

ATOMIC ENERGY CENTRAL SCHOOL NO.4 RAWATBHATA

CLASS 08 - ENGLISH

Online Descriptive Type Test - 1(2020-21)

Time Allowed: 1 hour and 28 minutes

Maximum Marks: 40

Section A

1. Transitive verb has [1]
 - a) no object
 - b) a modal verb
 - c) none of these
 - d) an object
2. What are the first person? [1]
 - a) I and we
 - b) he and you
 - c) they and we
 - d) you and she
3. Change voice: Reena is doing her work [1]
 - a) none of these
 - b) her work is done by Reena
 - c) her work was done by Reena
 - d) her work is being done by Reena
4. Choose kind of adjective: It is my pen [1]
 - a) adjective of quantity
 - b) possessive adjectives
 - c) adjective of number
 - d) adjective of quality
5. Why was Bepin reluctant to call Dinesh Mukerji? [1]
6. Bepin Babu lost consciousness at Hundroo Falls. What do you think was the reason for this? [1]
7. How, according to Parimal Ghosh, had Bepin Babu hurt his knee? [1]
8. Why did the man stare at Bepin Babu in disbelief? [1]
9. What would Bepin Choudhury do every Monday? [1]
10. What sort of social habits did Bepin Choudhury have? [1]
11. Who was Chunilal? What did he want from Bepin Babu? [1]
12. Why could Hafeez not join the army? [1]
13. Why did Hafeez Contractor go to an architect's office for learning French? [1]
14. Hafeez Contractor wanted to join the police force. Why didn't he? [1]
15. What was the terrible nightmare of Hafeez Contractor as a student? [1]
16. What did Hafeez do in school as a gang leader? [1]

Section B

17. How does the boy spend his day at school? Write your answer in the context The School Boy. [2]

Section C

18. Why was Dr. Chandra puzzled? What was unusual about Bepin Babu's loss of memory? [3]
19. What is Hafeez Contractor's definition of Mathematics? [3]
20. **Read the following extract and answer the questions that follow:** [3]

What are you saying, Mr. Choudhury? You had a fall in Hudroo and cut your right knee. I brought you iodine. I had fixed up a car for you to go to Netarhat the next day, but you

couldn't because of the pain in the knee. Can't you recall anything? Someone else you know was also in Ranchi at that time. Mr. Dinesh Mukerji.

- i. Who is the speaker of these lines?
- ii. Who was Dinesh Mukerji?
- iii. Why was he not able to recall anything?

21. **Read the following extract and answer the questions that follow:** [3]

But to go to school in a summer morn,
O' it drives all joy away,
under a cruel eye outworn,
The little ones spend the day,
In sighing and dismay.

- i. What drives away all the joy?
- ii. What does **cruel eye outworn** refer to?
- iii. How do the little ones spend the day?

Section D

22. Suppose you are Shashi Joshi of Class VIII studying in Springfield Public School, Jamshedpur. You have lost a bag of books during the lunch break. Write a notice for the School Noticeboard. [5]

23. **Read the following poems carefully: (1 x 5 = 5)** [5]

Great, wide, beautiful, wonderful World,
With the wonderful water round, you curled,
And the wonderful grass upon your breast
World, you are beautifully dressed.
The wonderful air is over me,
And the wonderful wind is shaking the tree,
It walks on the water, and whirls the mills,
And talks to itself on the tops of the hills.
You friendly Earth, how far do you go,
With the wheat-fields that nod and the rivers that flow,
With cities and gardens, and cliffs, and isles,
And people upon you for thousands of miles?
Ah! you are so great, and I am so small,
I tremble to think of you, World, at all;
And yet, when I said my prayers today,
A whisper inside me seemed to say,
You are more than the Earth, though you are such a dot:
You can love and think, and the Earth cannot!

- i. In the poem above 'beautifully dressed' refers to
 - a. having gaudy dress
 - b. decorated with nature's beauty
 - c. wearing costly dresses
 - d. wearing cheap but beautiful dresses.

- ii. The poet calls the world 'beautifully dressed' because
 - a. it looks beautiful
 - b. it has wonderful grass curled around it
 - c. it is covered with fine clothes
 - d. it is covered with green leaves.
- iii. The wind in the poem talks to
 - a. passersby
 - b. trees
 - c. clouds
 - d. itself.
- iv. The poet calls the earth
 - a. unfriendly
 - b. friendly
 - c. proud
 - d. kind.
- v. The phrase such a dot means
 - a. so small
 - b. so fat
 - c. so big
 - d. so kind.

