came to be known as Bloody Sunday? What were its consequences? **(1+2=3)**
    OR
    What steps were taken by Hitler to reconstruct Germany? **(3)**

14. What are the powers and functions of the Election Commission of India. **(3)**

15. What measures were taken by Robespierre to bring equality in the French Society? **(5)**
    OR
    How did the Indian pastoralists cope with the changes that were brought about by the British colonial officials?

16. Discuss the power and functions of the Prime Minister of India. (Any 5) **(5)**
    OR
    Explain briefly the powers and functions of the Supreme Court.

17. **Read the source below and answer the questions that follow:**

    "Women workers, often… inspired their male co-workers… At the Lorenz telephone factory… Marta Vasileva almost single handedly called a successful strike. Already that morning, in celebration of Women's Day, women workers had presented red bows to the men …Then Marta Vasileva, a milling machine operator stopped work and declared an impromptu strike. The workers on the floor were ready to support her…The foreman informed the management and sent her a loaf of bread. She took the bread but refused to go back to work. The administrator asked her again why she refused to work and she replied, "I cannot be the only one who is satiated when others are hungry". Women workers from another section of the factory gathered around Marfa in support and gradually all the other women ceased working. Soon the men downed their tools as well and the entire crowd rushed onto the street.
    (i) Who was Marfa Vasileva ? **(1)**
    (ii) Why is International Women's Day celebrated? **(1)**
    (iii) Write the role of women in Russian Revolution? (Any two role). **(2)**

18. Read the following extract and answer the questions that follow.

Our Constitution entitles every citizen to elect her/his representative and to be elected as a representative. The Constitution makers, however, were worried that in an open electoral competition, certain weaker sections may not stand a good chance to get elected to the Lok Sabha and the state Legislative Assemblies. They may not have the required resources, education and contacts to contest and win elections against others. Those who are influential and resourceful may prevent them from winning elections. If that happens, our Parliament and Assemblies would be deprived of the voice of a significant section of our population. That would make our democracy less representative and less democratic. So, the makers of our Constitution thought of a special system of reserved constituencies for the weaker sections. Some constituencies are reserved for people who belong to the Scheduled Castes [SC] and Scheduled Tribes [ST]. In a SC reserved constituency only someone who belongs to the Scheduled Castes can stand for election. Similarly only those belonging to the Scheduled Tribes can contest an election from a constituency reserved for ST. Currently, in the Lok Sabha, 84 seats are reserved for the Scheduled Castes and 47 for the Scheduled Tribes (as on 1 September 2012). This number is in proportion to their share in the total population. Thus the reserved seats for SC and ST do not take away the legitimate share of any other social group.

(i) What were our constitution makers worried about? **(1)**

(ii) What makes our democracy less representative and less democratic? **(1)**

(iii) Currently, how many seats in the Lok Sabha, are reserved for the Scheduled Castes and for the Scheduled Tribes (as on 1 September 2012)? **(2)**

19. Two places A and B have been marked on the given outline map of Europe. Identify them and write their correct names on the answer sheet. **(1x2=2)**

Section – B : Geography - 20 Marks

20. Which among the following does not have an international border or lies on the coast? **(1)**

    (a) Rajasthan   (b) Bihar   (c) Madhya Pradesh   (d) Kerala

21. What is Brahmaputra known as in Tibet? **(1)**

    (a) Tsang Po   (b) Jamuna   (c) Dihang   (d) None of the above

22. The rate of population growth has started declining in India since .... **(1)**

    (a) 1951   (b) 1961   (c) 1971   (d) 1981

23. Name the northern most range of the Himalayas and write it's average height. **(2)**

OR

Which island group of India has coral origin? Where is it located?

