SUBMITIVE ASSESMENT – 1 (2019-20)

CLASS: 10ᵀᴴ   SUBJECT: ENGLISH   MM: 80   TIME: 3Hours

Section 'A' Reading

1. Read the passage given below and answer the questions that follow :   (8)

The Chinese proverb – Without rice, even the cleverest woman cannot cook – is true for innumerable Indians too. Eating simply boiled rice, is the world's most important basic type of food. It's also delicious as Pulao, Biryani, Idli, Appams, Kheer or puddings. The grain is available in a myriad of varieties the world over. It's not fattening, contrary to some urban myths; scientists and diet experts know that rice is good for you and can't make you heavier. It mainly comprises carbohydrates that do not add kilos, if consumed in moderation. An average 100-gram serving of rice has only about 0.4 gram of fat. In fact, this serving has no more than 100 calories. And, writes noted culinary expert Tarla Dalal, - Rice has approximately the same calories as whole wheat and hence is not more fattening.

It's easy to digest. Rice Janji is, therefore, a home remedy for diarrhoea. In fact, the Janji, with a few accompaniments, like coconut chutney and cooked beans, makes for a healthful meal that millions in Kerala enjoy. White or brown ? Unpolished brown rice may not be as popular as white, but is a good source of complex carbohydrates providing starch and fibre. It takes relatively more time to digest allowing the body to consume the energy released over an extended period. Brown rice is also richer in vitamins, vitamin B, E and minerals like manganese and selenium, which make it more nutritious than the white rice varieties. However, white rice, too, has calcium and the essential B vitamins, niacin and thiamine. It's healthy since rice has no cholesterol or sodium; it is safe for those suffering from hypertension. Diabetics, who prefer rice daily, could choose brown rice after checking with their doctor.

(A) Answer the following questions :

(i) Name two Indian dishes made out of rice.

(ii) _____ is a home remedy for diarrhoea.

(iii) Pick out the word from the passage which means','a medicine on treatment for a desease'.

(iv) Rice has approximately the same calories as whole _____.

_____

(B) Choose the correct alternatives :

(i) 100 gm serving of rice has not more than _____ calories in it.

   (a) 100

   (b) 10

   (c) .001

   (d) 1000

(ii) What does brown rice contain?

   (a) Vitamin A and B

   (b) Vitamin B and C

   (c) Vitamin B and D

   (d) Vitamin B and E

(iii) Which proverb says that 'without rice, even the cleverest woman cannot cook'?

   (a) Japanese

   (b) German

   (c) French

   (d) Chinese

(iv) It is safe for_____ patients to have rice daily and to choose brown rice in their diet.

    (a) diabetic

    (b) blood pressure

    (c) rheumatic

    (d) paralytic

2.   Read the passage given below and answer the questions that follow :   (12 Marks)

(1) Have you ever failed at something so miserably that the thought of attempting to do it again was the last thing you wanted to do?

(2) If your answer is yes, then you are "not a robot." Unlike robots, we human beings have feelings, emotions, and dreams. We are all meant to grow and stretch despite our circumstances and our limitations. Flourishing and trying to make our dreams come true is great when life is going our way. But what happens when it's not? What happens when you fail despite all of your hard work? Do you stay down and accept the defeat or do you get up again and again until you are satisfied? If you have a tendency to persevere and keep going then you have what experts call, grit.

(3) Falling down or failing is one of the most agonizing, embarrassing, and scariest human experiences. But it is also one of the most educational, empowering, and essential parts of living a successful and fulfilling life. Did you know that preservance (grit) is one of the seven qualities that have been described as the keys to personal success and betterment in society? The other six are curiosity, gratitude, optimism, self-control, social intelligence, and zest. Thomas Edison is a model for grit for trying 1,000 plus times to invent the light bulb. If you are reading this with the lights on in your room, you know well he succeeded. When asked why he kept going despite his hundreds of failures, he merely stated that what he had been through were not failures. They were hundreds of ways not to create a light bulb. This statement not only revealed his grit but also his optimism for looking at the bright side

(4) Grit can be learned to help you become more successful. One of the techniques that helps is mindfulness. Mindfulness is a practice that helps the individual stay in the moment by bringing awareness of his or her experience without judgement. This practice has been used to quiet the noise of their fears and doubts. Through this simple practice of mindfulness, individuals have the ability to stop the self-sabotaging downward spiral of hopelessness, despair, and frustration.

(5) What did you do to overcome the negative and self-sabotaging feelings of failure? Reflect on what you did, and try to use those same powerful resources to help you today.

A.   On the basis of your reading of the passage, answer any *four* of the following questions in about 30-40 word each.   (2 × 4 = 8)

    (a)   According to the passage, what are the attributes of a human?

    (b)   What is perceived as grit?

    (c)   How is 'failing' an educational and empowering part of human life?

    (d)   In what ways can grit be developed?

    (e)   How does mindfulness help?

B.   On the basis of your reading of the passage, answer any four of the following :   (1 × 4 = 4)

    (a)   While inventing the light bulb, Thomas Edison had failed _____

        (i) 1000 times   (ii) 10000 plus times

        (iii) 1000 plus times   (iv) 10000 times

    (b)   Failure is a part of _____life.

        (i) normal   (ii) common

        (iii) human   (iv) ordinary

    (c)   In paragraph 2, _____ means continue.

        (i) robots   (ii) satisfied

        (iii) persevere   (iv) flourishing

(d) In paragraph 3, the synonym of 'distressing' is _____.

