## DELHI PUBLIC SCHOOL, GWALIOR

(Under the Aegis of DPS Society, New Delhi)

# MODEL TEST PAPER CLASS – VII SUBJECT – SCIENCE

Time: 3 hrs. M.M.: 80

#### **General Instructions:**

- 1. The question paper comprises three sections A, B and C. Attempt all the sections.
- 2. All questions are compulsory.
- 3. Internal choice is given in each section.
- 4. All questions in Section A are one-mark questions comprising MCQ, VSA type and assertion-reason type questions. They are to be answered in one word or in one sentence.
- 5. All questions in Section B are three-mark, short-answer type questions. These are to be answered in about 50-60 words each.
- 6. All questions in Section C are five-mark, long-answer type questions. These are to be answered in about 80-90 words each.
- 7. This question paper consists of a total of 30 questions.

### Section - A

[1x10=10]

- 1. Name the source of litmus.
- 2. What does a silk moth eat?
- 3. Answer question numbers 3(a) 3(d) on the basis of your understanding of the following paragraph and the related studied concepts.

When we stand in front of the mirror, we are able to see our image. Our image in a mirror is of the same size as we are and at the same size as we are and at the same distance from the mirror where we are standing. It is not possible to take this image on the screen. Such images are called virtual images.



- 3 (a) What are the characteristics of image formed by plane mirror?
- 3 (b) What do you mean by lateral inversion?
- 3 (c) Explain virtual image.
- 3 (d) At how much distance image get formed in the plane mirror?
- 4. Question numbers 4 (a) 4 (d) are based on the table given below. Study the table related to reproduction process in plants and answer the questions that follow:

Mode of Reproduction	Examples
Spore Formation	Fungi
Fragmentation	Spirogyra
Budding	Yeast
By leaves	Bryophyllum

	4 (a) What do you me	ean by reproduction?		
	4 (b) What is fragmen	ntation?		
	4 (c) Which one of the (i) budding	ne following is the method (ii) spore formation	of vegetative propagation (iii) by leaves	n? (iv) fragmentation
	4 (d) Which one of the (i) Poppy	ne following plant multipli (ii) Fungi	es by spore formation? (iii) Sunflower	(iv) Lotus
5.	An instrument used to (a) thermometer	o measure humidity is – (b) hygrometer	(c) barometer	(d) rain gauge
		<u>OR</u>		
	The length of a shado (a) 8:00 am	ow is longest at – (b) 10:00 a.m.	(c) 12 noon	(d) 2:00 pm
6.	A material used to ma (a) a soft iron bar	ake an electromagnet is – (b) wooden block	(c) plastic block	(d) none of these
7.	The image formed by (a) virtual and erect (c) real and erect	a plane mirror is –	<ul><li>(b) real and inverted</li><li>(d) virtual and erect</li></ul>	
8.	Soil erosion is caused (a) afforestation	by – (b) terrace farming	(c) deforestation	(d) all of these
		<u>OR</u>		
	The thinnest blood ve (a) arteries	essels in the human body a (b) veins	re – (c) capillaries	(d) none of these
9.	The term which is no (a) carding	t involved with sericulture (b) caterpillar	e is – (c) pupa	(d) cocoon
10.	Rusting of iron require (a) only oxygen	res – (b) only water	(c) both air and water	(d) none of these
11.	A mature ovary change (a) seed	ges into – (b) fruit	(c) ovules	(d) flowers
12.	Red litmus turns blue (a) an acid	in the presence of – (b) a base	(c) a salt	(d) water
		<u>OR</u>		
	Citric acid is present			
	(a) lemon	(b) bee sting	(c) curd	(d) turmeric
For	question numbers 13	and 14, two statements	are given one labelled	Assertion (A) and

For question numbers 13 and 14, two statements are given one labelled Assertion (A) and the other labeled Reason (R). Select the other correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below:

- (i) Both A and R are true and Re is correct explanation of the assertion.
- (ii) Both A and Re true but R is not the correct explanation of the assertion.
- (iii) A is true but R is false.
- (iv) A is false but R is true.

	Reas	son : Air does not allow heat to pass.					
14.	Asse	ertion : Breaking of a glass tumbler is an irreversible physical change.					
	Reas	son : In breaking no new substance is formed and it can not come back to original position.					
		Section - B					
15.	(a) (b)	Define thermometer Write different scales on which temperature can be measured.	[3]				
16.		te properties of wool.  OR	[3]				
17.		te properties of silk. lain why does iron get rusted? Is it a chemical change? Give reason in support of your wer.	[3]				
18		w a well labelled 'Human Respiratory System'.  OR  111 111 151	[3]				
4.0		w a well lablled 'Human Excretory system'.					
19.	(a) (b)	How are symbionts different from Parasites? Write the raw materials required for the process of photosynthesis.	[3]				
20.	Diffe	Perentiate between conduction, convection and radiation.	[3]				
21.	(a) (b)	Convert 100°C to °F. How do woollen clothes keep us warm?	[3]				
22.	(a) (b)	What is this reaction called as? Give an example.					
23.	(a) (b)	How wastes can be classified? Closed sewer system is better than open sewer system. Give your views.	[3]				
24.		ich component in audio speakers is commonly used as an electromagnet and why?  OR  OR	[3]				
	100	are given an iron nail. How will you magnetize it? Section - C					
25.	(a) (b) (c)	Write advantages of MCB over fuse. Differentiate between open circuit and closed circuit. What do you 'mean by overloading'?	[5]				
		<u>OR</u>					
	(a) (b) (c)	Name some devices which work on the principle of heating effect of electric current. Which element is used to make the filament of the bulb and why? What is a battery?					
26.	(a) (b)	How the cities like Noida which are industrialized and urbanized contribute to air pollution? Explain How is global water cycle different from biological cycle?	[5]				
27.	(a) (b)	What kind of technique is hydroponics? Suggest any 3 measures to conserve soil. Page 3 of 4	[5]				

13. **Assertion**: Air is good conductor of heat.

28. One needs to frequently dig up soil in garden or pots. Why do you think it is important? Also overwatering the plants often kills them. Why should this practice be avoided? Explain.

[5]

#### <u>OR</u>

Queen Victoria suffered from a 'Royal disease'. What is this 'Royal disease'? What is it also known as? Explain the symptoms of the disease.

- 29. (a) Spherical mirrors are of various uses in day to day life. Write any 3 such uses.
  - (b) Which lens is known to be converging Lens? Give reason.

[5]

[5]

- 30. The hair of an animal 'A' is cut from it's body in one piece along with a thin layer of it's skin in the form of 'B'. The 'B' of this animal is then cleaned by using soap and a lot of water by a process 'D'. The clean 'B' is then converted to yarn 'E' by a process of sorting, lying, spinning.
  - (a) What could be 'A' and 'B'?
  - (b) Name the processes 'C' and 'D'.
  - (c) What is yarn 'E'?
  - (d) State one use of 'E'.
  - (e) Which breed of animals 'A' is used for producing wool for making woollen shawls?

#### <u>OR</u>

When an ant stings a person, the solution of a substance 'K' is rubbed on the stung area of the skin, to get relief from pain. The substance 'K' is also used in kitchen for cooking purpose. Another substance 'L' is sour in taste and contains an organic acid 'M'. It is pungent smelling and is used as a preservative in food. When a solution of 'K' is mixed with 'L', then a change 'N' takes place to produce bubbles of gas 'O'.

- (a) Identify K and why is it used?
- (b) What is substance 'L'?
- (c) Name the acid 'M'.
- (d) What type of change is 'N'?
- (e) Name the gas 'O'.

----X-----