



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
वार्षिक परीक्षा / Annual Examination 2024-25

कक्षा / Class : IX

अवधि/Duration: 3 Hrs

विषय / Subject : English

अधिकतम अंक/Maximum Marks: 80

सामान्य निर्देश / General Instructions:

1. This question paper has 4 sections
 - a. Section A: Reading: (20 Marks)
 - b. Section B: Writing: (24 Marks)
 - c. Section C: Grammar (10 Marks)
 - d. Section C: Literature: (26 Marks)
2. Numbers to the right indicate the marks.
3. Read all the questions carefully and attempt all the questions.

Q.1: Read the passage and answer the questions that follow

The Emergence of Electric Vehicles

The 21st century has seen a remarkable shift in the transportation landscape, largely driven by the emergence of electric vehicles (EVs). Once perceived as a futuristic concept, EVs have now become a central part of the global effort to create sustainable and eco-friendly transportation solutions. Governments, automobile manufacturers, and consumers are increasingly embracing EVs, recognizing their potential to transform mobility and reduce environmental impact.

One of the primary factors propelling the rise of EVs is the growing awareness of environmental issues, particularly climate change. Traditional internal combustion engine vehicles contribute significantly to greenhouse gas emissions, primarily through the release of carbon dioxide (CO₂). These emissions have been linked to global warming, air pollution, and adverse health effects. EVs, by contrast, operate without emitting tailpipe pollutants, offering a cleaner alternative. Additionally, as energy grids worldwide shift toward renewable sources like wind and solar power, the overall environmental footprint of EVs is further reduced.

Advancements in technology have also played a pivotal role in the widespread adoption of electric vehicles. Battery technology, in particular, has seen significant innovation, leading to improved energy storage, longer ranges, and reduced costs. Lithium-ion batteries, now the standard in EVs, provide the capability for vehicles to travel hundreds of miles on a single

charge. Fast-charging networks have also expanded, addressing one of the main concerns for potential EV buyers: range anxiety. The ability to recharge batteries quickly has made long-distance travel more feasible for EV owners.

Governments worldwide have introduced policies and incentives to encourage the adoption of EVs. Subsidies, tax credits, and rebates are commonly offered to lower the upfront cost of purchasing an EV. Some countries have set ambitious targets to phase out gasoline-powered vehicles entirely within the next few decades. For example, Norway aims to have all new cars sold be zero-emission by 2025. These policies, combined with increasing investment in charging infrastructure, have created a conducive environment for the growth of EVs.

The automobile industry has responded to this shift with significant innovation and competition. Major manufacturers like Tesla, General Motors, and Nissan have pioneered the development of advanced EV models, while newer entrants to the market are driving innovation further. As a result, consumers now have a wide variety of options, ranging from compact cars to luxury vehicles and commercial trucks.

Despite these advancements, challenges remain. The production of EV batteries requires rare earth materials such as lithium and cobalt, which have their own environmental and ethical implications. Additionally, the development of a comprehensive charging infrastructure remains uneven across different regions, creating barriers to widespread adoption. However, with continued technological progress and policy support, these obstacles are expected to diminish over time.

The emergence of electric vehicles marks a significant turning point in the transportation industry. By reducing dependence on fossil fuels and lowering emissions, EVs offer a sustainable path forward. As innovation continues and adoption increases, the dream of a cleaner, greener future on our roads is becoming a reality.

1. What is one key reason for the rise of electric vehicles?

01

a) Increased fuel prices

b) Environmental awareness and climate change concerns

c) Popularity of traditional vehicles

d) Decrease in renewable energy sources

2. What technology has been most critical to the success of EVs?

01

a) Solar panel technology

b) Lithium-ion battery technology

c) Wind turbine advancements

d) Advanced engine designs

3. Which country has set a goal for all new cars sold to be zero-emission by 2025?

01

a) United States

b) Norway

c) Japan

d) China

4. What is a major challenge faced by the EV industry?

01

a) Lack of consumer interest b) Ethical issues in battery material sourcing

c) Decreasing government incentives d) Short vehicle lifespan

5. How do electric vehicles contribute to reducing environmental impact? 02

6. What measures have governments taken to promote the adoption of EVs? 02

7. Define the word "sustainable" in the context of the passage. 02

Q.2: Read the passage and answer the questions that follow

Adventure Sports: Embracing the Thrill

Adventure sports have emerged as a popular recreational activity, appealing to those who seek thrill and excitement beyond the mundane. These sports not only provide adrenaline-pumping experiences but also push individuals to overcome their fears and test their limits. From scaling towering mountains to diving into the depths of the oceans, adventure sports offer an escape from routine and an opportunity to explore the extraordinary.

One of the most appealing aspects of adventure sports is their variety. Activities such as skydiving, bungee jumping, rock climbing, scuba diving, and white-water rafting cater to diverse preferences and skill levels. Each sport presents its unique challenges, requiring physical stamina, mental strength, and often, teamwork. For instance, trekking to remote mountain peaks demands endurance and a strong will, while skydiving requires the courage to leap into the unknown.

Adventure sports are not just about thrill-seeking; they also offer numerous physical and psychological benefits. Engaging in these activities enhances physical fitness, builds core strength, and improves balance and coordination. Moreover, the psychological benefits are profound. Overcoming fears, stepping out of one's comfort zone, and achieving personal milestones foster confidence and resilience. Participants often report a sense of accomplishment and an improved ability to handle stress.

Safety is a critical concern in adventure sports. While the risks are part of the allure, it is essential to minimize them through proper training, equipment, and adherence to safety protocols. Certified instructors, reliable gear, and a cautious approach are non-negotiable for a safe and enjoyable experience. Neglecting these aspects can lead to accidents, highlighting the importance of being well-prepared.

The growing popularity of adventure sports has also contributed to the development of eco-tourism. Destinations known for their adventure offerings, such as the Himalayas, the Alps, and Australia's Great Barrier Reef, attract enthusiasts from around the globe. This influx of tourists has created opportunities for local communities to thrive, promoting sustainable practices and environmental conservation.

In conclusion, adventure sports embody the essence of living boldly and embracing challenges. They inspire people to connect with nature, discover their inner strength, and create unforgettable memories. While the risks involved cannot be ignored, the rewards—both tangible and intangible—make the experience worthwhile. For those seeking to break

free from monotony and experience life from a new perspective, adventure sports offer an ideal gateway.

1. What is one of the key benefits of adventure sports? 01
 - A. Increased social media following
 - B. Improved physical and mental fitness
 - C. Guaranteed financial success
 - D. Elimination of risks
2. Which of the following is NOT mentioned as an adventure sport in the passage? 01
 - A. Rock climbing
 - B. Scuba diving
 - C. Football
 - D. White-water rafting
3. How do adventure sports contribute to eco-tourism? 01
 - A. By creating employment opportunities in urban areas
 - B. By promoting sustainable practices and conservation
 - C. By encouraging high-risk behaviors
 - D. By discouraging travel to remote locations
4. What is crucial for safety in adventure sports? 01
 - A. Expensive equipment
 - B. Certified instructors and safety protocols
 - C. High levels of risk-taking
 - D. Avoiding training sessions
5. Mention two psychological benefits of adventure sports discussed in the passage. 02
6. How can adventure sports benefit local communities? 02
7. What does the phrase "stepping out of one's comfort zone" mean in the context of the passage? 02

SECTION B: WRITING (24 MARKS)

Q. 3: A guest lecture on Coping with Exam Stress has been organised in your school for students of classes 9 to 12. Write a notice to all the students to attend the lecture compulsorily. The speaker is a renowned one in his field. You are Jaydeep/Jayashree, In Charge, community Outreach, Sahyadri School Pune. 04

Q.4: Jaya and Viraj are discussing about the music system they want to gift their friend on his/her birthday. Prepare an imaginary conversation between Jaya and Viraj over which music system should they buy. 05

Q.5: You have recently attended a weeklong aeromodelling workshop at Nehru Science Centre, Mumbai. It was an amazing experience. Share your thought with your friend Madhur/Madhura in a letter written to him/her. You are Venkat/Vaani from Suratm Gujarat. 07

Q.6: "Picture yourself exploring an old, abandoned mansion with your friends on a rainy afternoon. You discover a hidden door behind a bookshelf, leading to a secret room filled

with dusty books, strange artifacts, and an old diary. The diary reveals a fascinating mystery about the mansion's past. Describe your exploration and what you uncovered."

Write a paragraph about your adventure in the abandoned mansion, highlighting the mystery you discovered and how it made you feel.

08

SECTION C: GRAMMAR (10 MARKS)

Q.7 A: Fill in the blanks with suitable options from the bracket and complete the sentences.

03

The knowledge and eloquence that people (1) through travelling is usually perceived as the best (2) in life. It is the inquisitive human nature that forces people to seek (3) experiences and to set out on an exploration trip.