परमाणु ऊर्जा केन्द्रीय विद्यालय-4, रावतभाटा
वर्णात्मक परीक्षा-2020

कक्षा-आठवीं पूर्णांक-40
विषय-हिन्दी समय-90 मिनट

प्रश्न.1 निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर लिखिए-

अब सब लोग नल पर टूट पड़े। यहाँ भी घमासान मची कि क्या मजाल जो एक बूँद पानी भी किसी के बर्तन में आ सके। ठूसम-ठास किसी बालटी पर पतीला और पतीले पर लोटा और भगोने और डोंगे। पहले तो धक्के चले। फिर कुहनियाँ और उसके बाद बरतन। फौरन बड़े भाइयों, बहनों, मामुओं और दमदार मौसियों, फूफियों की कुमक भेजी गई, फौज़ मैदान में हथियार फेंककर पीठ दिखा गई।

- क. पाठ के लेखक का नाम लिखिए। 1
ख. नल पर घमासान क्यों मची थी। 1
ग. कुमक का अर्थ क्या है? 1
घ. धक्के और कुहनियाँ क्यों चलीं? 1
ङ. भाइयों, बहनों, मामुओं और दमदार मौसियों की कुमक क्यों भेजी गई? 1

प्रश्न2 निम्नलिखित में से किन्हीं पाँच प्रश्नों के उत्तर लिखिए- 3x5=15

- क. तलवार का महत्व होता है म्यान का नहीं- उक्त उदाहरण से कबीर क्या कहना चाहते हैं? स्पष्ट कीजिए
ख. कबीर घास की निंदा करने से क्यों मना करते हैं?
ग. कबीर के दोहों को साखी क्यों कहा जाता है?
घ. कामचोर कहानी क्या संदेश देती है?
ङ. बच्चों के ऊधम मचाने के कारण घर की क्या दुर्दशा हुई?
च. भरा-पूरा परिवार कैसे सुखद बन सकता है और कैसे दुखद?

प्रश्न3 घरेलू नौकरों को हटाने की बात किन-किन परिस्थितियों में उठ सकती है। 5

प्रश्न4. नीचे दिए गए शब्दों को शुद्ध हिन्दी में लिखिए- 5

ग्यान, जीभि, पाऊँ, गारी, आँखि

प्रश्न5. नीचे दिए गए उपसर्ग जोड़कर दो-दो नए शब्द बनाइए- 5

प्र, आ, भर, बद, बे

प्रश्न6. निम्नलिखित प्रश्नों के उत्तर दीजिए-

- क. पहला वेद कौन-सा है? 1
ख. अर्थशास्त्र किसकी रचना है? 1
ग. भगवद्गीता में कितने श्लोक हैं? 1
घ. प्राचीन भारत के दो महाकाव्य कौन-कौन से हैं? 1
ङ. चरक किसके दरबार में राजवैद्य थे? 1

ATOMIC ENERGY CENTRAL SCHOOL NO.4 Rawatbhata

CLASS 08 - MATHEMATICS

Online Descriptive Type Test -1(2020-21)

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 40

Section A

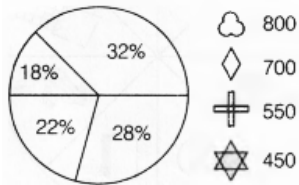
- Fill in the blanks: [1]
 - A display of information using bars of uniform width, their height being proportional to the respective values is called _____ graph.
- Arrange the following data in ascending order. [1]
4.6, 8.1, 2.0, 3.5, 0.7, 9.3, 1.4, 0.8
- Find the square root of 729. [1]
- Find the cube root of 13824 by prime factorisation method. [1]

Section B

- Find the probability of getting an ace from a well shuffled deck of 52 playing cards? [2]
- Find the square root of 169 by the method of repeated subtraction. [2]
- Find the cube root of 8000. [2]

Section C

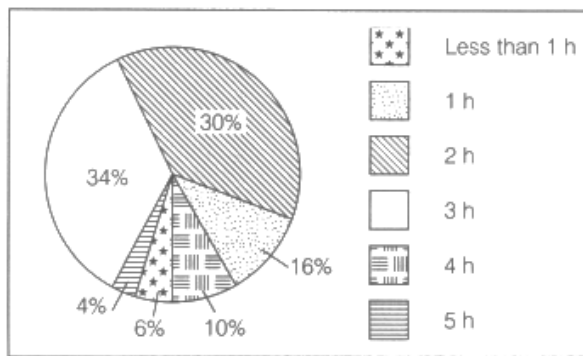
- Identify which symbol should appear in each sector of the pie chart. [3]



- The weekly wages (in dollars) of 28 workers of a factory are given below: [3]
668, 610, 642, 658, 668, 620, 719, 720, 700, 690, 710, 642, 672, 654, 692, 706, 718, 702, 704, 678, 615, 640, 680, 716, 705, 615, 636, 656
- Find the least number which must be subtracted from 825 so as to get a perfect square. Also find the square root of the perfect square so obtained. [3]
- Find the smallest square number that is divisible by each of the numbers 4, 9 and 10. [3]
- Find the smallest number by which 72 must be multiplied to obtain a perfect cube. [3]
- Find the smallest number by which 81 must be divided to obtain a perfect cube. [3]

Section D

- Given below is a pie chart showing the time spend by a group of 350 children in different games. Observe it and answer the questions that follow. [4]
 - How many children spend atleast one hour in playing games?
 - How many children spend more than 2 h in playing games?
 - How many children spend 3 or lesser hours in playing games?
 - Which is greater, number of children who spend 2 hours or more per day or number of children who play for less than one hour?