24. Discuss the three major components of population growth. **(3)**

25. Read the extract given below and answer the following questions:

As one goes from the surface of the earth to higher altitudes, the atmosphere becomes less dense and temperature decreases. The hills are therefore cooler during summers. The pressure and wind system of any area depend on the latitude and altitude of the place. Thus it influences the temperature and rainfall pattern. The sea exerts a moderating influence on climate. As the distance from the sea increases, it's moderating influence decreases and the people experience extreme weather conditions. Ocean currents along with onshore winds affect the climate of coastal areas. Relief too plays a major role in determining the climate of a place. High mountains act as barrier for cold or hot winds; they may also cause precipitation if they are high enough and lie in the path of the rain bearing winds. The leeward side of the mountains remains relatively dry

(i) How does increase in altitude affect the temperature? **(1)**

(ii) On what does the pressure and wind system of any area depend? **(1)**

(iii) What role does relief play in determining the climate of a place? (Write 2 points). **(2)**

26. Quite a few species of plants and animals are endangered in India. Why? Explain in five points. **(5)**

OR

Explain the Tropical Evergreen forests under the following heads :

(a) Location (any two major areas)   (b) Rainfall condition

(c) Any two characteristic features of the trees of the forest.   (d) Important species of trees (any 2)

27. On the given outline political map of India, locate and label any three of the following: **(3)**

(a) Chilika Lake

(b) Corbett National Park

(c) The state having the highest density of population

(d) One major receiving more than 400 cm of rainfall.

Section – C : Economics : 20 Marks

Choose the correct answer :

28. Why do farmers of Palampur follow multiple cropping? **(1)**

(a) because the water consumption is less in this method.

(b) because this method consumes less chemical fertilizers.

(c) because this method doesn't require fertile soil.

(d) because this method is the most common way of increasing production.

29. Match the following : **(1)**

Column A	Column B
(a) Invested in human Resource	(i) Sarva Siksha Abhiyan
(b) Has built a vast health infrastructure	(ii) Japan
(c) Encourage attendance and retention of children	(iii) Mid day Meal
(d) Providing elementary education	(iv) India

30. Define Famine. **(1)**

31. **Correct the following statement and rewrite :**

Disguised unemployment happens when people are not able to find jobs during some months of the year.

(1)

32. **Assertion (A) :** An average Indian has to spend a huge amount on marriage and other rituals.

Reasoning (R) : There is a Socio cultural pressure. **(1)**

Choose the correct option:

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(b) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(c) (A) is true but (R) is false.

(d) (A) is false but (R) is true.

33. Production of .... And .... where increased due to the Green Revolution. **(1)**

34. **Read the information from the given below Schedule and answer the following questions:** **(1)**

Production of Rice in the Province of Bengal

Year	Production (in lakh tonnes)	Import (in lath tonnes)	Export (in lath tonnes)	Total Availability (lakh tonnes)
1938	85	-	-	85
1939	79	04	-	83
1940	82	03	-	85
1941	68	02	-	70
1942	93	-	01	92
1943	76	03	-	79

(a) Which year shows a drastic decline in food availability?

(b) Why Bengal famine happened in 1943?

35. Differentiate between fixed capital and working capital. Categorize the following as fixed capital and working capital :   (i) Cotton   (ii) Machine **(2)**

36. Countries like Japan did not have any natural resources, still they are developed countries. Give reasons to support your answer. **(3)**

OR

How has human capital formation helped India?

37. Define Poverty line. Why do different countries use different Poverty Line? **(3)**

38. Explain the components of food security system started by the government of India? Discuss (any 2) schemes launched by the government to remove food insecurity. **(5)**

OR

What is Buffer Stock? Why Buffer stock is created by the government? What is the role of PDS in ensuring food security in India?

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DELHI PUBLIC SCHOOL, BHILAI

DATE : 23.02.2023   ANNUAL EXAMINATION 2022-2023   Time : 2 Hrs.

CLASS : IX   SUBJECT – ARTIFICAL INTELLIGENCE   Max. Marks : 50

General Instructions:
- ➢ Question paper consists of two sections, Part A and Part B
- ➢ Part A consists of Objective type questions of 24 marks.
- ➢ Part B consists of Subjective type questions of 26 marks.