- | | | | |
|-----------------|--------------|---------------|--------------|
| 1. a) purchase | b) exact | c) gain | d) nurture |
| 2. a) completed | b) fulfilled | c) conclusion | d) useful |
| 3. a) thriving | b) throbbing | c) thwarting | d) thrilling |

Q.8: Rearrange the words and prepare meaningful sentences

03

- a) the / great / healer / time / is
- b) rise / early / day / get / may / and / you / name / a / all / lie / to
- c) gifts / from / dangerous / enemies / are

Q.9: The following passage has not been edited and has a word missing in each line. Identify the error if any and write the incorrect and correct word in your answer sheet. Write no error if there is no error in the line.

04

The small town was the

foot of the mountains. Most the

people were farmers. There traders also

in the town. Though not rich were happy and contented.

Before missing word after.

(a) _____

(b) _____

(c) _____

(d) _____

SECTION D: LITERATURE (26 Marks)

Q. 8. Read the given excerpts and answer the questions briefly, for ANY TWO excerpts, of the three, given.

Read the extract carefully and answer the questions:

(4x2=8)

a) My chair-car was profitably well-filled with people of the kind one usually sees on chair-cars. Most of them were ladies in brown-silk dresses cut with square yokes, with lace insertion and dotted veils, who refused to have the windows raised. Then there was the usual number of men who looked as if they might be in almost any business and going almost anywhere. I leaned back idly in chair No. 7, and looked with tepidest curiosity at the small, black, bald-spotted head just visible above the back of No. 9.

i. What was the narrator's observation about the people in the chair-car?

- A. They were all young and energetic.
- B. They were typical of what one usually sees on chair-cars.
- C. They were dressed in expensive designer clothes.
- D. They were mostly businessmen on official trips.

ii. How does the narrator describe the ladies in the chair-car?

- A. Wearing floral dresses with bright patterns
- B. Dressed in brown-silk dresses with square yokes and lace insertion
- C. Wearing casual and modern outfits
- D. Wearing colorful gowns with fancy hats

iii. What did the narrator notice about the men on the chair-car?

- A. They were all businessmen going to a conference.
- B. They seemed like they could be in any business and heading anywhere.
- C. They were all reading newspapers.
- D. They were all engrossed in conversations with the ladies.

iv. What specific detail about chair No. 9 caught the narrator's attention?

- A. A woman wearing a colorful hat was seated there.
- B. The chair had an unusual design.
- C. A small, black, bald-spotted head was visible above its back.
- D. The person seated there was reading a novel.

b) *Oh, I wish I'd looked after me teeth.
I wish I'd been that much more willin'
When I had more tooth there than fillin'
To pass up gobstoppers.
From respect to me choppers,
And to buy something else with me shillin'.
When I think of the lollies I licked,
And the liquorice all sorts I picked,
Sherbet dabs, big and little,*

All that hard peanut brittle,

i. What does the speaker regret in the poem?

- A. Not eating enough sweets B. Not taking care of their teeth
C. Spending too much money on luxury items D. Ignoring their friends' advice

ii. What does the word "gobstoppers" refer to?

- A. Large marbles B. Hard, round candies
C. A type of medicine D. Ice cream treats

iii. Which of the following sweets is NOT mentioned in the extract?

- A. Sherbet dabs B. Chocolate bars
C. Liquorice all sorts D. Peanut brittle

iv. What does the speaker imply by mentioning "me shillin"?

- A. She regret spending money on sweets.
B. She wish they had saved more money.
C. She wanted to buy more luxurious items.
D. She regret losing their shilling.

c) *Persome: Mere Gringoire indeed! Mere Gringoire! What, the old witch who lives at the top of the hill, and who says she is bedridden because she is too lazy to do any work? And what did Mere Gringoire want with the money, pray ?*

Marie: Madam, it was for the rent. The bailiff would not wait any longer, and threatened to turn her out to-day if it were not paid, so she sent little Jean to Monseigneur to ask for help, and-

Persome: Oh, mon Dieu! It is hopeless, hopeless. We shall have nothing left. His estate is sold, his savings have gone. His furniture, everything. Were it not for my little dot we should starve ! And now my beautiful-beautiful (sob) salt-cellars. Ah, it is too much, too much. (She breaks down crying.)

1. What is Persome's opinion of Mere Gringoire?

- A. She admires her hard work.
B. She believes she is lazy and pretends to be bedridden.
C. She thinks she is a kind and generous woman.
D. She respects her for her struggle to pay the rent.

2. Why did Mere Gringoire send little Jean to Monseigneur?

- A. To ask for food for the family
- B. To request money to pay the rent
- C. To deliver a gift to Monseigneur
- D. To plead for forgiveness

3. What does Persome reveal about their financial situation?

- A. They have plenty of savings.
- B. They are relying on her "little dot" to survive.
- C. They own many valuable possessions.
- D. They have recently gained a large estate.

4. What item does Persome lament losing?

- A. Her silver goblets
- B. Her estate
- C. Her salt-cellars
- D. Her jewelry

Q.9: Answer ANY SIX of the following questions in about 20- 30 words each. (2X6=12)

- A. Duke was an extraordinary dog. What special qualities did he exhibit to justify this?
- B. What did the Professor mean by "intelligent reading"?
- C. How do you think the rain quenches the thirst of the fields and cures clouds ailment?
- D. Why was it necessary to keep Harold's father's profession a secret from him?
- E. Could the grandmother succeed in accomplishing her desire to read? How?
- F. What was John A. Pescud's opinion about best sellers? Why?
- G. Describe the two roads that the author comes across.

Q. 10. Answer ANY ONE of the following questions in about 120 words. (6)

- A. Not everyone is a born criminal, he is made out of situations and bad experiences in life. Justify this statement with reference to the play "Bishop's candlesticks"
- B. In the poem "Seven Ages" poet compares Old age with Childhood. Compare the same in your words based on your understanding of the poem.



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कक्षा / Class: नौवीं
विषय / Subject: हिन्दी (002)

अवधि / Duration : 3 घंटे
अधिकतम अंक / Maximum Marks: 80

सामान्य निर्देश / General Instructions:

1. इस प्रश्न पत्र में चार खंड हैं - क, ख, ग, और घ ।
2. खंड-क में कुल दो प्रश्न हैं जिनमें उप-प्रश्नों की संख्या 10 है ।
3. खंड-ख में कुल 4 प्रश्न हैं जिनमें उप-प्रश्नों की संख्या 20 है। दिए गए निर्देशों का पालन करते हुए 16 उप-प्रश्नों के उत्तर देना अनिवार्य है ।
4. खंड-ग में कुल 5 प्रश्न हैं, जिनमें उप-प्रश्नों की संख्या 21 है। दिए गए निर्देशों का पालन करते हुए 18 उप-प्रश्नों के उत्तर देना अनिवार्य है ।
5. खंड-घ में कुल 4 प्रश्न हैं सभी प्रश्नों के साथ उनके विकल्प विकल्प भी दिए गए हैं ।
6. प्रश्नों के उत्तर दिए गए निर्देशों का पालन करते हुए लिखिए ।

खंड-क

(अपठित बोध)

1. नीचे दिये गए गद्यांश को ध्यानपूर्वक पढ़कर उस पर आधारित प्रश्नों के उत्तर दीजिए।
आज विश्व के कई देशों में अदरक वाली भारतीय चाय का लोगों को ऐसा चस्का लग गया है कि हर भारतीय चाय का शौकीन हो गया है। इसके अलावा भारत में कुल्हड़ वाली चाय भी काफ़ी लोकप्रिय है । मिट्टी के कुल्हड़ में परोसी गई चाय का अपना विशेष महत्त्व है क्योंकि इसकी सौंधी खुशबू और लाजवाब स्वाद को इसके बिना अनुभव नहीं किया जा सकता । भारत की सिफारिश पर संयुक्त राष्ट्र महासभा ने 21 मई को 'अंतर्राष्ट्रीय चाय दिवस' घोषित किया है। संयुक्त राष्ट्र महासभा ने अपनी अधिसूचना में कहा कि हम विश्व की ग्रामीण अर्थव्यवस्था में चाय के योगदान को लेकर दुनिया को जागरूक करना चाहते हैं, ताकि वर्ष 2030 के सतत विकास से जुड़े लक्ष्यों को पूरा किया जा सके। संयुक्त राष्ट्र को विश्वास है कि 21 मई को अंतर्राष्ट्रीय चाय दिवस घोषित करने से इसके उत्पादन और खपत बढ़ाने में मदद मिलेगी। अंतर्राष्ट्रीय चाय दिवस का उद्देश्य दुनिया भर में चाय के लंबे इतिहास और गहरे सांस्कृतिक और आर्थिक महत्व के बारे में जागरूकता बढ़ाना है। इस दिन का लक्ष्य चाय के स्थायी उत्पादन और खपत के पक्ष में गतिविधियों को लागू करने के लिए सामूहिक कार्यों को बढ़ावा देना और भूख और गरीबी से लड़ने में इसके महत्व के बारे में जागरूकता बढ़ाना है। विश्व के कुल चाय उत्पादन में इन देशों की हिस्सेदारी 75 प्रतिशत है। भारत विश्व में चाय उत्पादन का एक बड़ा केंद्र है। असम भारत का सर्वाधिक चाय उत्पादन करने वाला राज्य है। चाय एक श्रम आधारित उद्योग है इसलिए भारत जैसे देश में इसके विकास की अपार संभावनाएँ हैं। चाय की चुनाई के लिए अधिक मात्रा में श्रमिकों की आवश्यकता पड़ती है, क्योंकि चाय की पत्तियाँ एक-एक कर तोड़ी जाती हैं, जिससे कोमल पत्तियाँ नष्ट ना हों। चाय की पत्ती तोड़ने के काम