15. Find the smallest whole number with which 1620 should be divided so as to get a perfect square. Also find the square root of the square number so obtained. **[4]**
16. Shyamala grew 400 plants in her garden. How many more plants should she grow, so that the total number is a perfect cube? **[4]**

रावतभाटा

कक्षा – आठवीं

वर्णनात्मक परीक्षा 24-9-2020

समय- 90 मिनट

विषय – संस्कृत

पूर्णांक – 40

प्रश्न- 1- अधोलिखितं गद्यांशं पठित्वा प्रश्नाम् उत्तराणि लिखत – [गद्यांश पढकर प्रश्नों के उत्तर संस्कृत में लिखिए]

कस्मिन्श्चित् वने खरनखर; नाम सिंहः प्रतिवसति स्म । सः कदाचित् इतस्ततः परिभ्रमन् क्षुधार्तः न किञ्चिदपि आहारं प्राप्तवान् । ततः सूर्यास्तसमये एकां महतीं गुहां द्रष्ट्वा सः अचिन्तयत् – “ नूनम् इत्स्याम् गुहायाम् रात्रो कोऽपि जीवः आगच्छति । अतः अत्रेव निगूढो भूत्वा तिष्ठामि “ इति ।

1-सिंहस्य नाम किम् अस्ति ? 1*5=5

2-सिंह किम् द्रष्ट्वा अचिन्तयत् ?

3-गुहा कीदृशी आसीत् ?

4-सिंह कुत्र प्रतिवसति स्म ?

5-परिभ्रमण सिंह किम्

न् प्राप्तवान् ?

प्रश्न -2- प्रदत्तविकल्पेभ्यः उचित पदं चित्वा वाक्यपूर्तिं कुरुत- [दिए गए विकल्पों से उचित पद चुनकर रिक्तस्थान भरिए-] 1*5=5

१- सदैव ----- निधेहि चरणम् । [परितः / पुरतो / सर्वतः]

२- विनैव यानम् ----- । [नागारोहणम् / नगारोहणम् / नगावरोहणम्]

३- ----- राष्ट्रैतथाऽनुरक्तिम् । [देहि / विधेहि / जहिही]

४- कुरु कुरु सततं ----- । [निजनिकेतनम् / ध्येय-स्मरणम् / सुदुष्करम्]

५- जहिही भीतिम् भज भज ----- । [साधनम् / शक्तिम् / गमनम्]

प्रश्न – 3- अधोलिखितपदयोः संधि कृत्वा लिखत – [संधि करके लिखिए] 1*5=5

पदस्या + अस्य = -----

तालपत्र + उपरि = -----

च + अतिष्ठत = -----

क्रय + अर्थम् = -----

उपचार + अर्थम् = -----

प्रश्न-4 निम्नलिखित में से किन्ही 3 के उत्तर संस्कृत में एक पद में लिखिए – 1*3=3

क – कुत्र ' डिजिटल इंडिया ' इत्यस्य चर्चा भवति ?

ख- कस्मिन् उद्योगे वृक्षाः उपयुज्यन्ते ?

ग – अद्य सर्वाणि कार्याणि केन साधितानि भवन्ति ?

घ- प्राचीनकाले विद्या कथं गृहीयते स्म ?

ङ – वयं कस्याम् दिशि अग्रेसरामः ?

च – केन सह मानवस्य आवश्यकता परिवर्तते ?

छ – वस्त्रपुटके केषाम् आवश्यकता न भविष्यति ?

प्रश्न-5 विलोमपदानि योजयत - [विलोम पदों का मिलान कीजिए] 1*5=5

पुरतः विरक्तिः

स्वकीयम् आगमनम्

भीतिः पृष्ठतः

अनुरक्तिः परकीयम्

गमनम् साहसः

प्रश्न – 6- अधोलिखित –तदभव- शब्दानाम् कृते संस्कृतपदानि लिखत – [तद्भव शब्दों के तत्सम

शब्द लिखिए] 1*5=5

कड़वा = -----

पूँछ = -----

लोभी = -----

मधुमक्खी = -----

तिनका = -----

प्रश्न – 7 – किसी एक श्लोक का हिन्दी अर्थ लिखिए - 3

1-पुष्पपत्रफलच्छायामूलवल्कलदारुभिः ।

धन्या महिरुहाः येषां विमुखम् यान्ति नार्थिनः ॥

अथवा

2-गुणा गुणज्ञेषु गुणा भवन्ति ,

ते निर्गुणं प्राप्य भवन्ति दोषाः ।

सुस्वादुतोयाः प्रभवन्ति नधः ,

समुद्रमासाद्य भवन्त्यपेयाः ॥

प्रश्न – 8- निम्नलिखित शब्दों के हिन्दी अर्थ लिखिए - 2

रवः = -----

सहसा = -----

जरा = -----

यावत् – तावत् = -----

प्रश्न-9- खाद् धातु भविष्यत काल प्रथम पुरुष और उत्तम पुरुष के तीनों वचनों में रूप लिखिए - 3

ATOMIC ENERGY CENTRAL SCHOOL NO.4 RAWATBHATA

CLASS 08 - SCIENCE

ONLINE DESCRIPTIVE TYPE TEST- I(2020- 21)

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 40

Section A

1. Project tiger was launched to: [1]
 - a) protect tigers of India
 - b) protect and preserve tigers of the world
 - c) protect tigers of India and neighbouring countries
 - d) protect tigers of Asia
2. Abiotic components of an ecosystem includes: [1]
 - a) Rainfall
 - b) rhizopus
 - c) rodents
 - d) rhizobium
3. In IVF technique, fusion of ovum and sperm take place in [1]
 - a) Culture medium
 - b) Uterus
 - c) Fallopian tube
 - d) Vagina
4. The sex of child depends on the [1]
 - a) Blood group of mother
 - b) Sperm of father
 - c) Blood group of father
 - d) Ovum of mother
5. The gland whose development is affected by iodine is [1]
 - a) Liver
 - b) Thyroid
 - c) Thyroxin
 - d) Pancreas