(i) embarrassing   (ii) scariest

(iii) agonizing   (iv) failing

(e) _____ helps in preventing individuals from going down the lines of despair.

(i) Robotos   (ii) Satisfied

(iii) Persevere   (iv) Flourishing

Section 'B' Writing skills and Grammar
30 marks

Q. 3. Write an article in 100-120 words on the 'Importance of Good Health' for your school magazine. You are Ram/Rani.   **8**

OR

You are Shiv/Shiva of C-12, Rajouri Garden, Delhi, you wish to make a pilgrimage to Badrinath, Kedarnath and Haridwar with your family of five. Write a letter to S.S. Travels Station Road, Delhi enquiring about the schedule of their conducted tour by Deluxe buses to these places. Ask about the charges, boarding and lodging arrangements and the total time needed for the tour.

Q. 4. Yesterday morning, I was getting ready for my school. As soon as I picked up my school bag, someone knocked on the door. I opened the door and saw.

OR

A boy was playing in the park. He saw a small sparrow sitting on a stone. He went near it, still it didn't fly. He......

Q. 5. Read the passage given below and fill in the blanks by choosing the most appropriate words from the given options. (Any four)   **5**

Rohini wrote to her mother that she (a)......................into the boarding school. "I now have (b)...............friends also. One of them is Anne. I (c)......................you a picture of the two of us by e-mail. I (d)....................really very happy.

(a) (i) settled   (ii) has settled   (iii) had settled   (iv) has been settled

(b) (i) a few   (ii) the few   (iii) few   (iv) little

(c) (i) send   (ii) sent   (iii) am sending   (iv) is sending

(d) (i) is   (ii) was   (iii) am   (iv) will be

Q. 6. The following passage has not been edited. There is an error in each line against which a blank is given. Write the incorrect word and the correction in your answer-sheet against the correct blank number. (Any four)   **(4)**

		Error	Correction
Anne is in need of the true friend with	e.g.	the	a
who she can share her joys and	(a)	....	....
sorrows. She has loving parent and about	(b)	....	....
thirty people whom she can call friend.	(c)	....	....
When she is with his friends she	(d)	....	....
could talk about matters of everyday	(e)	....	....
but cannot share her feelings.			

Q. 7. Rearrange any four of the jumbled words and phrases into meaningful sentences. The first one has been done as an example.   **(4)**

(a) in/the cactus/very hot,/grows/dry places

(b) do not/leaves/have/they/but/spiny needles

(c) flowers/and/bloom/some of them/cacti/at night/are big

(d) absorb/from fog/water/in the air/cacti can

(e) is/plant/aloe vera/a/common/cactus

Section 'C' Literature Textbook and Supplementary Reading Text
30 marks

Q. 8. Read the Extract given below and answer the questions that follow :

'Perhaps it requires such depths of oppression to create such heights of character. My country is rich in the minerals and gems that lie beneath its soil, but I have always known that its greatest wealth is its people, finer and truer than the purest diamonds'.   **(1×4=4)**

(a) Whose country is referred here ?

(i) Nelson Mandela   (ii) George Washington

(iii) Mahatma Gandhi   (iv) Martin Luther King

(b) What is a country's greatest wealth ?

(i) its economy   (ii) its infrastructure

(iii) its people   (iv) its resources

(c) Who have the people been compared to _____

(d) Mention the 'Synonym of valuable stone' in the passage?

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

The following Sunday, Lencho came a bit earlier than usual to ask if there was a letter for him. It was the postman himself who handed the letter to him while the postmaster, experiencing the contentment of a man who has performed a good deed, looked on from his office. Lencho showed not the slightest surprise on seeing the money; such was his confidence - but he became angry when he counted the money. God could not have made a mistake, not could he have denied Lencho what he had requested.   (1 × 4 = 4)

(a) Was Lencho surprised on seeing the money?

(i) a little   (ii) not at all   (iii) Very much   (iv) a sort of

(b) Lencho didn't get 100 pesos from God, it was only _____.

(i) Eighty pesos (ii) Fifty pesos   (iii) Seventy pesos   (iv) Sixty pesos

(c) Lencho's belief in God was _____.

(i) strong   (ii) weak   (iii) somewhat strong   (iv) very weak

(d) Who handed the letter to Lencho?

(i) The Post master   (ii) The Clerk   (iii) The Postman   (iv) Stranger

Q. 9. Answer the following question in 30-40 words.   2 × 5 = 10

(a) Why did Wanda's house remind Maddie of Wanda's blue dress ?

(b) What does 'fire' and 'ice' stand for and what is the general opinion regarding the world ?

(c) How did Anne respond to the punishment by Mr. Keesing ? What light does it throw on her nature ?

(d) Why did Matilda (Mme Loisel) leave the ball in a hurry ? What does it show about her character ?

(e) In which queer way did Anil make a living ? (The Thief's Story)

Q. 10. Answer any one of the following question in 100-150 words :   8

Neighbours must have a cordial relationship which Lomov and Natalya do not have. Describe the first fight between them.

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

The author shares a lot of information about the bakers in his home town when he was young. He appears to be a very observant child. Should children have such keen observation powers?

Q. 11. Answer any one of the following question in 100-150 words :   8

Why was the lawyer sent to New Mullion ? Why could the lawyer not complete his work on that day ?

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

Griffin is a talented scientist but he misused his invention. The lesson we learn from his example is that the misuse of a scientific discovery can play havoc with humanity. Explain.