के लिए श्रमिकों को पूरे दिन खड़े रहना पड़ता है, चाहे वह चिलचिलाती धूप हो या बारिश । वे आम तौर पर उस हिस्से तक पहुँचने के लिए चार से पांच किलोमीटर पैदल चलते हैं जहाँ वे चाय की पत्तियाँ चुनते हैं।

(i) कथन (A) और कारण (R) को पढ़कर उपयुक्त विकल्प का चयन कीजिए। (1)

कथन (A) - संयुक्त राष्ट्र महासभा ने 21 मई को 'अंतर्राष्ट्रीय चाय दिवस' घोषित किया है।

कारण (R) - विश्व की ग्रामीण अर्थव्यवस्था को मजबूत बनाने में चाय की अहमियत को समझाना।

विकल्प

- (क) कथन (A) गलत है, किन्तु कारण (R) सही है।
- (ख) कथन (A) सही है और कारण (R) कथन (A) की सही व्याख्या है।
- (ग) कथन (A) सही है किन्तु कारण (R) कथन (A) की सही व्याख्या नहीं है।
- (घ) कथन (A) और कारण (R) दोनों गलत हैं।

(ii) भारत में कुल्हड़ वाली चाय काफी लोकप्रिय है क्योंकि- (1)

- (A) सौधी खुशबू होती है।
- (B) लाजवाब स्वाद होता है।
- (C) बहुत महँगी होती है।
- (D) आसानी से उपलब्ध है।

विकल्प

- (क) कथन (A) और (B) सही है।
- (ख) कथन (A), (C) और (D) सही है।
- (ग) केवल कथन (C) सही है।
- (घ) कथन (A), (B) और (D) सही है।

(iii) निम्नलिखित में से गद्यांश के अनुसार कौन-सा कथन सही नहीं है? (1)

- (क) असम भारत का सर्वाधिक चाय उत्पादन करने वाला राज्य है।
- (ख) चाय की पत्ती तोड़ने के लिए श्रमिकों को पूरे दिन खड़े रहना पड़ता है ।
- (ग) पश्चिम बंगाल भारत का सर्वाधिक चाय उत्पादन करने वाला राज्य है।
- (घ) चाय उत्पादन में विश्व के चार देशों की 75 प्रतिशत हिस्सेदारी है।

(iv) चाय एक श्रम आधारित उद्योग है-कैसे ? (2)

(v) चाय के उत्पादन और खपत बढ़ाने में अंतर्राष्ट्रीय चाय दिवस की क्या भूमिका है? (2)

2. निम्नलिखित पद्यांश को पढ़कर उस पर आधारित दिए गए प्रश्नों के सर्वाधिक उपयुक्त उत्तर वाले विकल्प चुनकर लिखिए।

<p>सुनता हूँ, मैंने भी देखा, काले बादल में रहती चाँदी की रेखा। काले बादल जाति द्वेष के, काले बादल विश्व क्लेश के, काले बादल उठते पथ पर नव स्वतंत्रता के प्रवेश के ! सुनता आया हूँ, है देखा, काले बादल में हँसती चाँदी की रेखा ! आज दिशा है घोर अँधेरी नभ में गरज रही रणभेरी, चमक रही चपला क्षण-क्षण पर झनक रही झिल्ली झन-झन कर, नाच-नाच आँगन में गाते केकी-केका काले बादल में लहरी चाँदी की रेखा !</p>	<p>काले बादल, काले बादल, मन भय से हो उठता चंचल । कौन हृदय में कहता पल-पल ? मृत्यु आ रही साजे दल बल ! आग लग रही, घात चल रहे, विधि का लेखा ! काले बादल में छिपती चाँदी की रेखा ! मुझे मृत्यु की भीति नहीं है, पर अनीति से प्रीति नहीं है, यह मनुजोचित रीति नहीं है, जन में प्रीति प्रतीति नहीं है। देश जातियों का कब होगा, नव मानवता में रे एका, काले बादल में कल की सोने की रेखा।</p>
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(i) कैसे वातावरण में आशा की किरण छिप जाती है? नीचे दिए गए कारणों को पढ़कर इस प्रश्न का उत्तर देने के लिए उचित विकल्प का चयन कर उत्तर लिखिए। (1)

- (A) जब तेज वर्षा हो। (B) जब मन निराशा से भयभीत हो।
(C) जब षड्यंत्र रचे जा रहे हों। (D) जब काले बादल छाए हों।

विकल्प

- (क) कथन (A) और (B) सही है। (ख) कथन (B) और (C) सही है।
(ग) केवल कथन (C) और (D) सही है। (घ) कथन (B) और (D) सही है।

(ii) मोर-मोरनी द्वारा आँगन में नृत्य प्रस्तुत करने से क्या अभिप्राय है? (1)

- (क) उन दोनों का प्रसन्न होकर नृत्य प्रस्तुत करना
(ख) निराशा के बादल छूटने लगे, और खुशियों ने दस्तक दे दी है।
(ग) मोर-मोरनी नृत्य करके बादलों को बरसने के लिए मजबूर कर रहे हैं।
(घ) मोर सुहावने मौसम का आनंद ले रहे हैं।

(iii) चाँदी की रेखा को 'सोने की रेखा' में कब बदला जा सकता है? (1)

- (क) देश की विभिन्न जातियों में एकता स्थापित करके (ख) काले बादलों को दूर करके
(ग) बादलों में सूर्य के छिपने पर (घ) मृत्यु से भयभीत न होने पर

(iv) 'काले बादल' और 'चाँदी की रेखा' किनके प्रतीक हैं? (2)

(v) स्वतंत्रता प्राप्ति के मार्ग में किस प्रकार के बादल छाए हुए हैं? (2)

खंड-ख
(व्यावहारिक व्याकरण)

3. निर्देशानुसार 'उपसर्ग एवं प्रत्यय' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए। (1×4=4)

- (क) 'अनुकरणीय' में मूल शब्द एवं प्रत्यय अलग-अलग करके लिखिए।
- (ख) 'आजीवन' में मूल शब्द एवं उपसर्ग अलग-अलग करके लिखिए।
- (ग) 'अति' उपसर्ग से निर्मित दो शब्द लिखिए।
- (घ) 'ता' प्रत्यय से निर्मित दो शब्द लिखिए।
- (ङ) उपसर्ग और प्रत्यय में कोई एक अंतर लिखिए।

4. निर्देशानुसार 'समास' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए। (1×4=4)

- (क) 'सेनानायक' का विग्रह कर समास का नाम लिखिए।
- (ख) 'देश-विदेश' का विग्रह कर समास का नाम लिखिए।
- (ग) 'चौराहा' का विग्रह कर समास का नाम लिखिए।
- (घ) 'नीलगाय' शब्द में कौन-सा समास है ?
- (ङ) समास में कितने पद होते हैं? उनके नाम लिखो ।

5. निर्देशानुसार 'वाक्य-भेद' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए। (1×4=4)

- (क) 'सोहन सेब खाता है।' इस वाक्य को नकारात्मक वाक्य में परिवर्तित कीजिए।
- (ख) प्रश्नवाचक वाक्य का कोई एक उदाहरण लिखिए।
- (ग) 'ईश्वर आपको सफलता प्रदान करें।' किस प्रकार का वाक्य है?
- (घ) 'तुम्हारा जूता फटा है।' को प्रश्नवाचक वाक्य में बदलिए।
- (ङ) अर्थ के आधार पर वाक्य के कितने भेद होते हैं? किन्हीं दो भेदों के नाम लिखो ।

6. निर्देशानुसार 'अलंकार' पर आधारित पाँच प्रश्नों में से किन्हीं चार प्रश्नों के उत्तर दीजिए। (1×4=4)

- (क) 'अनुप्रास' अलंकार का कोई एक उदाहरण लिखिए।
- (ख) 'काली घटा का घमंड घटा' में प्रयुक्त अलंकार पहचान कर लिखिए।
- (ग) 'श्लेष अलंकार' श्लेष का क्या अर्थ है?
- (घ) 'यमक अलंकार' किसे कहते हैं?
- (ङ) 'चारु चंद्र की चंचल किरणें खेल रहीं हैं जल-थल में' में प्रयुक्त अलंकार पहचान कर लिखिए।

खंड-ग
(पाठ्य पुस्तक एवं पूरक पाठ्य पुस्तक)

7. नीचे दिए गए गद्यांश को पढ़कर नीचे लिखे प्रश्नों के उत्तर दीजिए। (1×5=5)

फोटो खिंचाना था तो ठीक जूते पहन लेते या न खिंचाते। फोटो न खिंचाने से क्या बिगड़ता था। शायद पत्नी का आग्रह रहा हो और तुम 'अच्छा, चल भाई' कह कर बैठ गए होगें। मगर यह कितनी बड़ी ट्रेजडी है कि आदमी के पास फोटो खिंचाने को भी जूता न हो। मैं तुम्हारी यह फोटो देखते-देखते, तुम्हारे क्लेश को अपने भीतर महसूस करके जैसे रो पड़ना चाहता हूँ, मगर तुम्हारी आँखों का यह तीखा दर्द भरा व्यंग्य मुझे एकदम रोक देता है।

(1) किसके फोटो खिंचाने के बारे में बात की गई है?

