

### PHYSICS

1. Define “Acceleration” and its S.I. unit (1m)
2. Write any two differences between 'Distance' and 'Displacement'. (2m)
3. A stone is dropped from a height of 50 meters with an acceleration of  $10\text{m/s}^2$ . Find the time to reach the ground and at what velocity it will strike the ground. (2m)
4. A truck goes 12Km north and then 5km east in half an hour. find speed and velocity of the truck (3m)
5. Write the 'Position velocity' relation. Establish this relation graphically. (1 + 4 = 5m)

### CHEMISTRY

1. Open a water tap, try breaking the stream of water with your fingers. What could be the reason behind the stream of water remaining together? (2)
2. Convert the following temperature : (a) 300K to Celsius (b) 250°C to Kelvin (2)
3. Mention the factors affecting evaporation. (2)
4. What produces more severe burns, boiling water or steam? Give reason. (2)
5. (a) Suggest a method to liquefy gases. (2+3)  
(b) Draw well labelled diagram of sublimation process.

### BIOLOGY

1. Who coined the term ‘protoplasm’? (1)
  2. Write the steps involved in the preparation of a temporary slide of onion peel. (2)
  3. Differentiate between prokaryotes and eukaryotes. (2)
  4. Why the lysosomes are known as suicidal bags? (2)
  5. What are the major functions of endoplasmic reticulum. (2)
  6. Distinguish between plant cells and animal cells with the help of diagrams. (2+3)
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Atomic Energy Central School No.4, Rawatbhata

Periodic Test-1 (2018-19)

Time – 1 & Half Hrs

Class-IX (Social Science)

M.M.- 40

General Instruction: -

All questions are compulsory

Write in neat and clear manner

After completion, attach the maps inside your answer book.

- |      |   |   |
|------|---|---|
| Q.1  | When did Louis XVI ascend the throne of France?   | 1 |
| Q.2  | What is the area of Landmass of India?  | 1 |
| Q.3  | What is Indirect Democracy?   | 1 |
| Q.4  | Name some non-farming activities?   | 1 |
| Q.5  | How did the spread of electricity help farmers in Palampur.   | 3 |
| Q.6  | “Democracy improves the quality of decision making” explain?  | 3 |
| Q.7  | “India is a country of great geographical extent”. Explain.   | 3 |
| Q.8  | Explain in brief the rise of Napoleon.  | 3 |
| Q.9  | Describe the circumstances leading to the outbreak of revolutionary protest in France?                  | 5 |
| Q.10 | The central location of India at the head of the Indian ocean is considered of great significance. Why? | 5 |
| Q.11 | Explain any five major features of democracy.   | 5 |
| Q.12 | What are the different ways of increasing production on the same piece of Land?                         | 5 |
| Q.13 | On an outline map of India locate and label the following?  |   |
| a)   | The place situated on three seas.   | 1 |
| b)   | The Strait separating Sri-Lanka from India  | 1 |
| c)   | Any Two union Territories of India  | 2 |

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General Instructions: (i) the question paper consists of 15 questions divided into FOUR sections –A,B,C and D

(ii) Section A contains 3 questions of 1 mark each. Section B contains 3 questions of 2 marks each. Section C contains 5 questions of 3 marks each and Sections D contains 4 questions of 4 marks each.

## SECTION-A

1 Is  $\sqrt{225}$  is a rational or irrational number? (1M)

2 Write the degree of polynomial  $\sqrt{5}$ . (1M)

3. In which quadrant points (3, -4) and (-6, -3) lie? (1M)

## SECTION -B

4 Find 2 rational number between  $\frac{5}{7}$  and  $\frac{9}{11}$ . (2M)

5 If  $3^{4x-2} = 729$ , then find the value of x (2M)

6 Find the remainder when  $x^3 - ax^2 + 6x - a$  is divided by  $x - a$  (2M)

## SECTION – C

7 Represent  $\sqrt{9.30}$  on the number line (3M)

8 Factorise:  $4x^2 + 9y^2 + 16z^2 + 12xy - 24yz - 16xz$  (3M)

Or

Evaluate using suitable identities:  $(998)^2$

9 If  $\frac{\sqrt{3}-1}{\sqrt{3}+1} = a + b\sqrt{3}$ , find the values of a and b. (3 M)

10 Write the coordinates of the points:

(a) Whose abscissa is -5 and lies on the x-axis

(b) Whose ordinate is 3 and lies on the y axis

(c) Whose abscissa is -4 and ordinate is 6 (3M)