<div align="right">□□□</div>

		खंड-'क' (अपठित अंश)	अंक-15
1		निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़िए और पूछे गए प्रश्नों के उत्तर लिखिए-	(8)
		सृष्टि ने मानव को जो सर्वश्रेष्ठ वरदान दिए हैं उनमें से एक महत्वपूर्ण वरदान है - स्वस्थ शरीर । स्वस्थ शरीर से ही जिंदगी की सही शुरुआत होती है । अस्वस्थ शरीर में कहाँ जीवन होता है ? वह तो जीवन पर बोझ होता है । जीवन के सभी सुख, सभी सौंदर्य, सभी आनंद स्वस्थ होने पर ही मिलते हैं । स्वास्थ्य सभी जीवधारियों के आनंदमय जीवन की कुंजी है; क्योंकि स्वास्थ्य के बिना जीवधारियों की समस्त क्रियाएँ-प्रक्रियाएँ रुक जाती हैं या शिथिल हो जाती हैं । जीवन को जल भी इसीलिए कहा जाता है । जिस प्रकार रुका जल सड़ जाता है, दुर्गंधयुक्त हो जाता है, ठीक इसी प्रकार शिथिल और कर्महीन जीवन से स्वास्थ्य खो जाता है । स्वास्थ्य और खेल-कूद का परस्पर गहरा संबंध है । पशु-पक्षी हो या मनुष्य, जो खेलता-कूदता नहीं, वह उत्फुल्ल और प्रसन्न रह नहीं सकता । जब हम खेलते हैं तो हममें नया प्राणावेग, नई स्फूर्ति और नई चेतना आ जाती है । हम देखते हैं कि हवा के झोंके एक-दूसरे का पीछा करते हुए दूर-दूर तक दौड़ते हैं, वृक्षों की शाखाओं को हिला-हिलाकर अठखेलियाँ करते हैं । आकाश में उड़ते पक्षी तरह-तरह की क्रीड़ाएँ करते हैं । हमें भी जीवन-जगत् से प्रेरणा लेते हुए खुले मन से खेल-कूद में भाग लेना चाहिए ।	
(क)		स्वास्थ्य और खेल-कूद परस्पर एक दूसरे के पूरक हैं - कैसे ?	(2)
(ख)		उदाहरण देते हुए सिद्ध कीजिए कि प्रकृति भी खेल-कूद पसंद करती है ।	(2)
(ग)		स्वास्थ्य का कर्म से क्या संबंध है ?	(2)
(घ)		जीवन को जल क्यों कहा गया है ?	(1)
(ङ)		उपर्युक्त गद्यांश के लिए उपयुक्त शीर्षक लिखिए ।	(1)
2		निम्नलिखित काव्यांश को ध्यानपूर्वक पढ़िए और पूछे गए प्रश्नों के उत्तर लिखिए- अपने नहीं अभाव मिटा पाया जीवन भर पर औरों के सभी अभाव मिटा सकता हूँ । तूफानों-भूचालों की भयप्रद छाया में, मैं ही एक अकेला हूँ जो गा सकता हूँ । मेरे 'मैं' की संज्ञा भी इतनी व्यापक है, इसमें मुझ-से अगणित प्राणी आ जाते हैं । मुझको अपने पर अदम्य विश्वास रहा है । मैं खंडहर को फिर से महल बना सकता हूँ । जब-जब भी मैंने खंडहर आबाद किए हैं, प्रलय-मेघ भूचाल देख मुझको शरमाए । मैं मजदूर मुझे देवों की बस्ती से क्या, मैंने अगणित बार धरा पर स्वर्ग बनाए ।	(7)
(1)		उपर्युक्त काव्य-पंक्तियों में किसका महत्व प्रतिपादित किया गया है ?	(1)
		स्वर्ग के प्रति मजदूर की विरक्ति का क्या कारण है ?	(1)

(2)		
(3)	किन कठिन परिस्थितियों में भी मजदूर ने अपनी निर्भयता प्रकट की है ?	(1)
(4)	मेरे 'मैं' की संज्ञा भी इतनी व्यापक है इसमें मुझ-से अगणित प्राणी आ जाते हैं ।	(2)
	उपर्युक्त पंक्ति का भाव स्पष्ट कीजिए ।	(2)
(5)	अपनी शक्ति और क्षमता के प्रति मजदूर ने क्या कहकर अपना आत्म-विश्वास प्रकट किया है ?	