- | | |
|------------------------|----------------------|
| (क) प्रेमचंद के | (ख) हरिशंकर परसाई के |
| (ग) श्याम सुंदर दास के | (घ) उपरोक्त सभी के |

(2) लेखक के अनुसार फोटो खिंचाने का आग्रह किसने किया होगा?

- | | |
|--------------------------|--------------------------|
| (क) प्रेमचंद के मित्र ने | (ख) प्रेमचंद के भाई ने |
| (ग) प्रेमचंदकी बहन ने | (घ) प्रेमचंद की पत्नी ने |

(3) लेखक ने 'ट्रेजडी' किसे कहा है?

- | | |
|---------------------------------|--------------------------------|
| (क) किसी आदमी के पास कपड़े न हो | (ख) किसी आदमी के पास जूते न हो |
| (ग) किसी आदमी के पास इत्र न हो | (घ) इनमें से कोई नहीं |

(4) प्रेमचंद की फोटो देखकर लेखक का अंतर्मन क्या करने को करता है?

- | | |
|--|--------------------|
| (क) रोना चाहता है। | (ख) हँसना चाहता है |
| (ग) प्रेमचंद का उपहास उड़ाना चाहता है। | (घ) उपरोक्त सभी |

(5) लेखक को कैसे पता लगता है कि प्रेमचंद के जूते फटे हुए हैं?

- | | |
|-------------------------------|-------------------------|
| (क) प्रेमचंद को देखकर | (ख) फोटोग्राफर को देखकर |
| (ग) प्रेमचंद की फोटो को देखकर | (घ) उपरोक्त सभी |

8. निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में लिखिए। (2×3=6)

- (क) 'दो बैलों की कथा' में गधे का छोटा भाई किसे और क्यों कहा गया है?
- (ख) सालिम अली पक्षियों को मनुष्य के समरूप नहीं देखने की सलाह क्यों देते थे?
- (ग) हमारी निगाह गुणवत्ता पर न जाकर विज्ञापन के पीछे भाग रही है, क्यों?
- 'उपभोक्तावाद की संस्कृति' पाठ के आधार पर स्पष्ट कीजिए।
- (घ) लेखिका उर्दू-फारसी क्यों नहीं सीख पाई? 'मेरे बचपन के दिन' पाठ के आधार पर लिखिए।

9. नीचे दिए गए पद्यांश को पढ़कर नीचे लिखे प्रश्नों के उत्तर दीजिए। (1×5=5)

फैली खेतों में दूर तलक
मखमल की कोमल हरियाली
लिपटी जिससे रवि की किरणें
चाँदी की सी उजली जाली !
तिनकों के हरे-हरे तन पर
हिल हरित रुधिर है रहा झलक,
श्यामल भू तल पर झुका हुआ
नभ का चिर निर्मल नील फलक !

(1) प्रस्तुत काव्यांश के लेखक कौन हैं?

(क) फणीश्वरनाथ रेणु

(ख) सुमित्रानन्दन पन्त

(ग) ज़ाबिर हुसैन

(घ) इनमें से कोई नहीं

(2) सुंदर मखमल और कोमल हरियाली कहाँ छाई हुई है?

(क) खेतों में

(ख) बगीचों में

(ग) विकल्प 'क' और 'ख' दोनों

(घ) इनमें से कोई नहीं

(3) नीला आकाश किस पर झुका हुआ है?

(क) पत्थर पर

(ख) पेड़ पर

(ग) भूमि पर

(घ) समुद्र पर

(4) 'हिल हरित रुधिर है रहा झलक' में अलंकार है-

(क) मानवीकरण

(ख) उपमा

(ग) रूपक

(घ) अनुप्रास

(5) उजली जाली किसके समान है?

(क) सोने के

(ख) चाँदी के

(ग) लोहे के

(घ) ताँबे के

10. निम्नलिखित प्रश्नों में से किन्हीं तीन प्रश्नों के उत्तर लगभग 25-30 शब्दों में लिखिए। (2×3=6)

(क) कबीर ने ईश्वर-प्राप्ति के लिए किन विश्वासों का खंडन किया है?

(ख) बच्चों का काम पर जाना धरती के एक बड़े हादसे के समान क्यों है?

(ग) 'कैदी और कोकिला' कविता में कवि ने शासन की करनी को काली क्यों कहा है?

स्पष्ट कीजिए।

(घ) मेघ रूपी मेहमान के आने से वातावरण में क्या परिवर्तन हुए? 'मेघ आए' कविता के आधार पर लिखिए।

11. निम्नलिखित प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर लगभग 50-60 शब्दों में लिखिए।
(4×2=8)

- (क) प्राकृतिक आपदा से आप क्या समझते हैं? किन्हीं दो आपदाओं के नाम लिखकर उनसे बचने के कोई भी दो-दो उपाय लिखिए।
- (ख) 'रीढ़ की हड्डी' एकांकी का उद्देश्य क्या है? समाज में महिलाओं को उचित गरिमा दिलाने हेतु आप कौन-कौन से प्रयास कर सकते हैं?
- (ग) 'शिक्षा बच्चों का जन्मसिद्ध अधिकार है' - इस दिशा में लेखिका मृदुला गर्ग के प्रयासों का उल्लेख कीजिए।

खंड-घ
(रचनात्मक लेखन)

12. निम्नलिखित तीन विषयों में से किसी एक विषय पर संकेत बिंदुओं के आधार पर लगभग 120 शब्दों में एक अनुच्छेद लिखिए। (6)

(क) खेल बिना पाठ्यक्रम है अधूरा

- (i) खेलों का महत्त्व
- (ii) पाठ्यक्रम का अभिन्न अंग
- (iii) दोनों में संतुलन

(ख) जब तक पहाड़-नदियाँ हैं तब तक जीवन है

- (i) प्रकृति से ही साँस है
- (ii) प्रकृति से मैत्री
- (iii) सतत विकास पर बल

(ग) बेटी बचाओ, बेटी पढ़ाओ

- (i) क्यों पढ़ी जरूरत
- (ii) बेटियाँ समाज का अभिन्न अंग
- (iii) महिलाओं के बढ़ते कदम

13. आपके क्षेत्र में स्थित स्टेडियम के स्थापना दिवस की वर्षगांठ के अवसर पर दिव्यांग बच्चों द्वारा अपनी प्रतिभा का प्रदर्शन किया जाएगा। इस कार्यक्रम के सीधे प्रसारण की प्रार्थना करते हुए दूरदर्शन निदेशक को लगभग 100 शब्दों में एक पत्र लिखिए। (5)

अथवा

अपने नगर की ऐतिहासिक इमारतों की दयनीय स्थिति पर चिंता व्यक्त करते हुए उनके उचित रख-रखाव के लिए अध्यक्ष, पुरातत्व विभाग को लगभग 100 शब्दों में पत्र लिखकर आग्रह कीजिए।

14. आपने ऑनलाइन कुछ पुस्तकें भेगवाई थी लेकिन आपकी पुस्तकें आपके ऑर्डर के अनुरूप नहीं आई हैं। इसकी शिकायत करते हुए प्रबंधक महोदय को लगभग 100 शब्दों में एक ई-मेल लिखिए।

(5)

अथवा

‘परिश्रम का महत्त्व’ अथवा ‘एकता में बल’ विषय पर लगभग 100 शब्दों में लघुकथा लिखिए।

15. ‘धूम्रपान स्वास्थ्य के लिए हानिकारक’ विषय पर लगभग 80 शब्दों में दो मित्रों के बीच हुए संवाद को लिखिए।

(4)

अथवा

आपके विद्यालय में अग्निशमन दल द्वारा आग से बचाव के उपायों पर एक प्रशिक्षण शिविर का आयोजन किया जा रहा है। इसकी जानकारी विद्यार्थियों को देने के लिए लगभग 80 शब्दों में एक सूचना लिखिए।



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
वार्षिक परीक्षा/ Annual Examination 2024-25

कक्षा/Class: IX

अवधि/Duration: 3 hours

विषय/Subject: Mathematics

अधिकतम अंक/Maximum Marks : 80

सामान्य निर्देश / General Instructions:

1. This Question Paper has 5 Sections A, B, C, D and E.
2. Section A has 20 MCQ's carrying 1 mark each.
3. Section B has 5 questions carrying 2 marks each.
4. Section C has 6 questions carrying 3 marks each.
5. Section D has 4 questions carrying 5 marks each.
6. Section E has 3 case based integrated units of assessment (04 marks each) with sub-parts of the values of 1, 1 and 2 marks each respectively.
7. All the questions are compulsory. However, an internal choice in 2 Qs of 5 marks, 2 Qs 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
8. Draw neat figures wherever required. Take $\pi = 22/7$ wherever required if not stated.

