



## QUESTION PAPER

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### PERIODIC TEST

CLASS	SECTION	EXAM CODE
7	A	3246811
7	B	3246821
7	C	3246831
7	D	3246851

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### SCHOOL

HIM Academy Public School

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1. There are 40 questions in the paper. All are compulsory.
  2. Tick or circle the option which is your answer.
  3. Show your working on a separate sheet of paper wherever you need to.
  4. Please check your answers carefully before submitting the test. Once submitted, the answers CANNOT be changed.



**Q: 1** The process of breakdown of food in the cell with the release of energy is called cellular respiration. During which of the following activities does cellular respiration occur?

- P. while a person sleeps
- Q. while a person jogs
- R. while a person eats
- S. while a person swims

- 1** only R                      **2** only Q and S                      **3** only P and R                      **4** all - P, Q, R, S

**Q: 2** In which of the following cells does cellular respiration occur?

- P) Heart cells
- Q) Lung cells
- R) Stomach cells
- S) Leg cells

- 1** only P    **2** only Q  
**3** only P, Q and R    **4** all - P, Q, R and S

**Q: 3** Vani goes for a jog every morning. How will her breathing be affected during the exercise?

- 1** The rate of her breathing will decrease.
- 2** The rate of her breathing will increase.
- 3** There will be no change in her breathing rate.
- 4** Her breathing will stop for some time.

**Q: 4** Radhika had fainted during a school program. When she woke, she was given some glucose mixed in water to drink.

**Why was glucose added to the water?**

- 1** to add taste to the tasteless water                      **2** to make her weak muscles stronger
- 3** to provide her body with energy it needs                      **4** to help her to wake up and not faint again

**Q: 5** Sindhu blew a balloon with her mouth. The gas that she exhaled into the balloon will be \_\_\_\_\_.

- 1** pure oxygen
- 2** pure carbon dioxide
- 3** a mixture of different gases
- 4** a mixture of oxygen and carbon dioxide only

**Q: 6 Which of the following is/are TRUE about the air we inhale and exhale?**

- P) We inhale oxygen
- Q) We inhale carbon dioxide
- R) We exhale oxygen
- S) We exhale carbon dioxide

- 1** only P and S
- 3** only P, R and S

- 2** only Q and R
- 4** all - P, Q, R and S

**Q: 7 Why is it important to breathe through the nose and not the mouth?**

- 1** The nose filters a lot of dust from inhaled air.
- 2** The nose helps us breathe even while eating.
- 3** The nose allows only oxygen to enter the body.
- 4** The nose helps us smell all the impurities in the air.

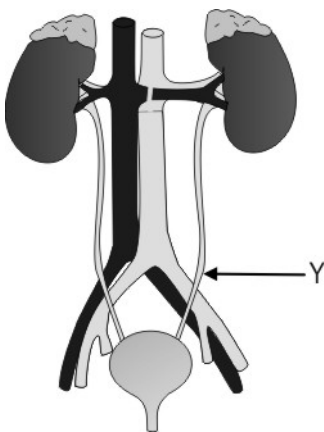
**Q: 8 In what order does the air we breathe in pass through the following organs before it is breathed out?**

- 1** nostrils-----> windpipe -----> lungs
- 3** nostrils -----> lungs -----> windpipe

- 2** windpipe -----> lungs -----> nostrils
- 4** lungs -----> nostrils -----> windpipe

**Q: 9 Blood gets filtered in both the kidneys. The bladder receives the urine produced by both the kidneys.**

**What will the immediate effect be if the part marked Y gets blocked?**



- 1** No urine will be formed.
- 3** Blood will not reach the kidneys.

- 2** Urine will not contain any water.
- 4** Less urine will flow into the bladder.

**Q: 10 Can we classify sweating as a part of excretion by human body?**

- 1** Yes, because when we sweat some wastes are removed from our body.
- 2** No, because sweating does not happen through anus or urethra.
- 3** Yes, because sweating is affected by the circulation of blood.
- 4** No, because sweating only leads to the cooling of the body.