	खंड-'ख' (व्यावहारिक व्याकरण)	अंक-15
3 1	निर्देशानुसार किन्हीं तीन का उत्तर लिखिए- युवा धनुर्धर को सेनापति ने युद्ध में भेजा । (मिश्र वाक्य में बदलिए)	(1☐3=3)
2	मैं विद्यालय पहुँचा परन्तु घंटी बज चुकी थी । (सरल वाक्य में बदलिए)	
3	जो मन लगाकर काम करते हैं, उन्हें सफलता मिलती है । (आश्रित उपवाक्य छाँटकर भेद भी लिखिए)	
4	<u>मेरी माँ चाहती हैं</u> कि मैं अच्छा इंसान बनूँ । (रेखांकित उपवाक्य का भेद लिखिए)	
4	निम्नलिखित वाक्यों में से किन्हीं चार वाक्यों का निर्देशानुसार वाच्य परिवर्तन कीजिए-	(1☐4=4)
1	मोहन से पैदल चला नहीं जाता । (कर्तृवाच्य में बदलिए)	
2	आओ, वहाँ बैठे । (भाववाच्य में बदलिए)	
3	किसान खेतों में बीज बोता है । (कर्मवाच्य में बदलिए)	
4	छात्रों द्वारा पाठ याद किया जाता है । (कर्तृवाच्य में बदलिए)	
5	पक्षी आकाश में उड़ेंगे । (कर्मवाच्य में बदलिए)	
5	5 निम्नलिखित वाक्यों में से किन्हीं चार वाक्यों के रेखांकित पदों का पद-परिचय लिखिए-	(1☐4=4)
1	सूर्योदय हुआ <u>और</u> पक्षी चहचहाने लगे ।	
2	<u>वीर</u> पुरुषों का सर्वत्र आदर किया जाता है ।	
3	अध्यापिका ने बच्चों को एक कहानी <u>सुनाई</u> ।	
4	अवनि <u>कल</u> आएगी ।	
5	<u>इलाहाबाद</u> में तीन नदियों का संगम है ।	
6	निम्नलिखित प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए –	(1☐4=4)
1	'वीर' रस का एक उदाहरण लिखिए ।	
2	निम्नलिखित काव्य पंक्तियों में रस पहचान कर लिखिए- एक ओर अजगरहि लखि, एक ओर मृगराय ।	

3 4 5	विकल बटोही बीच ही परयो मूरछा खाय || 'निर्वेद' किस रस का स्थायी भाव है ? करुण रस' का स्थायी भाव क्या है ? घृणित वस्तुओं को देखकर अथवा उनके बारे में सुनकर मन में जो भाव उत्पन्न होता है, उससे किस रस की व्युत्पत्ति होती है ?	

	खंड-'ग' (पाठ्य पुस्तक एवं पूरक पाठ्य पुस्तक)	अंक- 30
7	निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए- मैं नहीं जानता इस संन्यासी ने कभी सोचा था या नहीं कि उसकी मृत्यु पर कोई रोएगा लेकिन उस क्षण रोने वालों की कमी नहीं थी	(नम आँखों को गिनना स्याही फैलाना है |) इस तरह हमारे बीच से वह चला गया जो हममें से सबसे अधिक छायादार फल-फूल गंध से भरा और सबसे अलग, सबका होकर, सबसे ऊँचाई पर, मानवीय करुणा की दिव्य चमक में लहलहाता खड़ा था	जिसकी स्मृति हम सबके मन में (जो उनके निकट थे) किसी यज्ञ की पवित्र आग की आँच की तरह आजीवन बनी रहेगी	मैं उस पवित्र ज्योति की याद में श्रद्धानत हूँ		(5)
1 2 3	नम आँखों को गिनना स्याही फैलाना है ' ऐसा लेखक ने क्यों कहा ? लेखक ने फ़ादर के लिए किन-किन विशेषणों का प्रयोग किया है और क्यों ? गद्यांश में फ़ादर की स्मृति को किसके समान बताया गया है ?	(2) (2) (1)
8 1 2 3 4 5	निम्नलिखित प्रश्नों में से किन्ही चार प्रश्नों के उत्तर संक्षेप में लिखिए- हालदार साहब के लिए कौन-सा कौतूहल दुर्दमनीय हो उठा, जिसे पानवाले से पूछे बिना नहीं रह सके ? बालगोबिन भगत की दिनचर्या लोगों के अचरज का कारण क्यों थी ? लेखिका मन्नू भंडारी अपने ही घर में हीन भावना का शिकार क्यों हो गई ? उस्ताद बिस्मिल्ला खां काशी छोड़कर अन्यत्र क्यों नहीं जाना चाहते थे ? नवाब साहब खीरा खाने के अपने ढंग के माध्यम से क्या दिखाना चाहते थे ?	(2□4=8)
9	निम्नलिखित काव्यांश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए- ऊधौ, तुम हौ अति बड़भागी | अपरस रहत सनेह तगा तैं, नाहिन मन अनुरागी | पुरइनि पात रहत जल भीतर, ता रस देह न दागी | ज्यों जल माहँ तेल की गागरि, बूँद न ताकौं लागी | प्रीती-नदी में पाऊँ न बोरयौ, दृष्टि न रूप परागी | 'सूरदास' अबला हम भोरी, गुर चांटी ज्यों पागी ||	(5)

	गोपियों ने क्या कहकर ऊद्धव पर व्यंग्य किया है ?	
1	गोपियों ने क्या कहकर ऊद्धव पर व्यंग्य किया है ?	(1)
2	गोपियों ने ऊद्धव के व्यवहार की तुलना किस-किस से की है और क्यों ?	(2)
3	गोपियों ने अपनी तुलना गुड़ से लिपटी चींटियों से क्यों की है ?	(2)

10	निम्नलिखित प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर संक्षेप में लिखिए-	(2D4=8)
1	'संगतकार' कविता के आधार पर स्पष्ट कीजिए कि संगतकार जैसे व्यक्ति सर्वगुण सम्पन्न होकर भी समाज में आगे न आकर प्रायः पीछे ही क्यों रहते हैं ?	
2	धनुष भंग करने वाली सभा में एकत्रित जन *हाय-हाय* क्यों पुकारने लगे थे ? 'राम-लक्ष्मण परशुराम संवाद' पाठ के आधार पर अपने विचार लिखिए ।	
3	वर्तमान संदर्भों में 'कन्यादान' कविता कितनी उपयुक्त है ? स्पष्ट कीजिए|	
4	सामाजिक क्रान्ति में साहित्य की भूमिका महत्वपूर्ण होती है । 'उत्साह' कविता के आधार पर इस कथन की समीक्षा कीजिए ।	
5	यह 'दंतुरित मुस्कान' कविता में 'बाँस और बबूल' किसके प्रतीक बताए गए हैं ? इन पर शिशु की मुस्कान का क्या असर होता है ?	