SECTION A

Choose the correct options to answer the following questions. (1 x 20 = 20)

1. A rational number between $\frac{1}{7}$ and $\frac{2}{7}$ is
 a. $\frac{1}{14}$ b. $\frac{2}{21}$ c. $\frac{5}{14}$ d. $\frac{5}{21}$
2. If the difference between two complementary angles is 10° . Then the angles are
 a. $50^\circ, 60^\circ$ b. $50^\circ, 40^\circ$ c. $80^\circ, 10^\circ$ d. $35^\circ, 45^\circ$
3. Slant height of a cone is 34 cm and base diameter is 32 cm, then height of the cone is
 a. 33 cm b. 25 cm c. 30 cm d. 27 cm
4. A dome of the building is in the form of hemisphere. From inside, it was white washed at the cost of Rs 5544.00. If the cost of white washing is Rs. 4.00 per square metre, what is the inner surface area of dome in m^2 ?
 a. $504 m^2$ b. $22176 m^2$ c. $1386 m^2$ d. $792 m^2$
5. The polynomial $2x - x^2 + 5$ is
 a. An equation b. A trinomial c. a binomial d. a monomial
6. The radius of a circle is 13 cm and the length of the one of its chord is 10 cm. The distance of the chord from the centre is
 a. 11.5 cm b. 12 cm c. $\sqrt{69}$ cm d. 23 cm
7. Sakromani drew a line passing through the points P, O and R. Kiran drew a line passing through O and R. Which of the statement about the lines they drew is correct.
 a. The lines coincide b. The lines are parallel
 c. The lines are perpendicular d. None of these

8. The rational number $0.\overline{3}$ Can also be written as
a.3 b. $\frac{3}{10}$ c.0.33 d. $\frac{1}{3}$
9. Given two concentric circles with centre O. A line cuts the circle at A, B, C and D respectively. If AB = 10 cm, then the length of CD is _____.
a.5 cm b. 20 cm c. 7.5 cm d. 10 cm
10. Degree of the polynomial $5x^2 - 6x - 2$ is
a.2 b.1 c.0 d. 3
11. If two Lines are parallel to the same line, then those lines are _____.
(a) Parallel (b) intersecting (c) perpendicular (d) none of these.
12. In $\triangle ABC$, $BC = AB$ and $\angle B = 80^\circ$. Then $\angle A = ?$
(a) 80° (b) 40° (c) 50° (d) 100°
13. The lengths of the diagonals of a rhombus are 24 cm and 18 cm respectively. The length Of each side of the rhombus is
(a)12 cm (b)9 cm (c)15 cm (d)8 cm
14. In a parallelogram ABCD, if $\angle A = 115^\circ$, then $\angle B = ?$
(a) 45° (b) 85° (c) 55° (d) 65°
15. The radius of a circle is 10 cm and a chord of a circle is 12 cm in length. The distance of The chord from the centre of the circle is
(a) 6 cm (b) 8 cm (c) 10 cm (d) 12 cm
16. The semi-perimeter of a triangle having the length of its sides are 20 cm, 15 cm and 9 cm is
(a)44 cm (b)21 cm (c)22 cm (d) 24 cm
17. If ABC and ADC are two right triangles with common hypotenuse AC then, $\angle CAD =$
(a) $\angle CDB$ (b) $\angle CAB$ (c) $\angle CBD$ (d) $\angle ABC$
18. The sides of triangle plot are in the ratio 3:5:7 and its perimeter is 300 m. Which of the Following cannot be the length of the side of this triangle
(a)75 m (b)60 m (c)100m (d)140 m

DIRECTION: In the question number 19 and 20, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option

19. **Assertion:** The radius of a hemisphere is 2 cm then its volume is $\frac{16}{\pi} \text{ cm}^3$.

Reason: Volume of hemisphere is $\frac{2}{3}\pi r^3$, where 'r' is its radius.

- 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 and 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

20. Assertion: The class mark of the class-interval 190-200 is '195'
Reason: The class mark of a class-interval is $\frac{\text{upper limit} - \text{lower limit}}{2}$

- 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 and 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

Section B (2 x 5 = 10)

21. Add: $2\sqrt{2} + 5\sqrt{3}$ and $\sqrt{2} - 3\sqrt{3}$

22. If a point C lies between two points A and B such that $AC = BC$. Prove that $AC = \frac{1}{2} AB$.
Explain by drawing the figure.

23. Find the curved surface area of a right circular cone whose slant height is 10 cm and base radius is 7 cm.

24. Rationalise the denominator of $\frac{1}{2+\sqrt{3}}$

Or

If $x = 3 - 2\sqrt{2}$, then find the value of $\frac{1}{x}$.

25. If PQRS is a cyclic quadrilateral $\angle P = 3x$, $\angle Q = 5y$, $\angle R = x$, $\angle S = y$ then,
Find the values of x and y

Or

Find the value of k. If $x = 2$, $y = 1$ is a solution of the equation $2x + 3y = k$.

Section C (3 x 6 = 18)

26. Represent $\sqrt{9.3}$ on the number line.

27. Side of a triangle are in the ratio of 12 : 17 : 25 and its perimeter is 540 cm. Find its area.

28. Write any three solutions of the linear equations in two variables $x + 2y = 6$.

29. Find the value of k. If $(x - 2)$ is a factor of $P(x)$ in each of the following cases.

- (i) $P(x) = 2x^2 + kx + \sqrt{2}$
- (ii) $P(x) = kx^2 - \sqrt{2}x + 1$
- (iii) $P(x) = kx^2 - 3x + k$

30. Express $1.\overline{27}$ in the form of $\frac{p}{q}$ where p, q are integers and $q \neq 0$.
Or

Find three different irrational numbers between the rational numbers $\frac{5}{7}$ and $\frac{9}{11}$

31. Factorise $p(x) = x^3 - 3x^2 - 9x - 5$ by using the factor theorem.

Or

Expand $(3a + 4b)^3$ by using the suitable algebraic identity.

SECTION D (5 X 4 = 20)

32. In a right triangle ABC, right angled at C, M is the midpoint 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. show that

- (i) $\triangle AMC = \triangle BMD$
- (ii) $\angle DBC$ is right angle
- (iii) $\triangle DBC = \triangle ACB$
- (iv) $CM = \frac{1}{2} AB$

33. ABCD is a rhombus and P, Q, R and S are the mid points of the side AB, BC, CD and DA respectively. Show that the quadrilateral PQRS is a rectangle.

34. Find the area of triangle, the two sides of which are 8 cm and 11 cm and the perimeter is 32 cm.

Or

- (i) Find the value of 'k' so that the linear equation $6x + 2ky = 3k$ has $x = 1, y = 1$ as a solution.
- (ii) Express y in terms of x from the equation $3x + 2y = 8$ and check whether the point (4, -2) is a solution of the equation or not.

35. The volume of a right circular cone is 9856 cm^3 . If the diameter of the base is 28 cm, find

- (i) Height of the cone
- (ii) Slant height of the cone.
- (iii) Curved surface area of the cone.

Or

Twenty seven solid iron spheres, each of radius r and surface area S are melted to form a sphere with the surface area S' .

Find the (i) radius r' of the new sphere.

(ii) Ratio of S and S' .

SECTION E (4 X 3 = 12)

36. Mr. Sharma a mathematics teacher explained some key point of unit 1 of class IX to his students. Some are given here.

- There are infinite rational numbers between any two rational numbers.
- Rationalisation of a denominator means to change the irrational denominator to rational form.
- A number is irrational if its decimal form is non-terminating nor-recurring

On the basis of these key points, answer the following questions

- (i) What is the reciprocal of $2 + \sqrt{3}$?
- (ii) Find a rational number between $\sqrt{2}$ and $\sqrt{3}$.
- (iii) Is 0.401400140001..... an irrational number? Explain it.

OR

Find the value of $(\sqrt{11} + \sqrt{7})(\sqrt{11} - \sqrt{7})$

37. In a club house of a residential society, five children Ritu, Aman, Seema, Dhruv and Tina are playing a game using cards. They have prepared five cards and written the algebraic expression on cards. They have shown cards to each other. The card which Ritu contain has following expression $6x^3 + 4x^2 + 8x + 4$. When the expression is multiplied by 2 that information is written on Aman's Card and when Ritu's expression is divided by 2 that expression is written on Seem's Card. Dhruv and Tina have written $2x^3 + \sqrt{2}$ and $3x + 4$ on their cards respectively.

Now answer the following questions

- (i) Name the type of polynomial of the expression on Ritu's Card.
- (ii) Tina's Card has $3x + 4$ expression on the card. What is the type of polynomial On Tina's card?
- (iii) Find the value of expression on Aman's Card if $x = \frac{1}{2}$

(OR)

What is the degree of polynomial $2x^3 + \sqrt{2}$ on Dhruv's Card.

38. The strength of class IX of a Central School has 'x' students. On a 2nd Saturday, $\frac{1}{12}$ th times the square of the total number of students planned to visit historical monuments. $\frac{7}{12}$ th times the number of students planned to visit old age homes while 10 students decided to teach poor children.

