SECTION-A(25marks)

A. CHOOSE THE CORRECT OPTION: (1X5=5)

1. The process of throwing out waste from the body is called _____.
   (a)respiration   (b) photosynthesis   (c) excretion   (d) digestion

2. All flowering plants belong to the same_____.
   (a)Division (b) phylum   (c) family   (d) genus

3. Which of the following has a fixed volume but not a fixed shape?
   (a) milk   (b)nail   (c) air   (d) a pen

4. _____ is the study of matter and energy and the relation between them.
   (a) botany   (b)zoology   (c) physics   (d)chemistry

5. How many litres make 1m³? (a)1   (b)1000   (c) 100   (d)10000

B. FILL IN THE BLANKS: (1X5=5)

1. Green plants are called _____ because they make their own food.
2. The animal kingdom is divided into groups called _____.
3. When gases freely mix with one another, then it is called _____.
4. 1 square metre is the area of a _____ with side 1 metre.
5. The prefix milli means _____.

C. STATE WHETHER THE FOLLOWING STATEMENT IS TRUE OR FALSE: (1X5=5)

1. Plant responses are slow because they are rooted to the ground.
2. Members of the same family can breed among themselves.
3. Solids can be compressed easily.
4. Quantities that can be measured accurately are called physical quantities.
5. A length of 5 centimetres can be written as 5 cms.

D. ANSWER IN ONE WORD: (1X5=5)

1. The ability to respond to stimuli.
2. The broadest unit of classification.
3. Anything that occupies space and has mass.
4. The amount of surface covered by an object.
5. The internal volume of a container.

E. MATCH THE COLUMNS : (1X5=5)

COLUMN A	COLUMN B
1. Anaerobic	a. Parallax error
2. One celled organism	b. 10 q
3. Space between molecules	c. Absence of oxygen
4. 1 metric ton (t)	d. 100 kg
5. Incorrect positioning of the eye	e. Intermolecular space
	f. Unicellular

SECTION-B (25marks)

F. **ANSWER THE FOLLOWING QUESTIONS: (2X5=10)**

1. Mention 2 ways in which plants respond to stimuli.
2. What is species?
3. Write any 2 properties of a liquid.
4. What is measurement?
5. What is volume? Give its SI unit.

G. **SHORT ANSWER TYPE QUESTIONS: (attempt any 5 out of 7) (3X5=15)**

1. Why are animals called heterotrophs?
2. Mention 3 parts of plants other than the seed from which new plants grow.
3. Name the 3 states in which matter can exist.
4. Name 3 instruments used to measure the length.
5. Name the 3 devices used to measure mass.
6. Make 3 scientific names from the following. Mention the corresponding common names.

   Scientific name : *mays, tigris, sapiens*

   Generic name : *Homo, Zea, Panthera*

7. Find the volume of a stone in cm^3, if the water level rises from 18ml to 29ml on immersing it in water.

SECTION-C(40marks)

H. **EXPLAIN IN BRIEF: (attempt any 8 out of 10) (5X8=40)**

1. List out any 5 characteristics by which we recognise a living being. (5)
2. Define respiration, excretion and life span.(2+1+2)
3. Classify the following as solid, liquid or gaseous.(5)

   (a) a book (b) water (d) water vapour (e) a nail (f) air

4. What are the following changes in state called? (5)

   (a) Gaseous to liquid   (b) Liquid to gaseous   (c) solid to liquid   (d) Liquid to solid

   (e) solid to gaseous

5. A room has a length of 6m, breadth of 5m and height of 4m. What is

   (a) the area of the floor?(2)

   (b) the volume of the room?(3)

6. The mass of 20 pencils is 320g. Find the mass of each pencil in SI unit. (3+2)
7. Explain the activity to measure the volume of an irregular solid that does not dissolve in water. (5)
8. How is classification helpful in the study of the living world? (5)
9. What is the binomial system of naming organisms? (5)
10. Write the differences between Plants and Animals. (5)

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SUB : Algebra and Geometry

F.M.: 80

DURATION: 2 Hrs30Mins

DATE:25.04.2018

Group-A

1.Choose the correct answer.   1x5=5

i)Degree of this polynomial $3x^7+ 15 +x -2x^{10}$ is

a) 7   b) 10   c)1   d) none of these

ii) If x+2=6.then the value of x is

a)4   b)1   c)-4   d) 2

iii)Complementary angle of 77° is

a) 103°   b)13°   c) 3°   d)none of these

iv)A straight line cuts two other straight lines and the following are the pairs of alternate angles in different cases. Show in which of these cases the two straight lines are parallel.