11 If  $x = 2 + \sqrt{3}$ . find the values of  $x + \frac{1}{x}$ . (3M)

## SECTION D

12 Simplify:  $(1^3 + 2^3 + 3^3 + 4^3)^{1/2}$  (4M)

Or

If x, y, z are positive real numbers, then prove that  $\sqrt{x/y} \cdot \sqrt{y/z} \cdot \sqrt{z/x} = 1$

13 Factorise using factor theorem:  $x^3 - 3x^2 - 9x - 5$  (4M)

14 If  $x + y + z = 0$ , Show that  $x^3 + y^3 + z^3 = 3xyz$  (4M)

15 Plot the points (-2,0), (2,0), (2,2), (0,4) and (-2,2) and join them in order.

What figure do you get? (4M)

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# Atomic Energy Central School No.4 Rawatbhata

## Periodic Test-I (2018-19)

Time: 1 & 1/2 Hrs

Class IX, English

M.M : 40

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1. Read the following and answer the questions that follow :

Everybody wants to succeed in life. For some, success means achieving whatever they desire or dream. For many, it is the name, fame and social position. Whatever be the meaning of success, it is success which makes a man popular.

All great men have been successful. They are remembered for their great achievements. But it is certain that success comes to those who are sincere, hardworking, loyal and committed to their goals.

Success has been man's greatest motivation. It is very important for all. Success has a great effect on life. It brings pleasure and pride. It gives a sense of fulfillment. It means all-around development. Everybody hopes to be successful in life. But success smiles on those who have a proper approach, planning, vision and stamina. A proper and timely application of all these things is bound to bear fruit. One cannot be successful without cultivating these certain basic things in life. It is very difficult to set out on a journey without knowing one's goals and purposes. Clarity of the objective is a must to succeed in life. A focused approach with proper planning is certain to bring success. Indecision and insincerity are big obstacles on the path to success.

One should have the capability, capacity and resources to turn one's dreams into reality. Mere desire cannot bring you success. The desire should be weighed against factors like capability and resources. This is the basic requirement of success. The next important thing is the eagerness, seriousness and the urge to be successful. It is the driving force which decided the success. It is the first step on the ladder of success.

One needs to pursue one's goals with all sincerity and passion. One should always be in high spirit. Lack of such spirit leads to an inferiority complex which is a big obstruction on the path to success. Time is also a deciding factor. Only the punctual and committed have succeeded in life. Lives of great men are examples of this. They had all these qualities in plenty which helped them rise to the peak of success.

Hard labour is one of the basic requirements of success. There is no substitute for hard labour. It alone can take one to the peak of success. Every success has a ratio of five percent inspiration and ninety-five percent perspiration. It is the patience, persistence and perseverance which play a decisive role in achieving success. Failures are the pillars of success as they are our stepping-stones and we must get up and start again and be motivated.

**1.1** Answer in 30-40 words.

2x4=8

- a. To whom does success come certainly ?
- b. What are the basic things in life we need to achieve success ?
- c. What did great men have in plenty to rise to the peak of success ? Give any two examples.
- d. What is the one basic requirement of success ?

**1.2** On the basis of your reading of the passage, fill in the blanks with appropriate words\phrase:

a. \_\_\_\_\_ plays a decisive role in achieving success. 1  
mark

b. Goals have to be pursued with \_\_\_\_\_ and \_\_\_\_\_. 2  
marks

**2.** Based on the given outline, write a story or incident and give it a heading or title 10 marks

Last week I went to market to buy books \_\_ on bicycle \_\_ placed bicycle outside\_ .

**3.** Rearrange the following words and phrases to make meaningful sentences. 3

- a. always/ the same/ Earth's/ climate/ stayed/ hasn't
- b. an/ a period/ periodically/of/ cold weather/ called/ the/ goes/ through/ Earth/ ice age
- c. an/ during/ ice age/ polar glaciers/ grow/ the/ bigger.

**4.** Read the extract below and answer the questions:

And be one traveller, long I stood  
And looked down one as far as I could

- a. Where is the poet standing? 1 mark
- b. Describe the two roads. 2 marks

**5.** Give answers in 30 to 50 words :

4x2=8

- a. How was the book that Tommy found different from the books that he studied?