Part – A

Choose the correct option   1x24=24

1. _____ contains both location and time information?
   (a) Machine data   (b) Time stamped data   (c) Spatiotemporal data   (d) Spatial data

2. A message should be _____ to convey the right meaning to others?
   (a) Difficult   (b) Complex   (c) Clear   (d) Coded

3. Which of the following company have developed Hangout
   (a) Microsoft   (b) Google   (c) IBM   (d) Apple

4. The current ANN are the part of
   (a) Strong AI system   (b) Weak AI system   (c) True AI system   (d) General AI system

5. A group of words that makes complete sense is called a ?
   (a) Phrase   (b) Sentence   (c) Subject   (d) Predicate

6. Which of the following is NOT a part of Evaluation and Deployment stage?
   (a) Project resting   (b) Project modelling   (c) System modification   (d) None

7. The capability of AI system to find deeper truth by processing data is known as
   (a) AI deep layer   (b) AI analysis   (c) AI data Learning   (d) AI data augmentation

8. Which among the following is the pioneer of the AI research?.
   (a) Goggle   (b) Facebook   (c) US Department of Defence   (d) None

9. How many output layers are required for constructing Artificial Neural Network ?
   (a) Zero   (b) One   (c) Two   (d) Three

10. Which of the following is/are domains of artificial intelligence?
    (a) Data   (b) Neural networks   (c) Computer Vision   (d) All of these

11. Which of the following is not one of the version of Big Data
    (a) Volume   (b) Verifiability   (c) Velocity   (d) Variety

12. People with self confidence have----------outlook
    (a) Negative   (b) Arrogant   (c) Outward   (d) Positive

13. A webpage is written using
    (a) C++   (b) Python   (c) HTML   (d) JAVA

14. The AI Project cycle ends with
    (a) project deployment   (b) project review   (c) project tuning   (d) none of these

15. What is the answer to this expression 20 % 3
    (a) 6   (b) 2   (c) 1   (d) 5

16. In an email message Cc stands for
    (a) can copy   (b) can't copy   (c) carbon copy   (d) close copy

17. On which of the following learning system are the ANN based depending upon feedback received by them
    (a) Supervised learning   (b) Un supervised learning
    (c) Forced learning   (d) Reinforcement learning

18. The SDG deals with
    (a) climate change   (b) community   (c) water   (d) energy

19. All keywords in Python are
    (a) upper case   (b) lower case   (c) toggle case   (d) title case

20. Brainstorm is best suited for
    (a) Identifying existing measure   (b) Identifying stakeholders
    (c) Identifying goals   (d) None of these

21. The weak AI system
    (a) Mimic intelligence behavior   (b) Fail as reasoning based task
    (c) Can't handle bigdata   (d) can understand emotions

22. Which of the following input ( ) function will give syntax error ?
    (a) input(num)   (b) input(number)
    (c) input("integer number")   (d) input(integer number)

23. Which statement is true ?
    (a) Python is high level language   (b) Python is an object oriented language
    (c) Python is an interpreted language   (d) All of above

24. The Nodes of ANN are commonly arranged in
    (a) Layers   (b) Circle   (c) Randomly   (d) Pentagon

Part – B

Answer the following Questions (Do Any 3)   2x3=6

1. What is idea behind the creation of Artificial Neural Network ?
2. What is system software? Name any 2 (two).
3. What are barriers in the effective communication ?
4. Why does AI project cycle often become cyclic in nature ?
5. What are the factors affecting the self confidence ?

Answer the following Questions (Do Any 4)   2x4=8

6. Why is big data normally unstructured in nature?
7. How is the human brain different from the Artificial Neuron Network models?
8. Describe the following terms:
    (a) Machine Learning   (b) Data Science
9. How can Artificial Neutral Network improve decision making ? Give example.
10. Write some factors affecting in communication ?
11. Write a program to display multiplication table of any number entered by the user.

Answer the following Questions (Do Any 3)   4x3=12

12. Describe all domains of AI.
13. Define the following terms 1) List 2) Tuple 3) Set 4) Dictionary
14. Describe any four smart devices that can make youe home smart.
15. What are the demerits of social media ?
16. What are the decision tree ? How it is created ?

Name of the student: _____   Class/Sec._____   Roll No._____

Invigilator's Signature _____   Marks obtained : _____/50

GENERAL INSTRUCTIONS:
    Attempt all questions.
    Each correct answer carries 1 mark.
    No negative marking.
    Write the correct answer option no in the given box.