a)35°,36°   b) 80°,80°   c) 57°,69°   d) 119°,119°

v) Product of 4a, 5b and-6ab is

a)-120a²b²   b)120a²b²   c)90a²b²   d)none of these

a)$-120a^2b^2$ b)$120a^2b^2$ c)$90a^2b^2$ d)none of these

2.Fill in the blanks.   1x5=5

i) After solving $\frac{2x}{3}$=8 ,we get, x=_____.

ii)Arranging $8x^2-3x^4-12+6x^3$ in order of decreasing degree in x we get_____.

iii)Three or more points which lie on the same line are called _____.

iv)A line that divides an angle into two equal angles is called_____.

v)If two coplanar lines are cut by a transversal and they are parallel ,then alternate interior angles are_____.

3.Write down True or False.   1x5=5

i) $\frac{x}{y}$ - $2x^3+4x^4y^{-2}$ -7   is a polynomial.

ii)if 8t=32 then,t=4.

iii)If 3x+2=14, then x=3.

iv) Corresponding angles lie on the opposite sides of the transversal.

v)In a polynomial exponents of the variables are always positive integers.

4. Write very short answer of the following questions: 2x5=10
(i) Add: 8a – 3b and 2a + 6b.
(ii) Find the product of – $8x^2y$ and $3x^3y^3$.
(iii) Solve: $\frac{a}{3} - 7 = 4$
(iv) Find the supplement of 84^0.
(v) Define reflex angle.

5. Write short answer of the following questions: 3x5=15
(i) Divide: $-54x^4y^3z$ by $6x^2y^2z$.
(ii) Solve : $8y - 3 - 5y = 24$

OR

Solve: $14 + 2n - 6 + 8n = 4n - 21 + n + 34$
(iii) The sum of two numbers is 11 and one of them is 3 greater than the other; find the numbers.

OR

Bubai is now 7 years older than Sayan. If the sum of their ages is 33 years, find the age of each.

(iv) What do you mean by liner pair? Draw the diagram.
(v) Mention three conditions to prove two lines are parallel.

Group – C
6. Write the answer of the following questions: 5x8=40
(i) Simplify : $5x + 3 - [2x - \{ x - 3(5x - 6)\}]$

(ii) Divide: $2x^2 - 11x + 12$ by $x - 4$.

Or

Divide: $x^3 - 8$ by $x - 2$, $x \neq 2$.
(iii) Simplify: $(x^2 - 4xy - 4y^2)(2x^2 + 8xy + 2y^2)$.
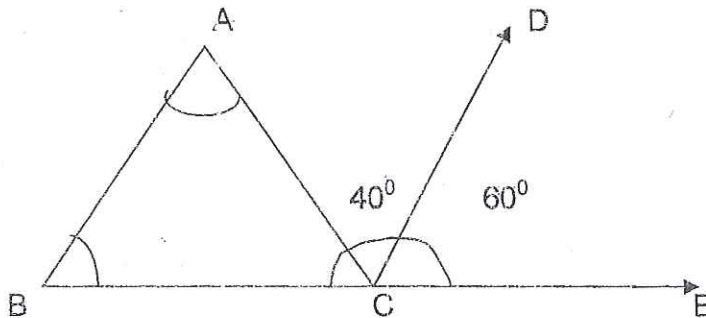(iv) Solve: $\frac{x}{2} + \frac{x}{3} = 10$
(v) One-third of a number is 2 more than one-fourth of the number. Find the number.

Or

If 14 is added to a number, the sum is 35. Find the number.
(vi) Two complementary angles are in the ratio of 4:5. Find the angles.

(vii) In the given figure, $\angle DCE = 60^0$ and $\angle ACD = 40^0$, Find $\angle A$, $\angle B$ and $\angle C$, when AB ‖ CD.

(viii) Construct an angle of $\angle 90^0$. Draw its angular bisector.

