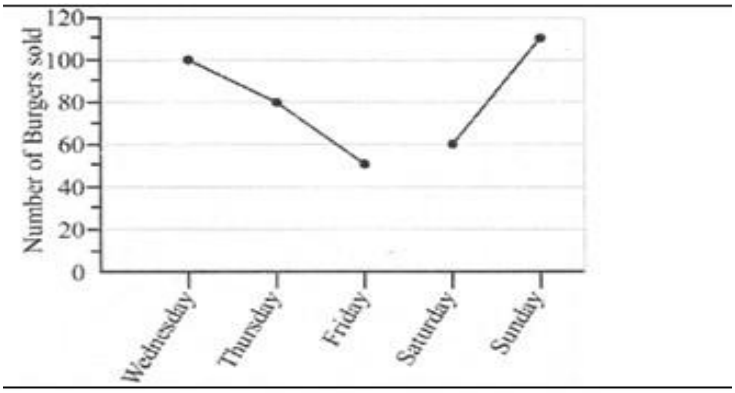
VELAMMAL NEXUS GROUP OF SCHOOLS

V-STAR SCHOLARSHIP TEST

MODEL QUESTION PAPER **CLASS: VI**

MATHEMATICS

1. Study the graph and answer the question. How many less burgers were sold on Saturday than on Wednesday?



a) 50

b) 40

c) 60

d) 20

2. Assertion (A): If the perimeter of rectangle is 120 cm and its breadth is one fifth of its length, then its length is 40 cm.

Reason(R): The perimeter of a rectangle is 2 (l+b)

a) A is correct, R explains about A **b) A is wrong, R is correct**

c) A and R are wrong d) A is correct, R does not explain about A

3. If AB = 7 cm and CD = 2 cm, then 3AB+2CD =

a) 52 cm **b) 25 cm** c) 15 cm d) 28 cm

4. Circles have ____ number of diameters

a) Two b) One c) Four **d) Infinite**

5. The needles of a clock at 3.00 am forms _____

a) 30^0 b) 45^0 c) 60^0 **d) 90^0**

6. The value of 55÷11×17-78+32 in Roman numerals is

a) XXIX b) XXVII c) XXX **d) XXXIX**

7. The difference of the fractions in the shaded part of the following figures is

a) $\frac{7}{10}$ b) $\frac{7}{30}$

c) $\frac{11}{30}$ d) $\frac{14}{30}$

Fig (i)

Fig (ii)

8. **Statement I: Keeping the place of 6 in the number 6350947 same, the smallest number obtained by re-arranging other digits is 6034579.**

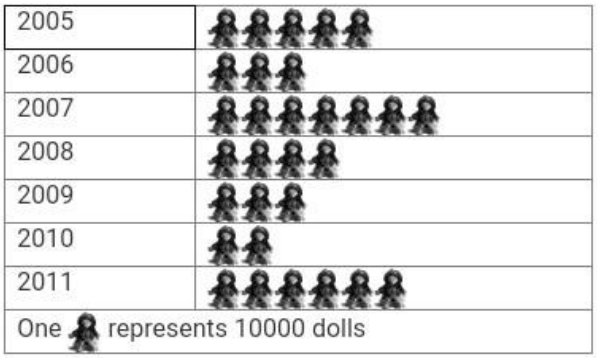
Statement II: If A + B + 45896 = C + D and C + D = 96023 + B, then value of A = 50127

a) I is correct, II is wrong b) Both I and II are wrong

c) Both I and II are correct d) I is wrong, II is correct

9. The number of dolls produced by a factory in different years has been shown in the following pictograph:

By how much, production of the dolls increased in 2011 in comparison to previous year.



a) 40,000

b) 30,000

c) 50,000

d) 10,000

10. Match the following:

Column-I	**Column-II**
a) 68	i) LXXXV
b) 97	ii) XCVII
c) 85	iii) LXVIII
d) 78	iv) LXXVIII

a) a-i, b-ii, c-iii, d-iv

b) a-iv, b-i, c-iii, d-ii

c) a-ii, b-i, c-iii, d-iv

d) a-iii, b-ii, c-i, d-iv

PHYSICS

1. Observe the figure given below. Identify X, Y and Z.

a)

X	**Y**	**Z**
Opaque body	**Light source**	**Shadow**

b)

X	Y	Z
Light source	Opaque body	Light source

c)

X	Y	Z
Light source	Opaque body	Shadow

d)

X	Y	Z
Opaque body	Shadow	Light source

2. Statement - I: Meter is the standard unit by which we can measure length.

Statement - II: Second is the standard unit by which we can measure mass.

a) Both Statements are true, Statement II is the correct explanation of Statement-I.

b) Both Statements are true, Statement II is not correct explanation of Statement- I.

C) Statement I is true, Statement II is false

d) Statement I is false, Statement II is true.