- b. When and where were Margie's classes conducted ?
- c. Why did Bismillah Khan refuse to go to U.S to start a shehnai school ?
- d. What are the things that the wind does according to the poem 'WIND'?
- 6.** Comparing the school of Margie's great grandfather with the one where she now studies, justify the title 'The Fun They Had' in about 100 to 120 words      5 marks

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परमाणु ऊर्जा केन्द्रीय विद्यालय-4, रावतभाटा  
प्रथम आवधिक परीक्षा-2018

समय-1 घंटा

कक्षा-नवीं (हिन्दी)

पूर्णांक-40

1. निम्नलिखित गद्यांश को ध्यानपूर्वक पढ़कर दिए गए प्रश्नों के उत्तर लिखिए:-
- जब कोई युवा अपने घर से बाहर निकलता है तो पहली कठिनाई उसे मित्र चुनने में पड़ती है। यदि उसकी स्थिति बिलकुल एकांत और निराली नहीं रहती तो उसकी जान-पहचान के लोग धड़ाधड़ बढ़ते जाते हैं और थोड़े ही दिनों में कुछ लोगों से उसका हेल-मेल बढ़ते-बढ़ते मित्रता के रूप में परिणत हो जाता है। मित्रों के चुनाव की उपयुक्तता पर उसके जीवन की सफलता निर्भर हो जाती है, क्योंकि संगति का गुप्त प्रभाव हमारे आचरण पर बड़ा भारी पड़ता है। हम लोग ऐसे समय में समाज में प्रवेश करके अपना कार्य आरंभ करते हैं, जबकि हमारा चित्त कोमल और हर तरह का संस्कार ग्रहण करने योग्य रहता है। हमारे भाव अपरिमार्जित और हमारी प्रवृत्ति अपरिपक्व रहती है। हम लोग कच्ची मिट्टी की मूर्ति के समान रहते हैं, जिसे जो जिस रूप में चाहे, उस रूप में ढाले, चाहे राक्षक बनाए, चाहे देवता।

- क) घर से निकलने पर किसी युवा को पहली कठिनाई क्या होती है? और वह कैसे दूर होती है? 2
- ख) हेल-मेल बढ़ते-बढ़ते किस रूप में परिणत हो जाता है? मित्रों का चुनाव कैसा होना चाहिए? 2
- ग) हमारे आचरण पर किसका भारी प्रभाव पड़ता है? 1
- घ) किस अवस्था में हमारे भाव अपरिमार्जित और हमारी प्रवृत्ति अपरिपक्व रहती है? 2
- ङ) उपर्युक्त गद्यांश के लिए उचित शीर्षक बताइए। 1

### खंड-ख

2. निर्देशानुसार उत्तर दीजिए:-

4

- क. 'वैज्ञानिक' शब्द में प्रयुक्त मूल शब्द एवं प्रत्यय लिखिए।
- ख. 'अनु' और 'अभि' उपसर्गों से दो- दो शब्द बनाइए।
- ग. 'समालोचना' शब्द में प्रयुक्त उपसर्गों एवं शब्द को स्पष्ट कीजिए।
- घ. 'ईला' प्रत्यय से दो शब्द बनाइए।

3. निम्नलिखित समस्त पदों का विग्रह कर समास का भेद लिखिए:-

3

देशभक्ति, गुरुदक्षिणा, भयभीत

### खंड-ग

4. निम्नलिखित प्रश्नों के उत्तर में दीजिए-

(8)

1. किन घटनाओं से पता चलता है कि हीरा और मोती में गहरी दोस्ती थी?
2. छोटी बच्ची को बैलों के प्रति क्यों प्रेम उमड़ आया?
3. अपनी यात्रा के दौरान लेखक को किन कठिनाइयों का सामना करना पड़ा?
4. यात्रा वृत्तांत के आधार पर बताइए कि उस समय तिब्बती समाज कैसा था?
5. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए:-



जानवरों में गधा सबसे ज्यादा बुद्धिहीन समझा जाता है। हम जब किसी आदमी को परले दर्जे का बेवकूफ कहना चाहते हैं, तो उसे गधा कहते हैं। गधा सचमुच बेवकूफ है, या उसके सीधापन, उसकी सहिष्णुता ने उसे यह पदवी दे दी है, इसका निश्चय नहीं किया जा सकता है

क. जानवरों में किसे सबसे ज्यादा बुद्धिहीन समझा जाता है? 1

ख. हम किसी आदमी को गधा कब कहते हैं? 1

ग. किस बात का निश्चय नहीं किया जा सकता? 2

4. निम्नलिखित प्रश्नों के उत्तर में दीजिए-

(8)

क. कबीर के अनुसार संसार में सच्चा संत कौन कहलाता है?

ख. बंद द्वार की सांकल खोलने के लिए ललघद ने क्या उपाय सुझाया है?

ग. ब्रजभूमि के प्रति कवि का प्रेम किन-किन रूपों में प्रकट हुआ है?

घ. किसी भी व्यक्ति की पहचान उसके कुल से होती है या कर्म से। तर्क सहित उत्तर दीजिए।

5. अपने छोटे भाई को सदाचार के महत्त्व पर एक पत्र लिखिए 5

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