**Q: 11** The component present in maximum quantity in the urine is \_\_\_\_\_.

- 1** blood
- 2** water
- 3** urea
- 4** other waste products

**Q: 12** Which of the following form(s) vascular tissue?

**P.** xylem

**Q.** phloem

**R.** stomata

- 1** only P
- 2** only Q
- 3** only P and Q
- 4** only P and R

**Q: 13** The substances absorbed by the roots reaches different parts of the plant through which of the following parts?

**P:** Food-carrying tubes

**Q:** Water-carrying tubes

**R:** Leaves

- 1** only P
- 2** only Q
- 3** only R
- 4** all - P,Q and R

**Q: 14** What happens in an athlete's body, 20 seconds after he starts running a race?

- 1** The number of arteries increase.
- 2** The heart sends blood faster to the legs.
- 3** The total amount of blood in the body increases.
- 4** The lungs take in oxygen and stop giving out carbon dioxide.

**Q: 15** Which of these best describes the function of an artery in the human body?

- 1** Arteries carry blood away from the heart.
- 2** Arteries pump blood to various parts of the body.
- 3** Arteries are the smallest vessels carrying blood.
- 4** Arteries carry only purified blood.

**Q: 16** Which option correctly identifies the functions of the lung and the heart?

Function	Lung	Heart
1	purify blood	pump blood
2	make oxygen	pump blood
3	pump blood	purify blood
4	pump blood	purify and pump blood

- 1** 1
- 2** 2
- 3** 3
- 4** 4



**Q: 17** The role of valves in the blood vessels is to \_\_\_\_\_.

- 1** allow the flow of only oxygen-rich blood
- 2** prevent the backward flow of the blood
- 3** filter the impurities from the blood
- 4** increase the speed of blood

**Q: 18** A group of 4 friends decided to test their blood for haemoglobin levels. From the results tabulated, identify the person most likely to be suffering from ANAEMIA?

Name	Result	Reference Range
Prannoy	14.2 g/dl	Male 13-17 g/dl
Varun	15.6 g/dl	Female 12-16 g/dl
Mary	9 g/dl	
Imran	17.5 g/dl	

- 1** Prannoy
- 2** Varun
- 3** Mary
- 4** Imran

**Q: 19** The agent that causes 'AIDS' or 'Acquired Immune Deficiency Syndrome' attacks the white blood cells (WBC) and causes a decrease in the total number of WBCs in the body.

Which of the following is therefore expected to happen to a person suffering from AIDS, as a direct result of this?

- 1** He will be more likely to suffer from different kinds of infections.
- 2** He will suffer from excessive bleeding as his blood will not clot properly.
- 3** His blood will not be able to carry enough oxygen thus leading to a heart attack.
- 4** His blood will not look as red as it used to look before.

**Q: 20** Which of these blood cells transport oxygen?

- P. red blood cells
- Q. white blood cells
- R. platelets

- 1** only P
- 2** only Q
- 3** both P and Q
- 4** all - P, Q and R

**Q: 21** Which of the following components of blood is responsible for the clotting of blood and if it is absent or low can cause excessive bleeding?

- 1** platelets
- 2** blood plasma
- 3** red blood cells
- 4** white blood cells

**Q: 22** During which of the activities given below, does anaerobic respiration occur in the cells of the human body?

- 1** during sleep, when the body does not need oxygen
- 2** during strenuous exercise, when the oxygen supply is insufficient
- 3** during digestion, when oxygen is not supplied to some organs
- 4** (Anaerobic respiration never occurs in the cells of the human body.)



**Q: 23** Compared to aerobic respiration, the amount of energy released during anaerobic respiration is \_\_\_\_\_.

(Consider the amount of glucose broken down to be equal in both the cases.)