Section B

6. What are the causes of deforestation? [2]
7. Draw a labeled diagram of female reproductive system . [2]
8. Differentiate between male gamete and female gamete. [2]
9. What are the changes seen in girls at the time of puberty? [2]

Section C

10. i) Why should paper be saved? [3]
ii) Explain desertification.
11. What is fertilisation? Differentiate between two types of fertilisation.(any two points) [3]
12. What is metamorphosis? Also state any two differences between frog and tadpole. [3]
13. Name the glands which secrete the following hormones.Also mention the function of these hormones. [3]
 - i) Insulin
 - ii) Growth hormone

iii) Estrogen

Section D

14. i) Describe binary fission in amoeba with the help of labeled diagram. [5]
ii) What is the difference between viviparous and oviparous animals ? Also write examples for each.
15. i) Draw a flowchart for the sex determination in humans. [5]
ii) What is AIDS? Also mention the various ways of its transmission.

Section E

16. Fill in the blanks: [5]
- a) A place where animals are protected in their natural habitat is called _____.
 - b) Budding is a type of _____ reproduction.
 - c) Testes are the main reproductive organs in _____.
 - d) Sudden increase in height and hairy line above the lips of boys are signs of _____.
 - e) ----- hormone helps the body to adjust to stress.

ATOMIC ENERGY CENTRAL SCHOOL NO.4 Rawatbhata

CLASS 08 - SOCIAL SCIENCE

Online Descriptive Type Test -1(2020-21)

Time Allowed: 1 hour and 30 minutes

Maximum Marks: 40

Section A

1. The Gaddis of Kulu were [1]
 - a) cattle herders
 - b) shepherds
 - c) fruit gatherers
 - d) hunters
2. According to Verrier Elwin, which tribal group were the best hunters? [1]
 - a) Mundas
 - b) Kols
 - c) Baigas
 - d) Santhals
3. Which among the following are fibre crops? [1]
 - a) Millets and Maize
 - b) Jute and cotton
 - c) Tea and Coffee
 - d) Rice and Wheat
4. Breeding of fish in specially constructed tanks and ponds is known as _____. [1]
 - a) Horticulture
 - b) Sericulture
 - c) Agriculture
 - d) Pisciculture
5. Name the type of activity that includes all those connected with extraction and production of natural resources [1]
 - a) Primary
 - b) Livelihood
 - c) Secondary
 - d) Tertiary
6. In what season is wheat grown in India? [1]
 - a) summer
 - b) autumn
 - c) winter
 - d) monsoon
7. The Parliament of India is the ____ law-making institution. [1]
 - a) Lowest
 - b) Midst
 - c) All of the above
 - d) Supreme
8. What is/are the major duty/duties of Parliament? [1]
 - a) To select the National Government
 - b) Law Making
 - c) To Control, Guide and Inform the Government
 - d) All of these

Section B

9. Mention different types of activities of the tribal people. [2]
10. Define commercial grain farming. [2]

11. What conditions are required for wheat production? [2]
12. What is Parliament? [2]
13. What is meant by the Opposition parties? What role do they play in the government? [2]
14. Under what circumstances is the coalition government formed? Or Write a note on the coalition government [2]

Section C

15. How did traders and money lenders lead to the exploitation of the tribes? [4]
16. Describe commercial farming and its types in detail. [4]
17. Why is the demand for jute decreasing in the domestic and international markets? [4]
18. How the parliament is constituted? Explain. [4]
19. Why do people participate in decision-making? [4]

Solution

Class 08 - English

Online Descriptive Type Test - 1(2020-21)

Section A

1. **(d)** an object
Explanation: an object
2. **(a)** I and we
Explanation: I and we
3. **(d)** her work is being done by Reena
Explanation: her work is being done by Reena
4. **(b)** possessive adjectives
Explanation: possessive adjectives
5. Bepin was reluctant to call Dinesh Mukerji as he thought Dinesh would make a ruthless sarcasm over the issue.
6. Bepin Babu became unconscious near Hundroo Falls. Most probably he would have slipped near Hundroo Falls and that would have made him unconscious.
7. According to Parimal Ghosh, Bepin Babu had a fall in Hudroo. It had injured his knee.
8. According to the man, he had met Bepin Babu at Ranchi. The man stared at Bepin Babu in disbelief because Bepin Babu did not recognise him even though he reminded Bepin Babu of the incident when he had met him in Ranchi. Bepin Babu was also equally sure that he had never met him.
9. Every Monday Bepin Choudhury would go to Kalicharan's shop to buy books.
10. Bepin Choudhury was not very social. He had few friends and didn't like spending time in idle chat.
11. Chunilal was Bepin's school time friend. He was going through a bad phase and wanted some help from Bepin to land a job.
12. Hafeez's aunt tore up his admission letter as she didn't want Hafeez to join the army.
13. Hafeez Contractor wanted to learn French from his cousin. The cousin's husband was an architect. So, Hafeez Contractor had to go to the architect's office to learn French.
14. He couldn't join the police force because his mother did not like him to. She asked him to do his graduation.
15. The terrible nightmare of Hafeez Contractor was about his mathematics examination. He often dreamt of appearing in maths examination and unable to answer any question.
16. Hafeez would plan strategies for gang fights.