11	'माता का अंचल' पाठ में भोलानाथ द्वारा चूहे के बिल में पानी डालना बच्चों की किस मनोवृत्ति को प्रकट करता है ? क्या यह उचित है ? पशु-पक्षियों के संरक्षण के उपाय भी बताइए ।	(4)

अथवा

	समाचार-पत्रों की जन-जागरण में क्या भूमिका होती है? 'जॉर्ज पंचम की नाक' पाठ के आधार पर स्पष्ट कीजिए ।	

खंड-'घ'	अंक-20
(लेखन)	

12	निम्नलिखित में से किसी एक विषय पर दिए गए संकेत बिन्दुओं के आधार पर लगभग 200 से 250 शब्दों में निबंध लिखिए-	(10)
1	आपदा प्रबंधन	
	• प्रस्तावना	
	• प्राकृतिक आपदाएँ	
	• दोषी कौन	
	• सरकार की जिम्मेदारी	
	• नागरिकों के कर्तव्य	
	• उपाय	
3	अपने लिए जिए, तो क्या जिए	
	• प्रस्तावना	
	• मनुष्य में बढ़ती स्वार्थपरता	
	• परोपकार की प्रकृति और पूर्वजों की सीख	
	• मानव जीवन की सार्थकता	
	• उपसंहार	
13	दूरदर्शन के महानिदेशक को पत्र लिखकर राष्ट्रीय एकता तथा साम्प्रदायिक सदभाव बढ़ाने वाले कार्यक्रम प्रसारित करने का आग्रह कीजिए ।	(5)

अथवा

	'सामाजिक सेवा कार्यक्रम' के अंतर्गत किसी गाँव में सफ़ाई अभियान के अनुभवों का उल्लेख करते हुए अपने मित्र को पत्र लिखिए ।	
14	आपके मोहल्ले के पार्क में लड़कियों को आत्म रक्षा के गुण सिखाने हेतु एक कैंप लगाया जा रहा है, इसके लिए एक विज्ञापन लगभग 20-25 शब्दों में तैयार कीजिए ।	(5)

SUMMATIVE ASSESSMENT –I (2019-20)

MATHEMATICS
CLASS-X

Time: 3 to 3½ hours   M.M.: 80

General Instructions

i)   All questions are compulsory.

ii)   The questions paper consists of 34 questions divided into four sections A, B, C and D. Section A comprises of 10 questions of 1 mark each, Section B comprises of 8 questions of 2 marks each, Section C comprises of 10 questions of 3 marks each and Section D comprises of 6 questions of 4 marks each.

iii)   Question numbers 1 to 10 in Section A are multiple choice questions where you are to select one correct option out of the given four.

iv)   There is no overall choice. How ever, internal choice has been provided in 1 question of two marks, 3 questions of three marks each and 2 questions of four marks each. You have to attempt only one of the alternatives in all such questions.

v)   Use of calculators is not permitted.

Section-A

Question numbers 1 to 10 are of one mark each.

1.   Euclid's Division Lemma states that for any two postive integers a and b, there exist unique integres q and r such that a=bq+r, where r must satisfy.

(A) $l < r < b$ (B) $0 < r < b$ (C) $0 \le r < b$ (D) $0 < r \le b$

2.   In Fig.1, the graph of a polynomial p(x) is shown. The number of zeroes of p(x) is

(A)   4   (B)   1   (C)   2   (D)   3
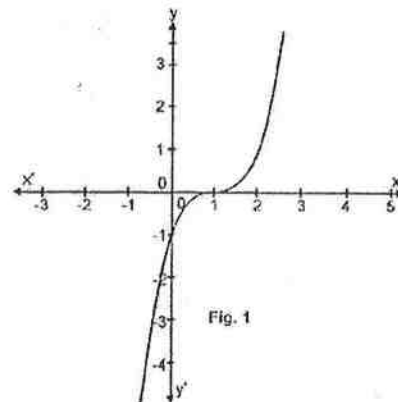
Fig. 1

3.   In Fig. 2, if DE ‖ BC, then x equals
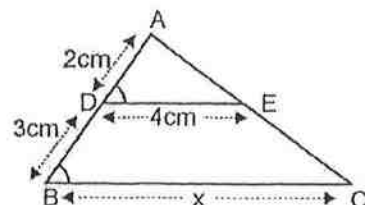
(A)   6 cm ‖   (B)   8 cm

(C)   10 cm   (D)   12.5 cm

Fig. 2

13

4. If $\sin 3\theta = \cos(\theta-6°)$, where (3θ) and $(\theta-6°)$ are both acute angles, then the value of θ is
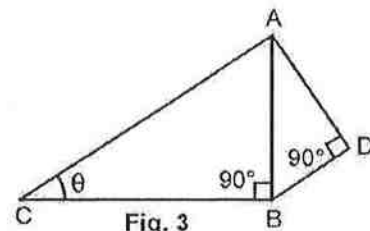
(A)   18°   (B)   24°   (C)   36°   (D)   30°