- 1** higher
- 2** lower
- 3** the same
- 4** either higher or lower depending on the temperature

**Q: 24** A group of students was visiting an aquarium. They were wondering how fish breathe in water when we humans cannot. Here is a part of their discussion -

**Aarthi:** "Fishes have special organs that convert water to oxygen."

**Vijay:** "Fishes swallow the air bubbles that are formed in the water by the aerator (air pump)."

**Suleman:** "Fishes breathe the oxygen atom present in the water molecule [H<sub>2</sub>O] and give out hydrogen."

**Victoria:** "Fishes use the dissolved oxygen in the water to breathe."

**Who among them is CORRECT?**

- 1** Aarthi
- 2** Vijay
- 3** Suleman
- 4** Victoria

**Q: 25** Which of the following respire?

**P.** trees

**Q.** underwater plants

**R.** desert plants

- 1** only P
- 2** only R
- 3** only P and R
- 4** all - P, Q and R

**Q: 26** What happens to oxygen that is released during the process of photosynthesis?

- 1** not utilized by the plant
- 2** utilized only by the animals
- 3** some stored by the plant in leaves
- 4** some used by the plant, remaining by the animals

**Q: 27** A banyan tree and a sunflower together cannot produce a banyan tree that has sunflowers. This is because -

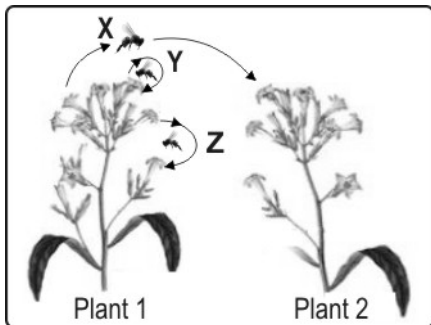
- 1** the tree is too big and the sunflower plant is too small.
- 2** only shrubs and some herbs bear flowers. Trees do not bear flowers.
- 3** they are different types of plants and only the same types of plants can reproduce among themselves.
- 4** (They can produce a banyan tree that has sunflowers because both the plants have seeds and plants with seeds can reproduce.)



Q: 28 What role does wind play in plant reproduction?

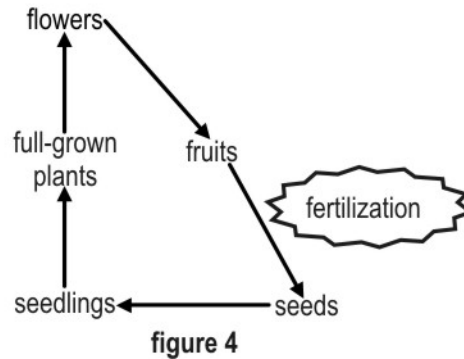
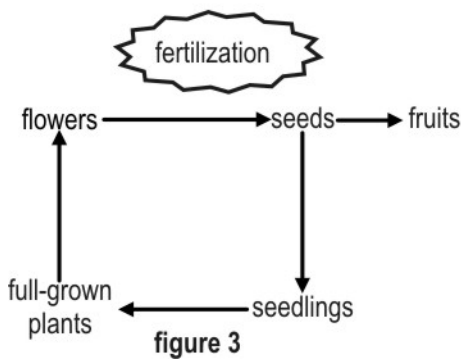
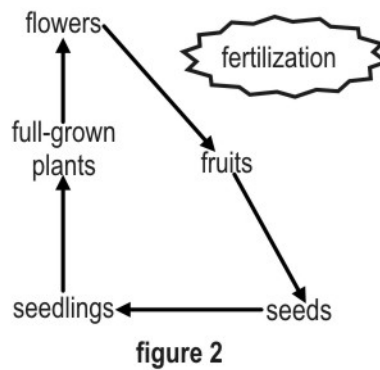
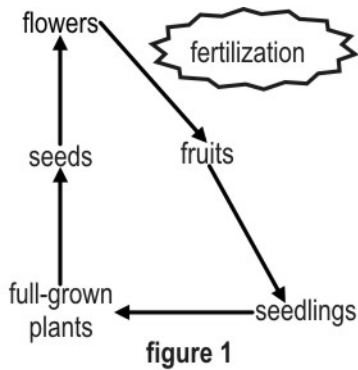
- 1 it helps the plant to keep cool
- 2 it brings the water required to the plant
- 3 it helps the plant to develop strong roots
- 4 it helps by spreading the pollen of the plant

Q: 29 Which of the following correctly represents 'cross-pollination'?