Based on the above information, answer the following questions:

- (i) Write the total number of students in a polynomial in terms of x?
- (ii) Find the Degree of the polynomial ?
- (iii) If the total number of students is 96, then find how many students planned to visit the Historical monuments?

Or

- (iii) Find the number of students planning to visit old age homes, if $x = 108$?



परमाणु ऊर्जा शिक्षण संस्था
Atomic Energy Education Society
वार्षिक परीक्षा/ Annual Examination 2024-25

कक्षा /Class :IX

अवधि/Duration :3 Hours

विषय/Subject :SCIENCE अधिकतम अंक/Maximum Marks :80

सामान्य निर्देश / General Instructions:

1. This question paper consists of 39 questions in 5 sections.
2. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
3. Section A consists of 20 objective type questions carrying 1 mark each.
4. Section B consists of 6 Very Short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.
5. Section C consists of 7 Short Answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.
6. Section D consists of 3 Long Answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.
7. Section E consists of 3 source-based/case based units of assessment of 04 marks each with sub-parts.

SECTION- A

Select and write one most appropriate option out of the four options given for each of the questions 1-20 (1x20=20)

1. The force of attraction between the particles of matter is maximum in (1)
a) iron rod b) kerosene oil c) glycerine d) dry air
2. Which of the following is a pure substance? (1)
a) milk b) sea water c) soil d) 24 carat gold
3. The electronic configuration of calcium with atomic number 20, is (1)
a) 2,8,10 b) 2,9,9 c) 2,8,8,2 d) 2,10,8

4. Which of the following is not correct according to Dalton's atomic theory? (1)
- Matter is made up of atoms.
 - Atoms of all substances are identical in all respects.
 - Atoms combine in a simple whole number ratio.
 - Atoms of two elements can combine to form more than one compound.
5. Plastids containing chlorophyll are called: (1)
- Chromoplast
 - Leucoplast
 - Chloroplast
 - Amyloplast
6. The oesophagus and the lining of mouth is covered by: (1)
- Squamous epithelium
 - Simple epithelium
 - Cuboidal epithelium
 - Columnar epithelium
7. Among the following which one is a macronutrient? (1)
- nitrogen
 - phosphorus
 - potassium
 - all of these
8. Which of the following options is an example of an exotic breed of cattle? (1)
- Aseel
 - Leghorn
 - Jersey
 - Sahiwal
9. Organic farming is the farming system with minimal or no use of: (1)
- fertilisers
 - herbicides
 - pesticides
 - all of these
10. The biotic factor which influences crop variety improvement is: (1)
- salinity
 - drought
 - insects
 - waterlogging
11. When a body falls freely towards the earth, then its total energy: (1)
- increases
 - decreases
 - remains constant
 - first increases then decreases
12. The gravitational force between two objects is F . If the masses of both objects are halved without changing the distance between them, then the gravitational force would become: (1)
- $F/4$
 - $F/2$
 - F
 - $2F$
13. The frequency of sound wave determines its: (1)
- loudness
 - speed
 - wavelength
 - pitch
14. A passenger in a moving train tosses a coin which falls behind him. It means that motion of the train is: (1)
- accelerated
 - uniform
 - retarded
 - along circular tracks
15. A car starts from rest and accelerates uniformly at 2 m/s^2 . What will be its velocity after 5 seconds? (1)
- 5 m/s
 - 10m/s
 - 15 m/s
 - 20 m/s
16. What changes continuously in a uniform circular motion? (1)
- Speed
 - Velocity
 - Both
 - None of these

17. Dolphins and bats use

(1)

- a) ultrasound
- b) infrasound
- c) both a and b
- d) none of these

Q. No 18 to 20 are Assertion – Reasoning based questions.

These consists of two statements – Assertion (A) and Reasoning (R). Answer these questions selecting the appropriate option given below.

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true and R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false but R is true.

18. **Assertion (A):** Milch animals are fed with both roughage and concentrates.

Reason (R) : Concentrates provide nutrients while roughage is rich in fibres. (1)

19. **Assertion (A):** Isotopes show the same physical properties.

Reason (R): Since different isotopes have the same electronic configurations, they have the same chemical properties. (1)

20. **Assertion (A):** The kinetic energy of an object increases as its speed increases.

Reason (R): Kinetic energy is proportional to the square of the speed of an object, (1)
so doubling the speed results in four times the kinetic energy.

SECTION-B

Question No 21 to 26 are very short answer questions.

(2x6=12)

21. Differentiate between quick lime and baking soda on the basis of what is given in the table:

(2)

S.no	Compound	Chemical formula	Elements present
1	Quick lime		
2	Common salt		

22. Identify the type of tissue in the following:

(2)

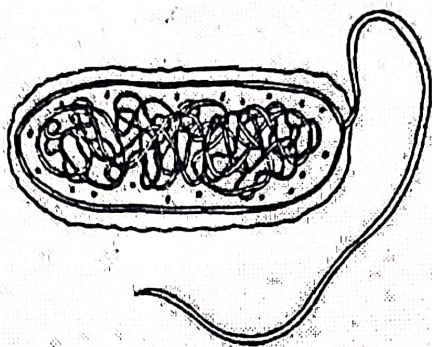
- i) Iris
- ii) Bark of the tree
- iii) Wall of urinary bladder
- iv) Heart

23. A man lifts a box of mass 10 kg to a height of 5 m. Calculate the work done by the man in lifting the box if $g=9.8 \text{ m/s}^2$.

(2)

24. Identify the cell. Write its characteristic feature.(any one)

(2)



25. (A) Write four applications of ultrasound.

(2)

OR

(B) A sound wave has a frequency of 2 kHz and wave length 35 cm. How long will it take to travel 1.5 km?

(2)

26. Why Mitochondria is known as the power house or storage batteries of the cell?

(2)

SECTION-C

Question No 27 to 33 are short answer questions

(3x7=21)

27. (A) Identify each of the following changes of state as evaporation or boiling.

Give reason for your answer.

(3)

- i) Wet clothes dry when spread on a wire.
- ii) Perspiration keeps our body cool.
- iii) We sprinkle water on the roof or open ground in summer.

OR

(B) Tabulate and differentiate between solid, liquid and gas based on:

- i) Shape and Volume
- ii) Interparticle force of attraction

(3)

28. (A) Calculate the mass of glucose and mass of water required to make 250g of 25% solution of glucose.

(3)

OR

(B) Differentiate between true solution, suspension and colloids on the basis of:

- i) Tyndall effect
- ii) Appearance

(3)

29. (A) State both the laws of chemical combination.

(3)

OR

(B) The average atomic mass of an element 'X' is 16.2 u. What are the percentages of isotopes ${}_8\text{X}^{16}$ and ${}_8\text{X}^{18}$ in the sample.

(3)

30. i) Differentiate between Mitosis and Meiosis. (any four points) (2)
 ii) Why is cell division necessary? (any two reason) (1)
 31. Identify A, B and C and state one function for each. (3)

32. A truck of mass 3000 kg is moving with a velocity of 72 km/h. The driver applies brakes, producing a constant retardation of 2.5 m/s^2 . Find the time taken by the truck to come to rest and the distance it covers before stopping. (3)
33. When a bus suddenly accelerates or decelerates, you tend to keep moving in the original direction. Why? Write the statement of law of motion related to it. (3)

Question No. 34 to 36 are long answer questions

34. (A) i) How do the following factors affect the rate of evaporation? (2)
- | | |
|-----------------|----------------|
| a) Surface area | b) Temperature |
| c) Wind speed | d) Humidity |
- ii) Explain how evaporation causes cooling. (2)
- iii) Why do we see water droplets on the outer surface of a glass containing ice-cold water. (1)

(B) Composition of the nuclei of two atomic species X and Y are given below:

- i) Give the mass number of X and Y. (2)
- ii) What is the relationship between X and Y? (1)

iii) An atom 'M' of an element reacts with oxygen to form M_2O_3 . Calculate the valency of the element M. (1)

iv) Name X and write whether X is a metal, non-metal or inert gas. (1)

35. (A) i) Explain composite fish culture. (3)

ii) Write one merit and one demerit of composite fish culture. (2)

OR

(B) i) Beekeeping can be practised in any area where there are sufficient bee pastures of wild shrub. An Italian variety, *A. mellifera* is widely used nowadays for honey production. Why? (any four points) (2)

ii) Write two uses of honey. (1)

iii) Define Apiculture. (1)

iv) Name two Indian bee varieties. (1)

36. (A) i) An object is placed at the bottom of a mountain and then moved to the top. Where is g greater - at the bottom or at the top of the mountain? Explain your answer. (2)

ii) Two objects one with mass $m_1 = 5$ kg and the other with mass $m_2 = 10$ kg, are placed 2 meters apart. Calculate the gravitational force between them. (3)

Use ($G = 6.67 \times 10^{-11} \text{ Nm}^2/\text{kg}^2$, g = acceleration due to gravity)

OR

(B) i) How is mass different from weight? Give two points. (1)

ii) What is buoyant force? Explain with an example. (2)

iii) Why does cork float while the nail sinks in water? Explain. (2)

SECTION-E

(4x3 = 12)

Question No- 37 to 39 are case- based/data based question with 2 to 4 short sub parts.