3. You lift a suitcase from the floor and keep it on a table. The work done by you on the suitcase does not depend on.

1. The path taken by the suitcase
2. The time taken by you in doing so
3. The weight of the suitcase
4. Your weight

a) 1, 2 & 4 are correct b) 1,2 & 3 are correct c) 2, 3 & 4 are correct d) All are correct

4. Assertion (A): During a total lunar eclipse only a slight darkening of the moon's surface occurs.

Reason (R): The earth's atmosphere refracts the sunlight

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 true but R is false

d) A is false but R is true

5. A force may:

a) Change the state of rest
b) Change the state of uniform motion
c) Change the direction of motion
d) All of these

6. Comprehension Type:

To convert a unit from one system to another, the steps to be followed are: First convert the given unit into SI unit. Then, convert it into the desired system of units. 1 cm× 1cm = --------m^2

a) 1×10^{-1} b) 1×10^{-3} c) 1×10^{-5} **d) 1×10^{-4}**

7. Match the following.

Group 'A'	**Group 'B'**
(1) Rolling object	(a) Heat energy
(2) Food	(b) Atomic energy
(3) Stretched bow	(c) Kinetic energy
(4) Sunlight	(d) Potential energy
(5) Uranium	(e) Chemical energy

a) 1-c, 2-e, 3-d, 4-a, 5-b b) 1-c, 2-e, 3-d, 4-b, 5-a

c) 1-e, 2-c, 3-d, 4-a, 5-b d) 1-c, 2-d, 3-e, 4-a, 5-b

CHEMISTRY

Copehension Type :-

Air is not a single gas, but is a mixture of gases. The important components of air are Oxygen, Nitrogen, Carbon dioxide and Water vapour.

1. The process of circulation of Oxygen among the various components of the environment is _____

a) Nitrogen cycle **b) Oxygen cycle** c) Water cycle d) Carbon cycle

2. Natural gas mainly contains a compound Known as

a) Butane **b) Methane** c) Propane d) Ethane

3. Arrange the following substance in increasing order of force of attraction between their particles (keeping the substance having the minimum force of attraction first).water, sand and Nitrogen.

a) Sand, Nitrogen, Water b) Sand, Water, Nitrogen

c) Nitrogen, Water, Sand d) Water, Nitrogen, Sand

4. Select the properties of X, Y & Z.

X → A piece of stone.

Y → A water droplet.

Z → Oxygen gas.

S.NO	X	Y	Z
a)	**Minimum inter molecular space**	**Particles are force to move**	**Force of attraction between particles is negligible**
b)	Maximum inter molecular space	Force of attraction between particles is negligible	Particles are force to move
c)	Particles are free to move	Force of attraction between particles is negligible	Minimum inter molecular space
d)	Force of attraction between particles is negligible	Maximum inter molecular space	Particles are force to move

5. Statement-I: With the help of barometer we can know the height of a particular place from the sea level.

Statement-II: For every 272.7 m of height from the sea level, 2.54 cm of pressure decreases.

a) Both statements are true and Statement-II is a correct explanation for Statement-I

b) Both statements are true and Statement-II is NOT a correct explanation for Statement I.

c) Statement-I is True, Statement-II is False

d) Statement-I is False, Statement-II is True

6.

Column-I	**Column –II**
Composition of Air	**Percentage**
A) Nitrogen	i)20.9%
B) Oxygen	ii)0.03%
C) Carbon dioxide	iii)0.94%
D) Noble gases	iv)78.03%

a) A-iv, B-i, C-iii, D-ii **b) A-iv, B-i, C-ii, D-iii**

c) A-i, B-iv, C-ii, D-iii d) A-i, B-iv, C-iii, D-ii

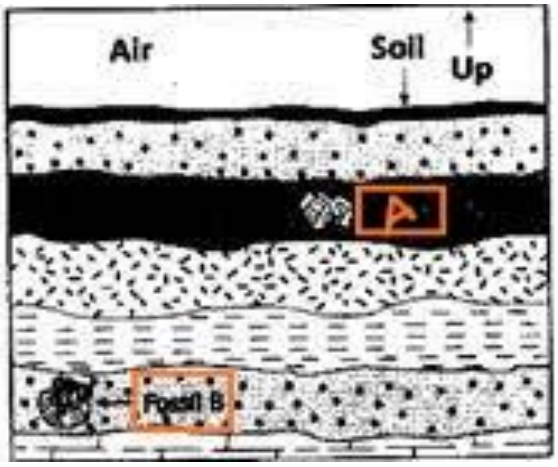
7. When comparing fossil A and fossil B, which of the statement is correct?

a) Fossil B is older than A

b) Fossil A is older than B

c) Fossil B is metamorphic.

d) Fossil B is rock



8. Which of the following rock samples contain fossils?

a) Obsidian b) Pumice c) Granite **d)Lime stone**



9. A small piece of stone sinks in water because, it is_____

a) Larger b) Lighter c) Smaller **d) Heavier**

10. Which of the following has a fixed volume but not a fixed shape?

A) Milk B) A book C) A Pen D) Oxygen E) Water

a) A , B **b) A, E** c) A, C & D d) B,C&E

BIOLOGY

1. Plants reproduce from _____

a) seed b) leaf **c) stem** d) all of these

2. How are the ants recognize ants from their group?

a) By Colour b) By face **c) By smell** d) By height

3. Read the given statements and select the correct option.

Statement 1: The level of groundwater below the surface of Earth at a given place is known as the water table.