1. In a current carrying conductor the motion of electron is :
    (a) accelerated (b) decelerated (c) uniform   (d) drifting

2. Which of the following particles will experience maximum force when projected with same velocity in a direction perpendicular to the magnetic field.
    (a) Electron   (b) Proton   (c) Helium-ion (d) Lithium-ion

3. Magnetic meridian is
    (a) a point   (b) a line along north-south   (c) a horizontal plane   (d) a vertical plane

4. A rainbow is formed because of :
    (a) scattering   (b) dispersion   (c) total internal reflection   (d) none of these

5. The best quality optical fibres are made of :
    (a) glass fibres   (b) quartz fibres   (c) silica-quartz fibres   (d) costly conducting materials

6. An object is placed at a distance of 10 cm. from a convex mirror of focal length 15 cm.
    The position and nature of the image are :
    (a) 3 cm. inform of the mirror, real & erect   (b) 6 cm. behind the mirror, virtual & erect
    (c) 9 cm. inform of the mirror, real & inverted   (d) 6 cm. behind the mirror, real & inverted

7. The Magnetic effect of current was discovered by –
    (a) Faraday   (b) Oersted   (c) Joule   (d) Ampere

8. An element X forms two oxides XO and XO_2. The oxide XO is neutral but XO_2 is acidic in nature. The element X is most likely to be
    (a) Sulphur   (b) Carbon   (c) Calcium   (d) Hydrogen

9. What happens when dilute Hydrochloric acid is added to iron filings?
    (a) Hydrogen gas and iron chloride is produced.   (b) Chlorine gas and iron hydroxide are produced
    (c) No reaction takes place   (d) Iron salt and water are produced

10. One of the following is not an organic acid. This is
    (a) Ethanoic acid   (b) Formic acid (c) Citric acid   (d) Carbonic acid

11. The indicators which turn red in acid solution are :
    (a) Turmeric and Litmus   (b) Phenolphthalein and Methyl Orange
    (c) Litmus and Methyl Orange   (d) Phenolphthalein and Litmus

12. Fresh milk has a pH of 6. When milk changes into curd. The pH value will
    (a) become 7   (b) become more than 7 (c) become less than 7   (d) remain unchanged

13. The real bleaching agent present in bleaching powder is
    (a) Oxygen (b) Calcium (c) Chlorine (d) Sulphuric acid

14. The number of protons in one atom of an element X is 8. What will be the number of electrons in its ion X^{-2} ?
    (a) 8   (b) 9   (c) 10   (d) 11

15. The number of covalent bonds in Pentane (C_5H_{12}) is
    (a) 5   (b) 12   (c) 17   (d) 16

16. Ovoviviparous are
    (a) Hen   (b) Snake   (c) Crocodile   (d) All of these

17. Mendel discovered
    (a) Law of linkage   (b) 10% energy law   (c) Laws of inheritance (d) None of these

18. 'AIDS' virus is called
    (a) ARV   (b) HTLV   (c) HIV   (d) All of these

19. Organic farming is the technique of raising crops through the use of –
    (a) Manure   (b) Biofertilizers   (c) Resistance varieties (d) All of these

20. In simple organisms, exchange of gases and excretion occur through –
    (a) Osmosis   (b) Diffusion   (c) Imbibition   (d) All of the above

21. Who was known as "Fuhrer"?
    (a) Mussolini   (b) Hitler   (c) Cavour   (d) Bismarck

22. Who organised the Dalits into the depressed classes association?
    (a) Mahatma Gandhi   (b) Subhas Chandra Bose   (c) Jawahar Lal Nehru   (d) B. R. Ambedkar

23. The Bolshevik Revolution in Russian began on
    (a) 7 October, 1917   (b) 7 November, 1917   (c) 7 December, 1917   (d) 7 March, 1918

24. Who created the cotton mill?
    (a) Richard Arkwright   (b) Williams   (c) Newcomen   (d) James Watt

25. The main grievance of the peasants of the Champaran Satyagraha was about the
    (a) Abwabs and illegal cesses   (b) Land revenue demands
    (c) Tinkathia System   (d) Exploitation by the Moneylenders

26. Alluvial Soil is a very fertile soil. The soil is principally found in the states of :
    (a) Telangana, Gujarat and Rajasthan   (b) Uttar Pradesh, Bihar and West Bengal
    (c) Kerala, Goa and Rajasthan   (d) Chattisgarh, Jharkhand and Nagaland

27. Bhakra – Nangal multi-purpose river valley project is situated on river:
    (a) Damodar   (b) Sutlej   (c) Mahanadi   (d) Yamuna