5. Given that $\tan\theta = \dfrac{1}{\sqrt{3}}$, the value of $\dfrac{cosec^2\theta - sec^2\theta}{cosec^2+sec^2\theta}$ is

(A)   -1   (B)   1   (C) $\dfrac{1}{2}$ (D) $-\dfrac{1}{2}$

6. In Fig. 3, AD=4 cm, BD = 3 cm and CB = 12 cm, then $\cot\theta$ equals

(A) $\dfrac{3}{4}$ (B) $\dfrac{5}{12}$

(C) $\dfrac{4}{3}$ (D) $\dfrac{12}{5}$

Fig. 3

7. The decimal expansion of $\dfrac{147}{120}$ will terminate after how many places of decimal?

(A)   1   (B)   2   (C)   3   (D)   will not terminate

8. The pair of linear equations $3x+2y=5$; $2x-3y=7$ have

(A)   One solution   (B)   Two solutions
(C)   Many Solutions   (D)   No solution

9. If $\sec A = cosec B = \dfrac{15}{7}$, then A+B is equal to

(A)   Zero   (B)   90°   (C)   <90°   (D)   >90°

10. For a given data with 70 observations the 'less then ogive' and the 'more than ogive' intersect at (20.5, 35). The median of the data is

(A)   20   (B)   35   (C)   70   (D)   20.5

SECTION-B

Question numbers 11 to 18 carry 2 marks each.

11. Is $7\times5\times3\times2+3$ a composite number? Justify your answer.

12. Can (x-2) be the remainder on division of a polynomial p(x) by (2x+3)? Justify your answer.

13. In Fig. 4, ABCD is a rectangle.

Find the values of x and y.

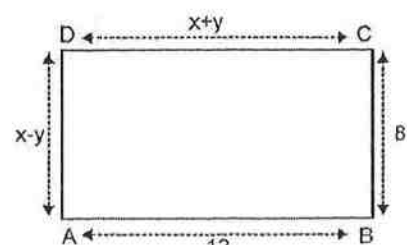Fig. 4

14

14. If $7\sin^2\theta + 3\cos^2\theta = 4$, show that $\tan\theta = \dfrac{1}{\sqrt{3}}$

OR

If $\cot\theta = \dfrac{15}{8}$, evaluate $\dfrac{(2+2\sin\theta)(1-\sin\theta)}{(1+\cos\theta)(2-2\cos\theta)}$

15. In Fig. 5, DE‖AC and DF‖AE. Prove that
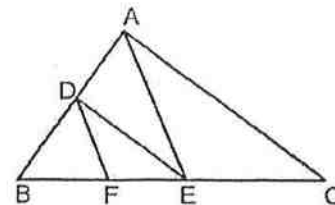
$$\frac{FE}{BF} = \frac{EC}{BE}$$

Fig. 5

16. In Fig. 6, AD ⊥ BC and $BD = \dfrac{1}{3}CD$.
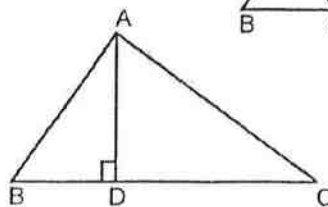
Prove that $2CA^2 = 2AB^2 + BC^2$

Fig. 6

17. The following distribution gives the daily income of 50 workers of a factory:

Daily income (in rupees)	100-120	120-140	140-160	160-180	180-200
Number of Workers	12	14	8	6	10

Write the above distribution as less than type cumulative frequency distribution.

18. Find the mode of the following distribution of marks obtained by 80 students:

Marks obtained	0-10	10-20	20-30	30-40	40-50
Number of students	6	10	12	32	20

SECTION C

Question numbers 19-28 carry 3 marks each.

19. Show that any positive odd integer is of the form 4q+1 or 4q+3 where q is a positive integer.

20. Prove that $\dfrac{2\sqrt{3}}{5}$ is irrational.

OR

Prove that $\left(5 - \sqrt{2}\right)$ is irrational.

21. A person can row a boat at the rate of 5km/hour in still water. He takes thrice as much time in going 40 km upstream as in going 40 km downstream. Find the speed of the stream.

15

OR

In a competitive examination, one mark is awarded for each correct answer while $\frac{1}{2}$ mark is deducted for each wrong answer. Jayanti answered 120 questions and got 90 marks. How many questions did she answer correctly?

22. If α, β are zeroes of the polynomial $x^2-2x-15$, then form a quadratic polynomial whose zeroes are (2α) and (2β).

23. Prove that $(\text{cosec}\theta-\sin\theta)(\sec\theta-\cos\theta) = \dfrac{1}{\tan\theta+\cot\theta}$.

24. If $\cos\theta+\sin\theta = \sqrt{2}\cos\theta$, show that $\cos\theta-\sin\theta=\sqrt{2}\sin\theta$

25. In Fig. 7, $AB \perp BC$, $FG \perp BC$ and

DE $\perp$ AC. Prove that

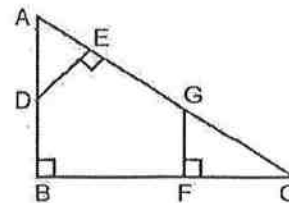$\triangle ADE \sim \triangle GCF$

Fig. 7

26. $\triangle ABC$ and $\triangle DBC$ are on the same base

BC and on opposite sides of BC and O is

the point of intersections of AD and BC.