37. All living organisms are made up of cells and these cells perform all the functions essential for the survival of the organism e.g., respiration, digestion excretion, etc.

In unicellular organisms, a single cell carries out all these functions and in multicellular organisms different group of cells carry out different functions.

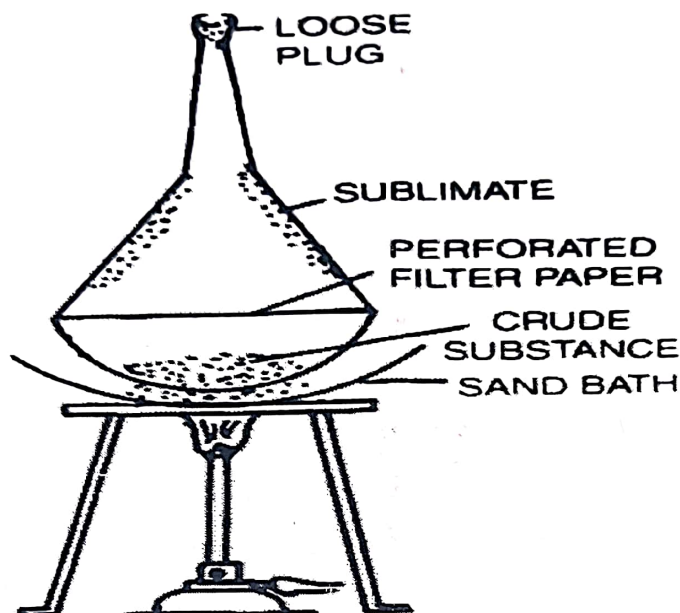
Cells were first discovered by Robert Hooke in 1665. He observed the cells in a cork slice with the help of a primitive microscope. Leuwenhoek (1674), with the improved microscope, discovered the free living cells in pond water for the first time. It was Robert Brown in 1831 who discovered the nucleus in the cell. Purkinje in 1839 coined the term 'protoplasm' for the fluid substance of the cell.

i) Write differences between plant cell and animal cell. (1)

ii) Why is the cell called structural and functional unit of life? (1)

iii) Draw a well labelled diagram of animal cell. (2)

38. Raju is performing an experiment to demonstrate the process of sublimation. He takes a material in a china dish and puts an inverted funnel over it, and also puts a cotton plug on the stem of the funnel as shown in figure. Substances around us change their state first from solid to liquid and then from liquid to gaseous state by absorption of heat. However there are some substances known which on heating directly change their state from solid to gas.



i) Define Sublimation. (1)

ii) Which of the following is a sublimatory substance? (1)

- a) Camphor
- b) Sand
- b) ammonium chloride
- d) both a and b

iii) Pick the incorrect statement from the following: (1)

- a) Iodine is a sublimatory substance.
- b) The process of sublimation is very useful in the purification of substance that sublimes on heating leaving non-volatile impurities behind.
- c) Naphthalene is not an example of a sublimatory substance.
- d) We place an inverted funnel on the filter paper and close the stem of the funnel with cotton plug to collect sublimates.

iv)(A) What observation had Raju made from the experiment? (1)

OR

iv) (B) $25^{\circ}\text{C} =$ _____ in Kelvin scale. (1)

- a) 298
- b) 300
- c) 273
- d) 373

39. A car of mass 1000 kg is initially at rest. When the driver applies the brakes, a constant force of 5000 N acts on the car in the opposite direction of its motion. The car comes to rest after traveling a distance of 20 meters. The car's motion is influenced by Newton's laws of motion, particularly the first and second laws. The force applied by the brakes causes the car to decelerate.

i) State Newton's second law of motion. (1)

ii) What is the acceleration of the car while the breaks are applied? (1)

- a) -5 m/s^2 b) -2 m/s^2 c) 0 m/s^2 d) 5 m/s^2

iii) Define Work. (1)

iv) What is the work done by the breaking force in bringing the car to rest? (1)

- a) -10,000 J b) 50,000 J c) 20,000 J d) -100,000 J



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Atomic Energy Education Society
वार्षिकपरीक्षा / Annual Examination 2024-25

कक्षा / Class : IX

विषय / Subject :

Social Science

अवधि/Duration : 3 Hours

अधिकतम अंक/Maximum Marks : 80

सामान्य निर्देश / General Instructions:

1. The question paper comprises six sections – A, B, C, D, E and F. There are 37 questions in the Question papers. All questions are compulsory.
2. Section A – Question no. 01 to 20 are MCQs of 1 mark each.
3. Section B – Question no. 21 to 24 are very Short Answer Type Questions, carrying 2 marks each.
4. Section C – Question no. 25 to 29 are short Answer Type Questions, carrying 3 marks each.
5. Section D – Question no. 30 to 33 are long answer type questions, carrying 5 marks each.
6. Section-E – Question no. 34 to 36 are case based questions with three sub questions of 4 marks each.
7. Section F – Question no. 37 is map based, carrying 5 marks with two parts, 37 A from History (2 marks) and 37 B from Geography (3 marks).
8. 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.

Section A - MCQs (1 X 20 = 20)

1. The "Subsistence crisis" in France had which of the following consequences? 1
(A) Scarcity of food grains due to bad harvest
(B) Rise in food prices resulted in widespread hunger in France
(C) Increased malnourishment, diseases, deaths and even food riots
(D) All of the above
2. In the question given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and chose the correct option: 1
Assertion (A): The role of thinkers and philosophers was very important in instigating people to question the absolute institution of monarchy in France.
Reason (R): Monarchy had lost connection with the masses and these new ideas enlightened people of France
(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 correct but R is wrong.
(D) A is wrong but R is correct.

3. Lenin's "April Theses" consisted of which of these demands ? 10. Which of (A) Imperial (C) ...
- (A) End of World War I.
(B) Land redistribution to peasants.
(C) Nationalisation of Banks
(D) All of the Above
4. Robert Owen, Louis Blanc, Karl Marx and Friedrich Engels these names are associated with which of the following political ideology? 1
- (A) Capitalism
(B) Liberalism
(C) Socialism
(D) Mercantilism
5. _____ unemployment happens when people are not able to find jobs during some months of the year. 1
- (A) Disguised (B) Voluntary
(C) Structural (D) Seasonal
6. My friend Chandrasena hails from a country which does not share land boundaries with India. Identify the country. 1
- (A) Bhutan (B) Sri Lanka
(C) Bangladesh (D) Nepal
7. In the _____ river, the largest inhabited riverine island in the world Majuli is located. 1
- (A) Narmada (B) Krishna
(C) Godavari (D) Brahmaputra
8. Which one of the following is the longest river of the Peninsular India? 1
- (A) Narmada (B) Krishna
(C) Godavari (D) Mahanadi
9. Match the following leaders with their roles in the making of the Constitution: 1
- | | |
|--------------------|--|
| a. Motilal Nehru | i President of the Constituent Assembly |
| b. B.R. Ambedkar | ii Member of the Constituent Assembly |
| c. Rajendra Prasad | iii Chairman of the Drafting Committee |
| d. Sarojini Naidu | iv Prepared a Constitution for India in 1928 |
- (A) a-iv, b-iii, c-i, d-ii (B) a-iv, b-ii, c-i, d-iii
(C) a-iii, b-ii, c-i, d-iv (D) a-iv, b-i, c-ii, d-iii

10. Which of the following body was responsible for preparing the Indian constitution? 1
(A)Imperial Legislative Council(B)The Parliament of India
(C)The Assembly of Indian Constitution (D)The constituent Assembly of India
11. Which of the following country had a history of successfully resolving the evil practice of Apartheid through constitutional means? 1
(A) South Africa(C) Nigeria
(B) Democratic Republic of Congo(D) Mexico
12. Which of the following is NOT the power of Indian President? 1
(A)President appoints the Prime Minister.
(B)President chairs the meeting of Cabinet.
(C)President can ask for reconsideration of a bill passed by both the Houses.
(D)President appoints Chief Justice of India.
13. ZANU-PF is a political party associated with which of the following country? 1
(A) Australia
(B) New Zealand
(C) Jamaica
(D) Zimbabwe
14. Which of the following rights is available as a fundamental right under the Indian Constitution? 1
(A)Right to work (B)Right to adequate livelihood
(C)Cultural and Educational Rights (D)Right to privacy
15. Under the Targeted Public Distribution System (TPDS) foodgrains given per family per month is : 1
(A) 40 kg (B) 35 kg
(C) 20 kg (D) 25 kg
16. Who are the poorest of the poor? 1
(A) Landlord, ministers and businessmen
(B) Women, old people and children
(C)Landless labourers, daily wage workers, destitute and homeless
(D)None of these

17. What is the main objective of Mahatma Gandhi National Rural Employment Guarantee Act, 2005? 1 25.

- (A) Employment Guarantee in rural areas
- (B) Identification of poor in rural areas
- (C) Increasing level of education among the poor
- (D) Reducing burden of debt on farmers

18. Which of the following social groups are most vulnerable to poverty? 1

- (A) Scheduled castes
- (B) Scheduled tribes
- (C) Rural agricultural labourers
- (D) All the above

19. The food distributed by the Public Distribution System is procured through _____. 1

- (A) Food Corporation of India
- (B) Ministry of Agriculture
- (C) Ministry of Health and Family Affairs
- (D) Department of Food Control

20. Which of the following statements is true regarding the Green Revolution? 1

- (A) Green Revolution increased food production in India
- (B) The Green Revolution has caused food insecurity in India
- (C) The Green Revolution failed to deal with famines in India
- (D) The Green Revolution increased the occurrence of famines in India

Section B - VERY SHORT ANSWER QUESTION (2x4=8)

21. Highlight important features of Nazi thinking? 2

22. The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat in the west but the watches show the same time. How does this happen? 2

Or

Why has 82°30'E been selected as the Standard Meridian of India? 2

23. What are major functions of Election Commission of India? 2

24. Explain the role of education in human capital formation? 2

Section C - SHORT ANSWER-BASED QUESTIONS (3x5=15)

25. In what ways was the working population in Russia different from other countries in Europe, before 1917? 3

Or

Why did the Tsarist autocracy collapse in 1917?