- 1 only X
- 2 only Z
- 3 both X and Z
- 4 all - X, Y and Z

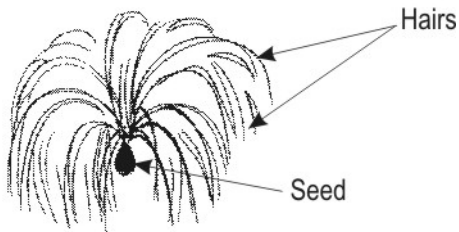
Q: 30 Which one of the following shows the life cycle of a plant with fertilization taking place at the correct stage?



- 1 figure 1
- 2 figure 2
- 3 figure 3
- 4 figure 4



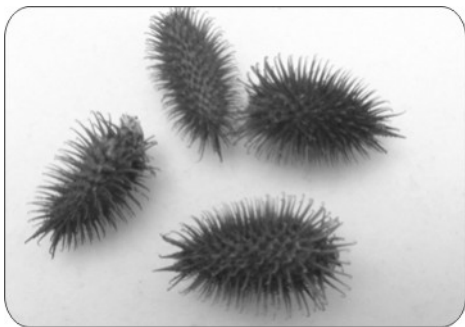
**Q: 31** Seeds have special features that help them to be spread far and wide. Here is a drawing of a seed.



The features of the seed shown above make it most suited for dispersal through \_\_\_\_\_.

- 1** wind                      **2** water                      **3** birds                      **4** animals

**Q: 32** The given picture shows the fruit of a plant called cocklebur. It is covered with stiff, hooked spines.



Choose the **MOST LIKELY** method by which the seeds in the fruit are dispersed.

- 1** carried by water                      **2** blown by the wind  
**3** eaten by an animal                      **4** carried on an animal's fur

**Q: 33** \_\_\_\_\_ is a part of the flower which produces male gametes in large numbers.

- 1** Filament                      **2** Anther                      **3** Stigma                      **4** Style

**Q: 34** Rita plucked a rose flower and touched its pollen on the style of another flower of the **SAME** rose plant. Which process has she performed?

- 1** self-pollination                      **2** cross-pollination  
**3** self-fertilisation                      **4** cross-fertilisation





**Q: 35** Water helps to carry the seed shown here to far off places.



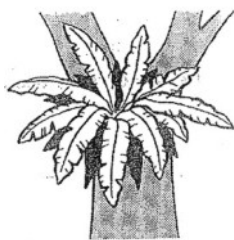
**Which of the following statements best describes this seed?**

- 1** It is light and dry and does not get wet.
- 2** Though it is heavy and gets soaked, it floats on water.
- 3** It bursts open when dry and is carried away to far off places.
- 4** It is dry, light and fluffy with either wings or hairs on it so that it can be carried away.

**Q: 36** Dispersion of seeds is a very important step in the reproduction of most plants. Which of the following best describes it?

- 1** transfer of seeds to places away from the parent plant
- 2** sprouting of seeds under favourable conditions
- 3** storing of seeds for agricultural purposes
- 4** formation of seeds in fruits

**Q: 37** The picture below shows a fern known as the Bird's Nest Fern. It grows on trees, rocks and the ground.



**It reproduces through** \_\_\_\_\_.

- 1** seeds
- 2** spores
- 3** laying eggs
- 4** giving birth to young alive

**Q: 38** Farida cut off a piece of the stem of a rose bush and planted it in a pot of soil. The piece slowly grew into a new rose bush.

**Which of the following is definitely true about the piece of stem that Farida cut off?**

- 1** It had flowers on it.
- 2** It had leaves on it.
- 3** It had buds on it.
- 4** It had roots on it.



**Q: 39** Shown here is a leaf which gives rises to new plants.



This leaf is from the \_\_\_\_\_ plant.

**1** rose

**2** carrot

**3** sweet potato

**4** bryophyllum

**Q: 40** Sam has a chickoo tree which produces very sweet fruit. To grow more such trees which will produce sweet fruit, he plants some seeds and also plants some stem cuttings.

Which of the following is likely to be true?

**1** Trees grown from seeds will produce fruit sooner.

**2** Trees grown from stem cuttings will not produce any fruit.

**3** Trees grown from stem cuttings will produce fruit sooner.

**4** Trees grown from seeds and stem cuttings will produce fruit at the same time.

**End of Questions in Paper**

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