Statement 2: Extensive use of groundwater in cities for domestic and industrial purposes is resulting in lowering of water table.

a) Both statements 1 and 2 are true and statement 2 is the correct explanation of statement 1.

b) Both statements 1 and 2 are true but statement 2 is not the correct explanation of statement1.

c) Statement 1 is true but statement 2 is false.

d) Both statements 1 and 2 are false.

4. The gas X is only about 20 parts out of 10 parts of air in the atmosphere. It is needed for decomposition of organic matter. The gas X is_____

a) Carbon dioxide b) Water vapor

c) Oxygen d) Nitrogen

5. Refer to the diagrammatic representation of water cycle and identify P, Q, R and S.

i. P - Condensation; Q - Precipitation; R - Transpiration; S - Evaporation

ii. P - Precipitation; Q - Condensation; R - Transpiration; S - Evaporation

iii. P - Precipitation; Q - Condensation; R - Evaporation; S - Transpiration

iv. P - Precipitation; Q - Evaporation; R - Condensation; S – Transpiration

Read the passage given below and answer the question that follows.

Chinnu noticed that her potted plant was not growing healthily. She put few earthworms into the pot. After a few weeks, she noticed that her plants looked healthier.

6. What could be the possible reason for the growth of the plant?

a) The earthworms ate up the pests in the soil.

b) The earthworms helped the plant to take in water.

c) The earthworms allowed the plant to make food faster.

d) The earthworms increased the air and nutrient content of the soil.

7. A tough covering of seed is called _____.

a) cotyledons **b) seed coat**

c) both (a) and (b) d) none of these

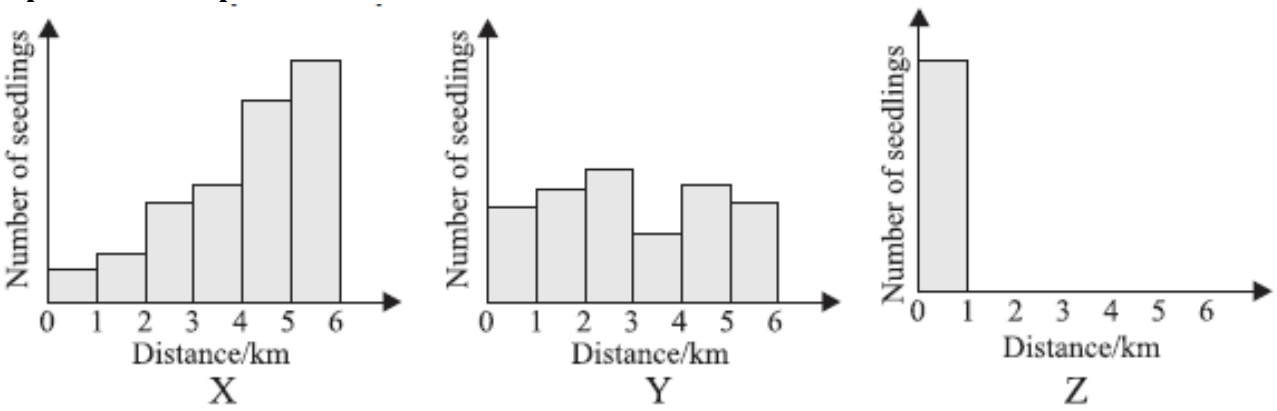
8. Match column I with column II and select the correct option from codes given below.

Column I	Column II
(i) Polar bear	(A) Feathers
(ii) Crocodiles	(B) Fur
(iii) Snail	(C) shell
(iv) Bird	(D) scale

a) i-B, ii-D, iii-A, iv- C b) i-D, ii-B, iii-C, iv- A

c) i-D, ii-B, iii-A, iv- C **d) i-B, ii-D, iii-C, iv- A**

9. Three different types of plants X, Y and Z, were selected by scientists who want to document their methods of seed dispersal. The graphs below show the approximate number of seedlings found at various distances around the parent plant. Which option most correctly lists the methods of seed dispersal of each plant?



a) Water Explosive action Animal b) Wind Animal Water

c) Wind Animal Explosive action d) Explosive action Water Animal

10. Joy bought some tomato seeds. She put them in a pot, watered them and kept them in refrigerator. After going out of station for a few days, she came back home. She checked her pot in the fridge. She found that

a) Her tomato plant had a shoot b) Her tomato plant had tomatoes on it

c) It had not grown at all as it had no warmth and sunlight

d) It was just germinating

MATHEMATICS –KEY

1) b 2) b 3) b 4) d 5) d 6) d 7) c 8) c 9) a 10) d

PHYSICS – KEY

1) a 2) c 3) a 4) a 5) d 6) b 7) a

CHEMISTRY – KEY

1) b 2) b 3) c 4) a 5) a 6) b 7) a 8) d 9) d 10) b

BIOLOGY – KEY

1) a 2) b 3) b 4) c 5) b 6) d 7) b 8) d 9) c 10) c