Section B

17. The boy spends his day drooping. He does nothing but Sighs in distress and dismay.

Section C

18. Dr. Chandra was puzzled because he had never dealt with a case like that of Bepin Babu. He knew that people lose their memory and forget about the past. The unusual thing about Bepin Babu's loss of memory was that he remembered everything except one. This one thing was his supposed trip to Ranchi.
19. Hafeez Contractor defined mathematics in a different manner: perhaps instinct, or call it arithmetic. Whatever may be. Putting design, construction, psychology and sociology together and making a sketch from all that is meant "mathematics" to Hafeez Contractor.
20.
 - i. Parmal Ghose is the speaker of these lines.
 - ii. Dinesh Mukerji was known to Bepin Choudhury. He had become an accomplice of Chunilal.
 - iii. He was not able to recall anything because he had never been to Ranchi.
21.
 - i. Going to school in a summer morning drives away all the joy.
 - ii. **Cruel eye outworn** refers to the teachers and uninspiring life at school.
 - iii. The little ones spend the day sadly sighing.

Section D

SPRINGFIELD PUBLIC SCHOOL, JAMSHEDPUR

10th August, 20XX

NOTICE

School Bag Lost

I have lost my school bag yesterday on 9th August in the school ground during the lunch break. The bag is brand new and yellow in colour. It has a picture of Micky Mouse on its front. It contains my books, notebooks, lunch box and a colour box. Anyone who finds it is requested to return it to me. A good treat is promised.

Shashi Joshi

Class VIII B

22.

23. i. (b) Beautifully dress refers to decorated with nature's beauty
ii. (b) The poet calls it beautifully dressed as it has wonderful grass curled around it
iii. (d) The wind in the poem talks to the clouds.
iv. (b) The poet calls the earth friendly.
v. (a) Such a dot means so small.

Solution

Class 08 - Mathematics

Online Descriptive Type Test -1(2020-21)

Section A

1. Fill in the blanks:

a) Bar

2. 4.6, 8.1, 2.0, 3.5, 0.7, 9.3, 1.4, 0.8

Ascending order: 0.7, 0.8, 1.4, 2.0, 3.5, 4.6, 8.1, 9.3

$$\begin{array}{r} 27 \\ 2 \overline{) 729} \\ \underline{-4} \\ 329 \\ \underline{329} \\ 0 \end{array}$$

3. Therefore $\sqrt{729} = 27$

4. $13824 = \underline{2 \times 2 \times 2} \times \underline{2 \times 2 \times 2} \times \underline{2 \times 2 \times 2} \times \underline{3 \times 3 \times 3} = 2^3 \times 2^3 \times 2^3 \times 3^3$

Therefore, $\sqrt[3]{13824} = 2 \times 2 \times 2 \times 3 = 24$

Section B

5. Probability of getting an ace from a well shuffled deck of 52 playing cards = $\frac{4}{52} = \frac{1}{13}$ [\because There are in all 4 ace cards]

6. $169 - 1 = 168$

$168 - 3 = 165$

$165 - 5 = 160$

$160 - 7 = 153$

$153 - 9 = 144$

$144 - 11 = 133$

$133 - 13 = 120$

$120 - 15 = 105$

$105 - 17 = 88$

$88 - 19 = 69$

$69 - 21 = 48$

$48 - 23 = 25$

$25 - 25 = 0$

Since from 169 we subtracted successive odd numbers starting from 1 and obtained 0 at the 13th step, therefore, $\sqrt{169} = 13$.

$$\begin{array}{r} 2 \overline{) 8000} \\ \underline{2} \\ 4000 \\ \underline{2} \\ 2000 \\ \underline{2} \\ 1000 \\ \underline{2} \\ 500 \\ \underline{2} \\ 250 \\ \underline{5} \\ 125 \\ \underline{5} \\ 25 \\ \underline{5} \\ 5 \\ \underline{1} \\ 1 \end{array}$$

By prime factorisation,

$8000 = \underline{2 \times 2 \times 2} \times \underline{2 \times 2 \times 2} \times \underline{2 \times 2 \times 2} \times \underline{5 \times 5 \times 5}$ [grouping the factors in triplets]

$= 2^3 \times 2^3 \times 2^3 \times 5^3$ [by laws of exponents]

$= (2 \times 2 \times 5)^3$

= 20^3 which is a perfect cube.
Hence, 8000 is a perfect cube.

Section C

8. Total Quantity obtained from the given four symbols = $800 + 700 + 550 + 450 = 2500$ From the pie chart,
 28% of $2500 = \frac{28}{100} \times 2500 = 700$
 22% of $2500 = \frac{22}{100} \times 2500 = 550$
 18% of $2500 = \frac{18}{100} \times 2500 = 450$
 32% of $2500 = \frac{32}{100} \times 2500 = 800$

Thus,

- 32% → ☁
 28% → ◇
 22% → +
 18% → ☆

9. Construct a frequency table with equal class intervals, taking the first of the class intervals as 610-630, where 630 is not included.