Prove that $\dfrac{\text{area}(\triangle ABC)}{\text{area}(\triangle DBC)} = \dfrac{AO}{DO}$
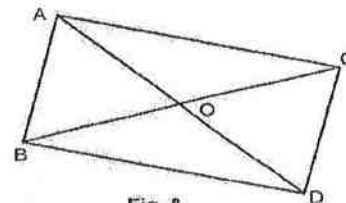

Fig. 8

27. Find mean of the following frequency distribution, using step-deviation method:

Class	0-10	10-20	20-30	30-40	40-50
Frequency	7	12	13	10	8

OR

The mean of the following frequency distribution is 25. Find the value of p.

Class	0-10	10-20	20-30	30-40	40-50
Frequency	2	3	5	3	p

28. Find the median of the following data

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
Frequency	5	3	4	3	3	4	7	9	7	8

SECTION D

Question numbers 29 to 34 carry 4 marks each

29. Find other zeroes of the polynomial $p(x) = 2x^4+7x^3-19x^2-14x+30$ if two of its zeroes are $\sqrt{2}$ and $-\sqrt{2}$.

30   Prove that the ratio of the areas of two similar triangles is equal to the ratio of the squares of their corresponding sides.

OR

Prove that in a triangle, if the square of one side is equal to the sum of the squares of the other two sides, then the angle opposite to the first side is a right angle.

31.   Prove that $\dfrac{\sec\theta+\tan\theta-1}{\tan\theta-\sec\theta+1} = \dfrac{\cos\theta}{1-\sin\theta}$

OR

Evaluate $\dfrac{\sec\theta\ \csc(90°-\theta) - \tan\theta\ \cot(90°-\theta) + \sin^2 55° + \sin^2 35°}{\tan 10° \tan 20° \tan 60° \tan 70° \tan 80°}$

32.   If $\sec\theta+\tan\theta = p$, prove that $\sin\theta = \dfrac{p^2-1}{p^2+1}$

33.   Draw the graphs of following equations :

$2x-y = 1$, $x+2y = 13$ and

(i)   find the solution of the equations from the graph.

(ii)   shade the triangular region formed by the lines and the y-axis

34.   The following table gives the production yield per hectare of wheat of 100 farms of a village :

Production yield in kg/hectare	50-55	55-60	60-65	65-70	70-75	75-80
Number of farms	2	8	12	24	38	16

Change the above distribution to more than type distribution and draw its ogive.

SUMMATIVE ASSESSMENT –I (2019-20)

CLASS-X   **SUBJECT- SCIENCE**   **TIME: - 3 Hours**   **MM: 80**

General Instructions:

i. The question paper comprises two sections, A and B. You are to attempt both the sections.

ii. All questions are compulsory.

iii. All questions of Section A and B are to be attempted separately.

iv. There is an internal choice in two questions of three marks each and one question of five marks.

v. Question numbers 1 and 2 in Section-A are one mark question. They are to be answered in one word or in one sentence.

vi. Question numbers 3 to 5 in Section- A are two marks questions. These are to be answered in 30 words each.

vii. Question numbers 6 to 15 in Section-A are three marks questions. These are to be answered in about 50 words each.

viii. Question numbers 16 to 21 in Section-A are 5 marks questions. These are to be answered in 70 words each.

ix. Question numbers 22 to 27 in Section- B are based on practical skills. Each question is a two marks question. These are to be answered in brief

Section A

1. Which sodium compound is used as on antacid in medicine.

2. Give the function and source of Insulin hormone.

3. What do you observe when penta hydrated copper-Sulphate crystals are heated? Give reaction also.

4. Name the unit of inheritance. Write its functions.

5. What will be the amount of energy available to the organism of the 2nd trophic level of a food chain, if the energy available at the first trophic level is 10,000 joules.

6. Four elements P, Q, R and S have atomic numbers 12, 13, 14, 15 respectively.
   Answer the following questions giving reasons:
   a. What is the valency of P.

b. Classify these elements as metals and non metals.

c. Which of these elements will form basic onides.

7. a. Write Name & formula of ore of Al, Cu & Zn.
   b. Explain the Refining of metal with suitable example.

8. Write any three advantages of vegetative propagation.

9. Draw a sectional view of human female reproductive system and label the part where:

   a. Eggs develop

   b. Fertilizations take place.

   c. Fertilized egg get implanted.

10. Name the eye defect in which eye lens become cloudy on milky. Name the method for its correction. A person uses a lens of power - 2.0 D for correcting his distant vision and for correcting his near vision he used lens of power + 2.0 D. Calculate the focal length of lenses required to correct these defects.

11. Define the following terms-
    a) Unisexual and Bisexual
    b) Self and cross Pollination

12. What is the difference between a direct current and an alternating current? How many times does AC used in India change direction in one second?

OR

What is the role of fuse used in series with any electrical appliance? Why should a fuse with defined rating not be replaced by one with a larger rating?

13. Calculate the energy transferred by a 5A current flowing through a resistor of 2 Ohms for 30 minutes.

14. Sahil lives in Delhi and is much concerned about the increasing electricity bill of the house. He look some steps to save electricity and succeeded in doing so:

    i. Mention any two steps that Sahil might have taken to save electricity.

    ii. Which alternative source of energy would you suggest Sahil to use?

15. a. Write the electron-dot structure of Sodium, Oxygen and Magnesium.

    b. Show the formation of MgO by the transfer of electrons.

    c. What are the ions present in these compounds?

16. Draw the ray diagram in each case to show the position and nature of the image formed

when the object is placed:

i. At the centres of curvature of a concave mirror.

ii. Between the pole P and focus F of a concave mirror.

iii. In front of a convex mirror.

iv. At 2F of a convex lens.

v. At infinity in front of a concave lens.

