ALOHA®J&K

Question Paper

MAINS ALOHA GAT 2016-17

Class: **7th**

Max Marks: **200**

Total Number of Printed Pages: **6**

Total No. of Questions: **14**

Time Allowed: **2 hr 40 min**

SECTION 1-SCIENCE

LONG ANSWER TYPE

1. Give a brief description of the process of synthesis of food in green plants?

   Or

   Describe the main digestive glands and how do they help in the process of digestion in humans?

2. What is a virtual image? Give one situation where a virtual image is formed? State two differences between a concave and a convex lens.

   Or

   Explain why:
   (a) Antacids are used for relieving stomach acidity.
   (b) Soap solution is applied on the part of the body stung by a bee.

   [10 x 2 = 20 marks]

3. **SHORT ANSWER TYPE** (Do any three)
   i. State similarities and differences between the laboratory thermometer and the clinical thermometer.
   ii. What is electrolysis? Discuss in brief the electrolysis of water.

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iii. What is an electric fuse? Draw an electric fuse and explain briefly how it works?

iv. Distinguish between a parasite and a saprotroph?

v. The odometer of a car reads 57321.0 Km when the clock shows the time 08:30am. What is the distance moved by the car if at 08: 50 am, the odometer reading has changed to 57336.0 Km.

[6 x 3 = 18 marks]

4. **VERY SHORT ANSWER TYPE**

i. Why does an electric bulb get hot if it is kept "ON" for a little while?

ii. What is Chlorination ?

iii. Why are two blankets warmer than one of double the thickness?

iv. Write one difference between the nutrition in amoeba and human beings.

v. Why do we often sneeze, when we inhale a lot of dust laden air?

vi. What is the difference between the artery and a vein?

vii. What is a pulse?

viii. What is the importance of sweating?

ix. Write the physical properties of acids?

x. What is haemoglobin?

xi. What is an electric circuit?

[2 x 11 = 22 marks]

SECTION 2a-SOCIAL STUDIES

LONG ANSWER TYPE

5. Give a brief account of military campaigns of Akbar and Aurangzeb.

OR

Describe the role of Pirs in Bengal.

6. What is a Rock cycle? How sedimentary and metamorphic rocks are formed?

OR

Ecologically Amazon Basin is considered important, Why?

[10 x 2 = 20 marks]

7. **SHORT ANSWER TYPE** (Do any three)
    i)   Define the term 'Communication'. Name the means which help to communicate with several people simultaneously.
    ii)   How were the Sikhs organized in the eighteenth century?
    iii) Write a short note on Taj Mahal at Agra.
    iv)   Name the towns and cities of the Brahamputra Plain.
    v)   What is Rural Settlement?

[6 x 3 = 18 marks]

SECTION 2b-CURRENT AFFAIRS

8. Write a short note on the following: (any two)
    a)   Education in Kashmir amidst Hartals
    b)   Tourist Resorts of J&K
    c)   Shiva Lingam
    d)   Water Transport in J&K

[5 x 2 = 10 marks]

9. **MCQ/Objective Type Questions:**
    i.   Article 370 guarantees the special status to :
          a)Assam   b) Jammu and Kashmir   c) Punjab   d) Delhi
    ii   Who inaugurated the foundation of three medical colleges in J&K state?
          a) Union Health and Family Welfare Minister JP Nadda
          b) Mehbooba Mufti
          c) N N Vohra
          d) Bali Baghat
    iii. Name the Kashmir born famous novelist, who recently visited the Native land and her Novel has been shortlisted for Asia Literary Prize?
    iv.   A police officer was lynched here in Kashmir during the *Shab -e-Qadr*. His name was _____.
    v.   For which Parliamentary constituency in J&K recent by-polls were postponed?

vi. Which region of J&K is known as the little Tibet?

vii. Name the Kashmiri boy who won gold medal in the Asian Karate Championship.

viii. NEET stands for?

ix. Who was the education minister of J&K before Syed Altaf Bukhari?

x. Name the brand ambassador boy of SMC.