Wages (in Dollars)	610-630	630-650	650-670	670-690	690-710	710-730
Frequency	4	4	5	3	7	5

$$\begin{array}{r}
 28 \\
 2 \overline{) 825} \\
 \underline{- 4} \\
 425 \\
 \underline{- 384} \\
 41
 \end{array}$$

This shows that 28^2 is less than 825 by 41. This means, if we subtract the remainder from the number, we get a perfect square. So, the required least number is 41.

Therefore, the required perfect square is $825 - 41 = 784$

Hence, $\sqrt{784} = 28$.

11. The least number divisible by each one of 4, 9 and 10 is their L.C.M.

$$\begin{array}{r}
 2 \mid 4, 9, 10 \\
 2 \mid 2, 9, 5 \\
 3 \mid 1, 9, 5 \\
 3 \mid 1, 3, 5 \\
 5 \mid 1, 1, 5 \\
 \hline
 1, 1, 1
 \end{array}$$

The L.C.M. of 4, 9 and 10 is $2 \times 2 \times 3 \times 3 \times 5 = 180$

Now prime factorisation of 180 is $180 = \underline{2} \times \underline{2} \times \underline{3} \times \underline{3} \times 5$

The prime factor 5 is not in pair. Therefore 180 is not a perfect square.

In order to get a perfect square, each factor of 180 must be paired. So we need to make pair of 5.

Therefore 180 should be multiplied by 5.

Hence, the required number is $180 \times 5 = 900$.

$$\begin{array}{r}
 12. \quad 2 \mid 72 \\
 2 \mid 36 \\
 2 \mid 18 \\
 3 \mid 9 \\
 3 \mid 3 \\
 \hline
 1
 \end{array}$$

By prime factorisation,

$72 = \underline{2} \times \underline{2} \times \underline{2} \times 3 \times 3$ [grouping the factors in triplets]

The prime factor 3 does not appear in a group of three.

Therefore, 72 is not a perfect cube. To make it a cube, we need one more 3. In that case

$$72 \times 3 = \underline{2} \times \underline{2} \times \underline{2} \times \underline{3} \times \underline{3} \times \underline{3}$$

$$= 2^3 \times 3^3$$

$$= (2 \times 3)^3$$

= 6^3 which is a perfect cube.

Hence, the smallest number by which 72 must be multiplied to obtain a perfect cube is 3.

$$13. \begin{array}{r|l} 3 & 81 \\ \hline 3 & 27 \\ \hline 3 & 9 \\ \hline 3 & 3 \\ \hline & 1 \end{array}$$

By prime factorisation,

$$81 = \underline{3} \times \underline{3} \times \underline{3} \times 3 \text{ [grouping the factors in triplets]}$$

In the above factorisation 3 remains after grouping the 3's in triplets. Therefore, 81 is not a perfect cube. If we divide the number by 3, then in the prime factorisation of the quotient, this 3 will not remain. In that case,

$$81 \div 3 = \underline{3} \times \underline{3} \times \underline{3}$$

$27 = 3^3$ which is a perfect cube.

Hence, the smallest whole number by which 81 must be divided to obtain a perfect cube is 3.

Section D

14. a. Number of children who spend atleast 1 h in playing games i.e. the number of children playing 1 h or more than 1 h
 = (Total number of children) - (Number of children spend less than 1 h)
 = $350 - 6\% \text{ of } 350$
 = $350 - \frac{6}{100} \times 350$
 = $350 - 21 = 329$
- b. Number of children who spend more than 2 h in playing games
 = $(34 + 10 + 4)\%$ of the total number of students
 = 48% of 350
 = $\frac{48}{100} \times 350 = 168$
- c. Number of children who spend 3 or lesser hours in playing games
 = $(34 + 30 + 16 + 6)\%$ of total number of students
 = 86% of 350
 = $\frac{86}{100} \times 350 = 301$
- d. Number of children who spend 2 h or more per day in playing games
 = $(30 + 34 + 10 + 4)\%$ of total number of students
 = 78% of total number of students
 Number of children who spend less than one hour = 6% of total number of students
 Clearly, number of children who play for 2 h or more per day is greater than the number of children who play for less than 1 h.

15. The prime factorisation of 1620 is $1620 = 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 5$

We see that prime factor 5 has no pair. So, if we divide 1620 by 5, then we get

$$\begin{array}{r|l} 2 & 1620 \\ \hline 2 & 810 \\ \hline 3 & 405 \\ \hline 3 & 135 \\ \hline 3 & 45 \\ \hline 3 & 15 \\ \hline & 5 \end{array}$$

$$1620 \div 5 = \underline{2} \times \underline{2} \times \underline{3} \times \underline{3} \times \underline{3} \times \underline{3}$$

Now each factor has a pair. Therefore, $1620 / 5 = 324$ is a perfect square. Thus the required smallest number is 5.

16. No. of plants in the garden = 400

400 is not a perfect cube. So, some number should be added to 400 to make it a perfect cube.

400 lies between $7^3 = 343$ and $8^3 = 512$.

Therefore, to make 400 to 512, the number that should be added to 400 is

$$512 - 400 = 112.$$

So, 112 more plants should be grown, to make total number 512, which is a perfect cube.