28. Which pair of states is famous for the production of petroleum in India?
    (a) Maharashtra and Goa   (b) Punjab and Gujarat   (c) Assam and Gujarat   (d) Rajasthan and Punjab

29. Select the row of towns who are famous for atomic power plants:
    (a) Tarapur, Ankleshwar, Nagpur, Kaiga   (b) Tarapur, Nagarjunsagar, Mathura, Meerut
    (c) Tarapur, Rawatbhata, Vadodara, Narora   (d) Tarapur, Narora, Kakrapar, Kaiga

30. Sundarbans National Park is famous for:
    (a) Elephant   (b) Wild Pigs   (c) Bengal Tiger   (d) Gangetic Dolphin

31. Blue Revolution is associated with :
    (a) Development of Food Crops Farming   (b) Development of Hydel Power Projects
    (c) River Management   (d) Development of Fisheries

32. Durgapur Steel Plant is situated in the state of
    (a) Chhattisgarh   (b) West Bengal   (c) Madhya Pradesh   (d) Jharkhand

33. Who is the present UN Secretary General?
    (a) Kofi Annan   (b) Antonio Guterres   (c) Ban Ki-Moon   (d) None

34. What is the full name of UPA?
    (a) United Party Alliance   (b) United People's Alliance
    (c) United Progressive Alliance   (d) United Progressive Axis

35. Which constitutional amendment granted reservation to women in Panchayats?
    (a) 42nd   (b) 44th   (c) 65th   (d) 73rd

36. The Reserve Bank of India was nationalised in :
    (a) 1945   (b) 1947   (c) 1949   (d) 1950

37. When the New Economic Policy came into force in India?
    (a) 1990   (b) 1991   (c) 1993   (d) 1994

38. Who wrote the book "Wealth of Nations"?
    (a) Marshall   (b) Piggu   (c) Adam Smith   (d) Kinns

39. The main feature of the New Economic Policy of India-
    (a) Liberalisation   (b) Globalisation   (c) Privatisation   (d) All of them

40. Which of the following Countries has adopted the One Party System?
    (a) India   (b) USA   (c) China   (d) Japan

41. The sum of the five consecutive numbers is equal to 170. What is the product of largest and the smallest numbers?
    (a) 1512   (b) 1102   (c) 1152   (d) 1210

42. The HCF of two numbers is 15 and their LCM is 225. If one of the numbers is 75, find the another number.
    (a) 105   (b) 90   (c) 60   (d) 45

43. The capacity of two pots are 240 litre and 112 litre respectively. Find the capacity of a container which can exactly measure the contents of the two pots
    (a) 9000cc   (b) 12000cc   (c) 16000cc   (d) 8000cc

44. The product of two numbers is 12960 and their HCF is 36. Number of pairs of such numbers that can be formed is
    (a) 2   (b) 3   (c) 4   (d) 5

45. A man had 170 currency notes in all, some of which were of ₹ 100 denominations and some of are ₹ 50 denomination. The total amount of all these currency notes was ₹ 10000. How much amount did he have in the denominations of ₹ 50.
    (a) ₹ 4000   (b) ₹ 9000   (c) ₹ 7000   (d) ₹ 6000

46. The difference between the ages of Sonu and Sneha is 12 years. If the ratio of their ages is 3:5 then the age of Sneha is
    (a) 32 yrs.   (b) 24 yrs.   (c) 28 yrs.   (d) 30 yrs.

47. Five ninth of 60% of a number is equal to 2790. What is the number?
    (a) 8100   (b) 7200   (c) 7300   (d) None of these

48. The average monthly income of four earning members of a family is Rs.7350. One member passes away and the average monthly income becomes ₹ 6500. What was the monthly income of the person, who is no more?
    (a) ₹ 6928   (b) ₹ 8200   (c) ₹ 9900   (d) ₹ 13850

49. A class is divided into two sections A and B. Passing average of 20 students of section A is 80% and passing average of 30 students of section B is 70%. What is the passing average of both of the sections?
    (a) 72%   (b) 74%   (c) 75%   (d) 77%

50. In the class, the number of boys and girls are in the ratio of 4 : 5. If 10 more boys join the class, the ratio of numbers of boys and girls become 6 : 5. How many girls are there in the class?
    (a) 20   (b) 30   (c) 25   (d) None of these