ST. LAWRENCE HIGH SCHOOL

1st TERM EXAMINATION-2018
CLASS-VI

SUBJECT: GENERALSCIENCE
DURATION: 2HRS 30MINS

F.M.90
DATE:25.4.2018

SECTION-A (25marks)

A. CHOOSE THE CORRECT OPTION: (1X5=5)

1. Excretion   2.Division   3.Milk   4.Physics   5.1000

B. FILL IN THE BLANKS: (1X5=5)

1.Autotrophs   2.Phylum   3.Diffusion   4.Square   5.1000

C. STATE WHETHER THE FOLLOWING STATEMENT IS TRUE OR FALSE: (1X5=5)

1.False   2.False   3.False   4.True   5.False

D. ANSWER IN ONE WORD: (1X5=5)

1.Sensitivity   2.Kingdom   3.Matter   4.Area   5.Capacity

E. MATCH THE COLUMNS : (1X5=5)

COLUMN A	COLUMN B
1. Anaerobic	Absence of oxygen
2. One celled organism	Unicellular
3. Space between molecules	Intermolecular space
4. 1 metric ton (t)	10q
5. Incorrect positioning of the eye	Parallax error

SECTION-B (25marks)

F. ANSWER THE FOLLOWING QUESTIONS: (2X5=10)

1.Touch,light,temperature.(any2)

2.Species is the smallest unit of classification. It comprises organisms that are identical in all characters. A group of species which are more identical in most constitutes a genus. Members of same species can breed or reproduce among themselves.(any2 pts)

3.A liquid has no fixed shape. It can be compressed only to a small extent. A liquid can flow. It expands or contracts more than a solid. All liquids do not mix with each other.(any2)

4.The comparison of an unknown quantity with the known fixed quantity of the same kind is called measurement.

5.The space occupied by a substance is called volume. It 's SI unit is cubic metre.

G. SHORT ANSWER TYPE QUESTIONS: (attempt any 5 out of 7) (3X5=15)

1. The organisms which are not capable of producing their own food, depend on other organisms directly or indirectly for their food. Such organisms are called Heterotrophs.

2.Stem, root and leaves.

3.Solid,liquid and gas.

4.Measuring tape, ruler, metre scale.

5. Physical balance, electronic balance and beam balance.

6.*Homo sapiens, Zea mays, Panthera tigris.*

7.R_1=18ml; R_2=29ml

The volume of a stone = R_2-R_1=(29-18)ml=11ml=11cm^3

H. EXPLAIN IN BRIEF: (attempt any 8 out of 10) (5X8=40)

1. Living beings are made up of cells, they grow, they need food, they respire, they throw out waste, they respond to stimuli, they move, they reproduce and they follow a definite life cycle.(any 5)

2. The entire process of taking in O_2, breaking down of food and releasing CO_2 and water vapour is called respiration(2). The process of throwing out waste from the body is called excretion(1). The period of time between the birth and the death of an organism is called lifespan(2).

3. a) a book- solid   b)water-liquid   c)water vapour- gas   d)a nail-solid   e)air-gas.

4. a)condensation   b)evaporation   c)melting   d)freezing   e)sublimation

5. a)Area of the floor= lxb=6x5=30=30m² (2¹/²)

   b) Volume of the room= lxbxh=6x5x4=120m³ (2¹/²)

6. The mass of 20 pencils is 320g.

   The mass of each pencil=320/20=16g

   The mass of each pencil in SI unit=16/1000=0.016kg. (1g=1000kg;1kg=1/1000)

7. Objective: To measure the volume of an irregular solid that does not dissolve in water.

   Materials required: An irregular solid that does not dissolve in water, a measuring cylinder and a thread.

   Procedure: Pour a suitable quantity of water in the measuring cylinder. Note the reading of the water level, say R_1. Tie the given solid to a thread and immerse it completely into the water. You will observe that the level of the water rises. Note the new reading at the two levels (R_2-R_1) will give you the volume of the given solid.

8. Classification helps to (a) identify organisms (b) know about all members of a group by studying a few members (c) share information in a systematic way.(1+2+2)

9. Carolus Linnaeus, a swedish botanist, proposed the binomial system of naming organisms in 1735. In this system, organisms name consists of two parts. The first part refers to the genus and may be called generic name and the second part refers to the species and may be the specific name. The name used in this system are of Latin origin or are latinised. The generic name starts with a capital letter, while the specific name starts with a small letter. While writing, it should be underlined and when it is printed ,it should be printed in italics.

10.

PLANTS	ANIMALS
1. They are autotrophs. They make their own food from carbon dioxide and water.	They are heterotrophs. They depend upon plants or other animals for food.
2. They are fixed to the ground, so they cannot move freely.	Most animals move freely.
3.They do not have nervous system or sense organ, so their response to stimuli is slow.	They respond much faster.
4. They grow throughout their life.	They grow only upto a certain age.

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