Solution

Class 08 - Science

ONLINE DESCRIPTIVE TYPE TEST- I(2020- 21)

Section A

1. **(a)** protect tigers of India

Explanation: Project tiger was launched in 1973 in india.

The main objective of Project Tiger is to ensure a viable population of tiger in India for scientific , **economic** , aesthetic , cultural and ecological values .

2. **(a)** Rainfall

Explanation: The non living components of an ecosystem are called abiotic components. Rainfall is a non living component of an ecosystem. So rainfall is an abiotic component of an ecosystem.

3. **(a)** Culture medium

Explanation: The couple which are not able to reproduce uses IVF technique in which eggs and sperms collected from donor or self is fertilized in culture medium and fertilized egg is implanted in uterus of female.

4. **(b)** Sperm of father

Explanation: Male produce two kinds of sperms, half containing X chromosome and half contain Y chromosome. The sperm that fertilise the egg of female decides the sex of child. X chromosome is responsible for the development of female and Y chromosome is responsible for male .

5. **(b)** Thyroid

Explanation: Development of thyroid gland is affected by iodine. Thyroid gland is located in neck that produce thyroxin hormone.

Section B

6. Causes of deforestation:

- (i) Procuring land for cultivation.
- (ii) Building of houses and factories.
- (iii) Making furniture or using wood as fuel.
- (iv) Clearing land for making roads, railway lines, dams, etc.
- (v) Grazing cattle.

7. -----

8. -----

9. The various changes that occur into girls at the time of puberty are

- (a) hair growth in the armpits and pubic region.
- (b) development of mammary glands or breasts.
- (c) onset of menstruation cycle due to production of eggs or ova by the ovaries.
- (d) increased oil secretion in the skin.

Section C

10. **Paper should be saved for the following reasons:**

- (a) A large number of trees can be saved by saving paper this can check deforestation.
- (b) Saving paper also saves energy and water needed for manufacturing paper.
- (c) Amount of harmful chemicals used making will be reduced by saving paper.

The ways to save paper are :

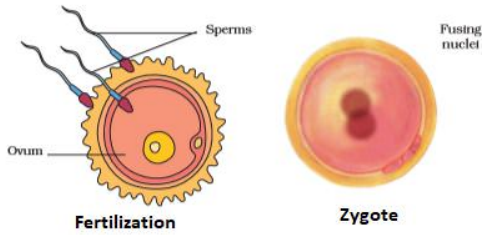
- (1) Economical use of paper.
- (2) Recycling of paper should be done.
- (3) Paper should not be burnt.
- (4) Using both sides of a paper for writing.
- (5) Spreading awareness about the importance of paper among the school children and youth.
- (6) Intelligent and proper use of paper.

11. When sperms come in contact of an egg, one of the sperms may fuse with the egg. Such type of fusion of sperm and egg is called fertilisation. In this process formation of zygote takes place. There are following two

types of fertilisation: (i) Internal fertilisation (ii) External fertilisation.

i. **Internal fertilisation:** The fertilisation in which fusion of egg and sperm takes place inside the body of female is called internal fertilisation. Internal fertilisation takes place in many animals like, cow, dogs, hens and human beings.

ii. **External fertilisation:** The fertilisation in which fusion of egg and sperm takes place outside the body of female is called external fertilisation. It is very common in aquatic animals like fish, frog and starfish etc.



12. -----

13. -----

Section D

14. -----

15. -----

Section E

16. Fill in the blanks:

- a) Zoo
- b) Asexual
- c) males
- d) Adolescence
- e) adrenaline

Solution

Class 08 - Social Science

Online Descriptive Type Test -1(2020-21)

Section A

1. **(b)** shepherds

Explanation: Many tribal groups lived by herding and rearing animals. The Gaddis of Kulu were shepherds.

2. **(c)** Baigas

Explanation: The answer is correct because Verrier Elwin in his Notes on Khonds have mentioned that the Baigas were the best hunters .

3. **(b)** Jute and cotton

Explanation:

1. Cotton requires high temperature, light rainfall, two hundred and ten frost-free days and bright sunshine for its growth. It grows best on black and alluvial soils. China, USA, India, Pakistan, Brazil and Egypt are the leading producers of cotton. It is one of the main raw materials for the cotton textile industry.

2. Jute was also known as the 'Golden Fibre'. It grows well on alluvial soil and requires high temperature, heavy rainfall and humid climate. This crop is grown in the tropical areas. India and Bangladesh are the leading producers of jute.

4. **(d)** Pisciculture

Explanation: Fish farming or pisciculture involves raising fish commercially in tanks or enclosures such as fish ponds, usually for food.

5. **(a)** Primary

Explanation: Primary activities include all those connected with extraction and production of natural resources. Agriculture, fishing and gathering are good examples of primary activities.

6. **(c)** winter

Explanation: Wheat requires moderate temperature and rainfall during growing season and bright sunshine at the time of harvest. It thrives best in well drained loamy soil. Wheat is grown extensively in USA, Canada, Argentina, Russia, Ukraine, Australia and India. In India it is grown in winter

7. **(d)** Supreme

Explanation: The Parliament of India (Sansad) is the supreme law-making institution. It has two Houses, the Rajya Sabha and the Lok Sabha.