xi. Ujjala scheme in J&K was launched on:

xii. Name the recent tax regime introduced:
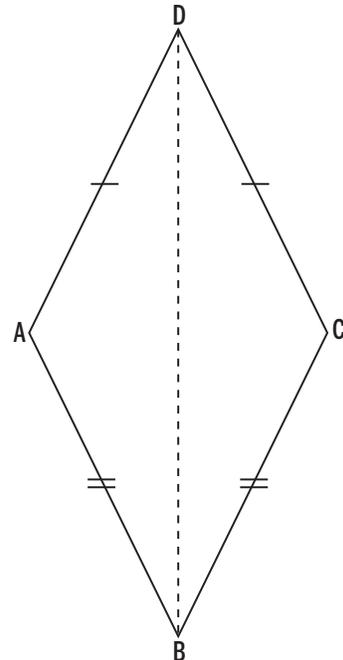
[12 x 1 = 12 marks]

SECTION 3-MATHEMATICS

10. An elevator descends into a mine shaft at the rate of 5 m per minute. What will be its position after one hour? If it begins to descend from 15 m above the ground, what will be its position after 45 minutes?

OR

In a class of 40 students $\frac{1}{5}$ of the total number of students like to study English, $\frac{2}{5}$ of the total number like to study Mathematics and the remaining students like to study science.

i. How many students like to study English?

ii. How many students like to Study Mathematics?

iii. What fraction of the total number of students likes to study science?

11. In figure;

AD =CD and AB =CB

i. State the three pairs of equal parts in △ ABD and the △CBD.

ii. Is △ABD ≅ △ CBD Why or why not?

iii. Does BD bisect ∠ABC? Give reasons.

OR

A shopkeeper sells mangoes in two types of boxes, one small and one large. A large box contains as many as 8 small boxes plus 4 loose mangoes. Set up an equation which gives the number of mangoes in each small box. The number of mangoes in a large box is given to be 100.

[10 x 2 = 20 marks]

12. **Do any three:**

   i   If P= –10, find th value of $P^2 – 2 P–100$

   ii   Simplify; $\dfrac{(2^5)^2 \times 7^3}{8^3 \times 7}$

   iii   Verify the following

        18x[7+(-3)]=[18x7]+[18x(-3)]

   iv   A rectangular sheet is $21\frac{1}{2}$cm long and $10\frac{2}{3}$ cm wide. Find its Perimeter.

   v   A car covers a distance of 89. 1 km in 2.2 hours. What is the average distance covered by it in 1 hour ?

[6 x 3 = 18 marks]

13. **Multiple Choice Questions** (Do all Questions)

   a. $\dfrac{25.5}{0.5}$ is equal to:

       (a) 54   (b) 53   (c) 51   (d) 52

   b.   If the side of an equilateral triangle is 3.5 cm then its perimeter is:

       (a)10 cm   (b) 9 cm   (c) 10.5cm   (d) 9.5 cm.

   c.   For any three integers a,b,and c; ax(b+c)=axb+axc is called as?

       (a) commutative property   (b) associative property

       (c) distributive property   (d) both a and b are correct.

   d.   – 91 ÷ (   ) = – 7

       (a) 13   (b) –13   (c) –1   (d) –9

   e.   One fourth of 'm' is.

       (a) $1\frac{m}{4}$ (b) $\frac{m}{4}$ (c) $\frac{4}{m}$ (d) $m\frac{1}{4}$

f. The line segment joining a vertex of a triangle to the midpoint of its opposite side is called a:

(a) altitude   (b) arc   (c) median   (d) arm

g. In an equilaterial triangle each angle has a measure of:

(a) 40^0 (b) 50^0 (c) 60^0 (d) 70^0

h. The standard form of $\dfrac{36}{-24}$ is?

(a) $\dfrac{3}{2}$ (b) $\dfrac{-3}{2}$ (c) $\dfrac{-3}{-2}$ (d) $\dfrac{3}{-2}$

i. Which of the following pairs represent the same rational number:

(a) $\dfrac{-16}{20}$ and $\dfrac{20}{-25}$ (b) $\dfrac{-3}{5}$ and $\dfrac{-12}{20}$

(c) $\dfrac{1}{3}$ and $\dfrac{-1}{9}$ (d) $\dfrac{-5}{-9}$ and $\dfrac{5}{-9}$

j. Area of a circle is

(a) $2\pi r$ (b) πr^2 (c) $\dfrac{1}{\pi r^2}$ (d) $\dfrac{2}{\pi r^2}$

k. Any expression with one or more terms is called a:

(a) Binomial   (b) Trinomial   (c) Polynomial   (d) Monomial.

[2 x 11= 22 marks]

SECTION 4-GENERAL ESSAY

14. **Write an essay on any one of the following (150- 200 words)**

1. Substance Abuse
2. Shrinking glaciers and our agriculture
3. Domestic Violence
4.   Demonetization

[20 marks]