17. In a domestic circuit 5 appliances are connected in parallel with a 220 volt supply. Find the Power consumed if they operated for 6 hr/day for 30 days. Also find the electricity bill if 1 unit costs 4 Rs./unit. Draw its neat diagram.

18. a. Draw a meat diagram of on excretory unit of human kidney and label the following parts.

i. Bourman's capsule

ii. Renal Artery

iii. Glo merulus

iv. Collecting diut

b. Mention any two functions of the kidney.

c. Mention any two substances which are selectively re absorbed as the filtrate flows along the tubular part of this unit.

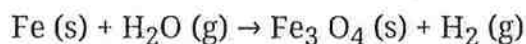19. a. What happens chemically when quick lime is added to water?
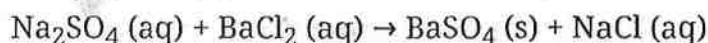
b. Balance the following chemical equation:

$MnO_2 + HCl \rightarrow MnCl_2 + Cl_2 + H_2O$

c. What is decomposition reaction? Explain it with suitable example.

OR

a. Balance the chemical equation:

$Fe\ (s) + H_2O\ (g) \rightarrow Fe_3O_4\ (s) + H_2\ (g)$

b. Identify the type of reaction in the equation given below:

$Na_2SO_4\ (aq) + BaCl_2\ (aq) \rightarrow BaSO_4\ (s) + NaCl\ (aq)$

c. When copper powder is heated in a Cheinadish the surface of copper powder becomes coated with black colour substance:

i. What is that black substance.

ii. Why has this black coloured substance formed.

iii. Write the chemical equation of the reaction take place.

20. a) Explain the menstrual cycle in Human female briefly.
    b) Difference between Tropic and Nastic Movement.

21. Explain the term Rancidity, Corrosion with suitable example.

SECTION -B

PRACTICAL SKILL BASED QUESTIONS)

22. Write the type of reaction and observation that can be made when:
    a. Iron filling are added to copper sulphate solution.
    b. When ferrous sulphate crystals are heated.

23. Calculate the current 'I' in the following circuit:
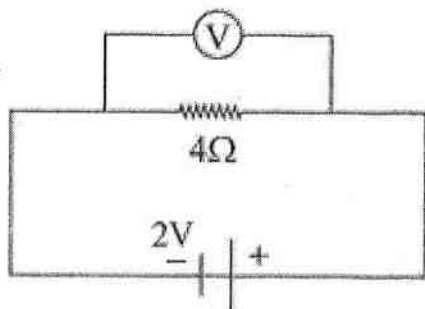
24. Draw a diagram showing various parts of an embryo of a dicot seed.

25. How does acetic acid react with sodium bicarbonate? Give chemical equation for this chemical change.

26. An object is placed at $2F_1$ in front of a convex lens. What is the-
    a. Portion
    b. Size
    c. Nature of image
    d. Magnification.

27. Mention the observation of budding in Yeast.

Note: Q. 1 to Q. 7 each of 1 mark. Q. 8 to Q.18 each of 3 marks.
       Q. 19 to Q. 26 each of 5 marks.

Q : 1 Which one of the following type of resources is iron ore-

    (a) Renewable   (b) Flow   (c) Biotic   (d) Non - -renewable

Q; 2 Which one of the following is a Rabi crop?

    (a) Rice   (b) Millets   (c) Gram   (d) Cotton

Q: 3 When was first cement plant set up?

    (a) 1905   (b) 1904   (c) 1907   (d) 1910

Q: 4 What do you mean by federal division of power?

Q: 5 What are the criteria for the classification of economic activities?

Q: 6 In which year and by whom was the COPRA enacted?

Q: 7 What is NABARD?

Q: 8 Difference between the organic and inorganic industries.

Q: 9 Explain the functions of RBI.

Q: 10 What is meant by two types of natural resources? Give one example of each.

Q: 11 What do you know about Krishna-Godavari dispute?

Q: 12 "Social divisions of one kind or another exist in most countries." In the light of above statement, mention a few basis of social division in India.

Q: 13 In India women's political representation is very low. Justify.

Q: 14 Explain concerted efforts to modern ire agriculture by government.

Q: 15 What facts shows that modern forms of money are different from the early forms of money?

Q: 16 why are demand deposits considered as money?

Q: 17 How are the three sectors of economy interdependent?

Q: 18 What development goals encourage women to work outside their home?

Q: 19 How has globalisation been advantageous to both the producers as well as consumers in India? Explain.

Q: 20 "Secularism is an ideology of some political parties or persons but it is one of the foundations of our country". Explain this statement.

Q: 21 Why are cotton and textile industry spread all over the India? Explain five reasons with suitable examples.

Q: 22 Explain the different forms of occurrence of minerals.

Or

'Railways are the principal mode of transportation in India'. Explain.

Q: 23 Explain the features of third tier of the rural government.

Q: 24 Can you explain any five challenges and problems faced by Indian Democracy?

Or

Examine the basic features of the caste system prevailing in India.

Q: 25 Explain the factors which facilitate Globalisation.

Or

"Be careful! That's our world you are playing with! Some day you'll have to pay a price!" How would you prioritize the facts behind this warning?

Q: 26 Mark the following s in map of India.

(a) Iron ore mines- Durg, Bellary, Bailadila

(b) Coal Mines – Bokaro, Neyveli