8. **(d)** All of these

Explanation: The three major duties of the Parliament are

A. To Select the National Government

B. To Control, Guide and Inform the Government

C. Law-Making

Section B

9. (a) Some practiced jhum cultivation.

(b) Some were hunter – gatherers.

(c) Some herded animals.

(d) Some took to settled cultivation.

10. In commercial grain farming crops like wheat and maize are grown for commercial purposes. Temperate grasslands of North America, Europe, and Asia are major areas of commercial grain farming. These areas are sparsely populated with large farms spreading over hundreds of hectares. Severe winter restricts the growing season and only a single crop can be grown.

11. i. Wheat requires moderate temperature and rainfall during the growing season.

ii. It needs bright sunshine at the time of harvest.

iii. It thrives best in well-drained loamy soil.

12. Parliament is the voice of the people and represents their needs and interests. The Parliament in India consists of the President, the Rajya Sabha and the Lok Sabha. It is the highest law-making body of the country.
13. After election results are declared, the leader of the party with clear majority of elected members form a government. The other political parties form the opposition. The largest amongst these parties is known as the Opposition party. The Opposition parties play a crucial role in the healthy functioning of a democracy. They keep a check on the government by highlighting its drawbacks in various policies and programmes. They also mobilise popular support for their own policies.
14. The coalition government is a phenomenon of the recent past. At times it so happens that one political party does not get a clear majority that is required to form the government. In such circumstances a group of political parties come together to form a government. These political parties are usually interested in similar concerns. The government formed by these parties is popularly known as the coalition government.

Section C

15. Tribal groups often needed to buy and sell in order to be able to get the goods that were not produced within the locality. This led to their dependence on traders and moneylenders. Traders came around with things for sale. They sold the goods at high prices. Moneylenders used to give loans. The money lenders would charge a high rate of interest. The traders and moneylenders would exploit the tribals by selling goods at high rates and demanding high interest on the loans. For meeting their cash needs they would take loans from the moneylenders who charge high-interest rates. Hence the tribals considered the money lenders as evil and the main cause for their miserable state.
16. Commercial farming is the practice in which crops are grown exclusively for commercial purpose, i.e. for sale in the market. A large area is cultivated and huge capital is involved unlike subsistence farming. Machines are used to a large extent.

Commercial grain farming is a class of commercial farming. Crops like wheat and maize are grown for commercial purpose. The temperate grasslands of North America, Europe and Asia are some common areas where it is seen.

Mixed farming is another type of commercial farming. The land is used for growing food and fodder crops and rearing livestock. Some areas where it is followed are Europe, eastern USA, Argentina, south-east Australia, New Zealand and South Africa.

Plantations are a type of commercial farming where only a single crop (like tea, coffee, sugarcane, cashew, rubber, banana or cotton) is grown. Large amount of labour and capital are required. The produce is processed in the farm itself or nearby factories.

17. Following points show a decrease in demand for jute owing to the Government of India:
 - i. The jute mills often failing to supply bags to sugar mills on time, as a result, jute mills in India are not getting orders from sugar mills and the demand for jute has dropped.
 - ii. The government has increased the Minimum Support Price (MSP) for jute.
 - iii. Jute prices are also sensitive to climate fluctuations in Bangladesh and the North-West of India (West Bengal), which are the areas that produce two-thirds of the total global jute production and have similar climates and weather conditions.
 - iv. Despite the expansion of jute growing area and intensification of its cultivation, India is not self-sufficient in the supply of raw material.

18. Once elections to the Parliament have taken place, the Parliament needs to perform the following functions:

TO SELECT THE NATIONAL GOVERNMENT:

- The Parliament in India consists of the President, the Rajya Sabha and the Lok Sabha.

THE LOK SABHA

1 For a political party to form the government in Lok Sabha, they must have a majority of elected MPs.

→ Since there are 543 elected (plus 2 nominated) members in Lok Sabha, to have a majority a party should have at least

half the number i.e. 272 members or more.

2. Coalition government is formed when one political party does not get simple majority. In such a condition, a group of

different political parties come together to form a government.

3. The Prime Minister of India is the leader of the ruling party in the Lok Sabha.

4. From the MPs who belong to her party, the Prime Minister selects ministers to work with her to implement decisions.

RAJYA SABHA

1. The Rajya Sabha functions primarily as the representative of the states of India in the Parliament.
 2. The Rajya Sabha can also initiate legislation and a bill is required to pass through the Rajya Sabha in order to become a law.
 3. It, therefore, has an important role of reviewing and altering (if alterations are needed) the laws initiated by the Lok Sabha.
 4. The members of the Rajya Sabha are elected by the elected members of the Legislative Assemblies of various states.
 5. There are 233 elected members plus 12 members nominated by the President.
- 19.
- i. The Constitution gave the right to the people of India to decide whom they want as their representatives.
 - ii. The Constitution wants that the people of India should be free to select and decide their dreams, demands, and aspirations. The government had to be sensitive to people's needs and demands.
 - iii. After the freedom struggle, participation in decision making was the initial step taken for people's freedom.
 - iv. The constitution laid the principle of universal adult franchise, i.e., all adult citizens of the country have the right to vote without any discrimination on the basis of caste, color, creed or religion, sex, etc.