26. Distinguish between Bhangar and Khadar 3

Or

Western Ghats and Eastern Ghats

27. Explain the importance of independent Judiciary in a Democracy. 3

28. Table 3.1: Estimates of Poverty in India (Tendulkar Methodology) 3

Year	Poverty ratio (%)			Number of poor (in millions)		
	Rural	Urban	Total	Rural	Urban	Combined
1993-94	50	32	45	329	75	404
2004-05	42	26	37	326	81	407
2009-10	34	21	30	278	76	355
2011-12	26	14	22	217	53	270

Source: India in figures, 2018 Government of India Central Statistics office.
 niti.gov.in/statistics (accessed on Nov.15,2021)

Study Table 3.1 and answer the following questions:

28-A. Even if the poverty ratio declined between 1993-94 and 2004-05, why did the number of poor remained at about 407 million? (2)

28-B. Are the dynamics of poverty reduction the same in rural and urban India? (1)

29. Define the following terminologies 1x3= 3
- Gross Domestic Product
 - Poverty line
 - Minimum Support Price

Section D- LONG ANSWER-BASED QUESTIONS (5X4=20)

30. Which groups of French society benefited from the revolution? Which groups were forced to relinquish power? Which sections of society would have been disappointed with the outcome of the revolution? 5

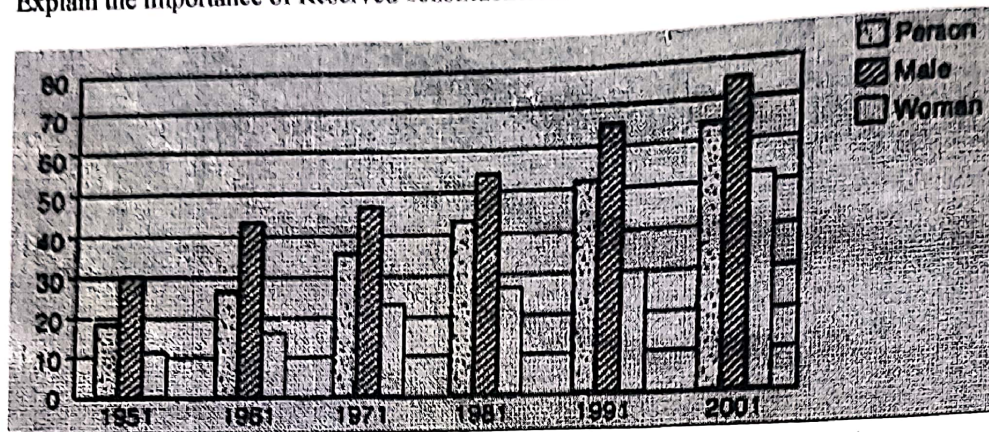
Or

Draw up a list of democratic rights we enjoy today whose origins could be traced to the French Revolution

31. Give the characteristics and effects of the monsoon rainfall in India. 5

32. What are the challenges of free and fair elections?
Or
Explain the importance of Reserved constituencies?

33.



Reference- literacy rate in India

Study the above graph and answer the following questions:

- Has the literacy rates of the population increased since 1951?
- In which year India has the highest literacy rates?
- Why is literacy rate high among the males of India?
- Why are women less educated than men?
- How would you calculate literacy rate in India?

Section E- CASE-BASED QUESTIONS (4X3=12)

34. Read the source given below and answer the questions that follow:

In 1933 Hitler said: 'In my state the mother is the most important citizen.' But in Nazi Germany all mothers were not treated equally. Women who bore racially undesirable children were punished and those who produced racially desirable children were awarded. They were given favoured treatment in hospitals and were also entitled to concessions in shops and on theatre tickets and railway fares. To encourage women to produce many children, Honour Crosses were awarded. A bronze cross was given for four children, silver for six and gold for eight or more. All 'Aryan' women who deviated from the prescribed code of conduct were publicly condemned, and severely punished. Those who maintained contact with Jews, Poles and Russians were paraded through the town with shaved heads, blackened faces and placards hanging around their necks announcing 'I have sullied the honour of the nation'. Many received jail sentences and lost civic honour as well as their husbands and families for this 'criminal offence'.

- What was the objective of awarding Honour crosses to women? (1)
- Describe treatment given to people who maintained contact with the Jews? (1)
- What was the status of women in Nazi Germany? (2)

35. Read the source given below and answer the questions that follow:

In China, elections are regularly held after every five years for electing the country's parliament, called Quanguo Renmin Daibiao Dahui. The National People's Congress has the power to appoint the President of the country. It has nearly 3,000 members elected from all over China. Some members are elected by the army. Before contesting elections, a candidate needs the approval of the Chinese Communist Party. Only those who are members of the Chinese Communist Party or eight smaller parties allied to it were allowed to contest elections held in 2002-03.

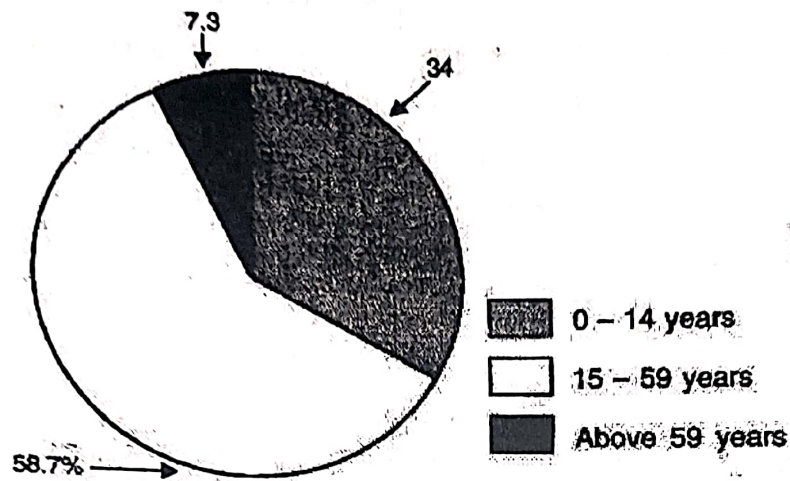
Mexico holds elections after every six years to elect its President. The country has never been under a military or dictator's rule. But until 2000 every election was won by a party called PRI. Opposition parties did contest elections, but never managed to win. The PRI was known to use many dirty tricks to always win elections. All those who were employed in government offices had to attend its party meetings. Teachers of government schools used to force parents to vote for the PRI. Media largely ignored the activities of opposition political parties except to criticize them. Sometimes the polling booths were shifted from one place to another in the last minute, which made it difficult for people to cast their votes. The PRI spent a large sum of money in the campaign for its candidates. In China the elections do not offer the people any serious choice. They have to choose the ruling party and the candidates approved by it. In the Mexican example, people seemed to really have a choice but in practice they had no choice. There was no way the ruling party could be defeated, even if people were against it. These are not fair elections. Holding elections of any kind is not sufficient. The elections must offer a real choice between political alternatives. And it should be possible for people to use this choice to remove the existing rulers, if they wish so.

(i) Why can the Chinese government not be called a democratic government even though elections are held there? (1)

(ii) _____ party always won elections in Mexico since its independence in 1930 until 2000. (1)

(iii) On the basis of reading the above paragraph explain the importance of free and fair elections in a democracy? (2)

36.



Study the given figure carefully and answer the following questions:

- Which age group has the maximum share in the population?(1)
- What is the percentage of working population in relation to the total population?(1)
- What is the percentage of India's dependent population?(2)

37.

Section F- MAP SKILL-BASED QUESTION (2+3=5)

- On an outline map of the Europe, two nations A and B are marked these are countries of Second World War "Axis Powers". Identify these countries and write their correct names on the lines marked on the map.
- On the outline map of India locate and label **ANY THREE** of the following with suitable Symbols.
 - Ganga river
 - Montane Forest – Vegetation Type
 - Tropic of Cancer
 - Sambhar salt Lake

Name-

Class/Sec-

Roll no.-

Invigilators signature-



Q no. 37 B

Name-

Class/Sec-

Roll no.-

Invigilators signature-

