

**Question paper**  
**2011 - 2012**  
**CBSE Class 8 Science SA – II, set 2**

**General Instructions:**

- The question paper consists of 2 sections - Section A (having 21 questions) and Section B (having 09 questions). You are to attempt both the sections.
- All questions are compulsory.
- There is no overall choice. However, internal choices have been provided in 3 questions of 5 marks category and 3 questions of 2 marks category.
- All questions of Section A and all questions of Section B are to be attempted separately.
- Questions 1 to 5 in Section A, and Questions 22 and 23 in Section B, are multiple choice type questions and carry one mark each.
- 6. Questions 6 to 11 in Section A, and Questions 24 and 25 in Section B, are short answer type questions and carry 2 marks each.
- 7. Questions 12 to 17 in Section A, and Questions 26 to 28 in Section B, are also short answer type questions and carry 3 marks each.
- 8. Questions 18 to 21 in Section A, and Questions 29 and 30 in Section B, are long answer type questions and carry 5 marks each.

**Section - 'A**

1. The small circular aperture present in the centre of iris is known as the: (1)  
(a) cornea (b) retina (c) pupil (d) cone
2. The synthetic fibre that appears to resemble wool is (1)  
(a) PET (b) acrylon (c) Rayon (d) nylon
3. A prominent constellation looking like a distorted form of the letter W or M, is the: (1)  
(a) Cassiopeia (b) Big dipper (c) Orion (d) Ursa minor
4. An example of a plastic which cannot be remoulded again by simple heating is: (1)

(a) polyethene (b) PVC (c) polystyrene (d) bakelite

5. An icy celestial body that appears again and again after regular intervals, is the (1)

(a) Ceres

(b) Phobos

(c) Halley's comet

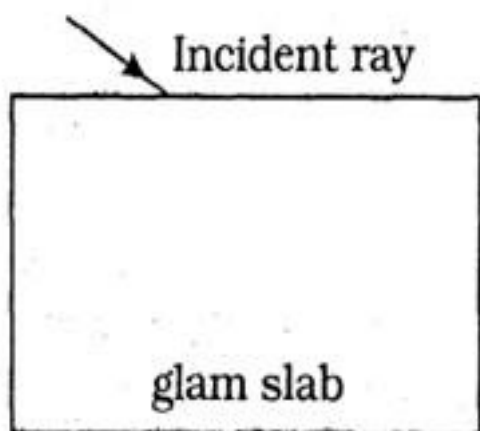
(d) Sirius

6. Define the terms

(a) relative refractive index

(b) absolute refractive index in terms of 'speed of light'. (2)

Complete the ray diagram showing the path of rays in the ray diagram given here.



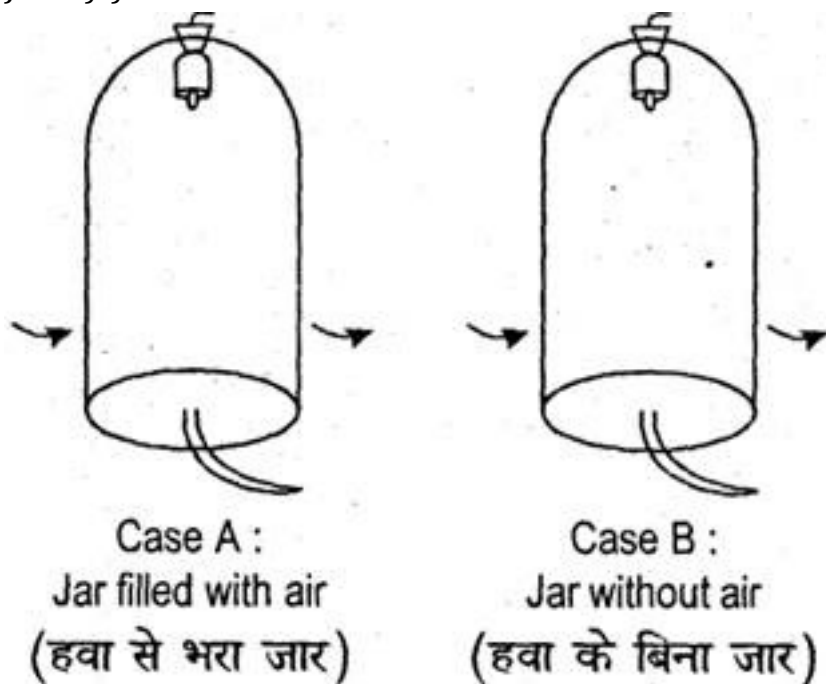
7. Name a natural effect based on dispersion of sun light. State in brief, the reason for its occurrence. (2)

8. Differentiate between tactile and auditory aids for visually challenged persons. Give one example of each. (2)

9. Look at the given figure carefully.

In which case/s would we hear the sound of the bell when the two belljars are shaken.

Justify your choice/s.



10. State two conditions necessary for producing or sustaining combustion of all combustible Substance. (2)

OR

Differentiate between spontaneous and explosive combustion.

11. "Rayon is not truly an artificial fibre." Justify. (2)

12. Radha's grandmother often complained of hazy Vision. (3)

(i) Name the eye defect she may be suffering from?

(ii) What may be the possible reason behind this defect?

(iii) State any one possible way that could improve her vision.

13. (i) What is the effect on the (3)

(a) loudness of a sound if the amplitude of a vibrating body is doubled? -

(b) pitch of a sound when the frequency of the vibrating body is doubled?

(ii) The frequency of a sound is .5 kHz. Is it audible? State the reason in support of your answer.

14. (i) Why are geostationary satellites called so? (3)

(ii) What is the time period of their revolution around the earth?

(iii) Mention any one of their practical applications.

15. (i) Write any two ill effects of incomplete combustion. (3)

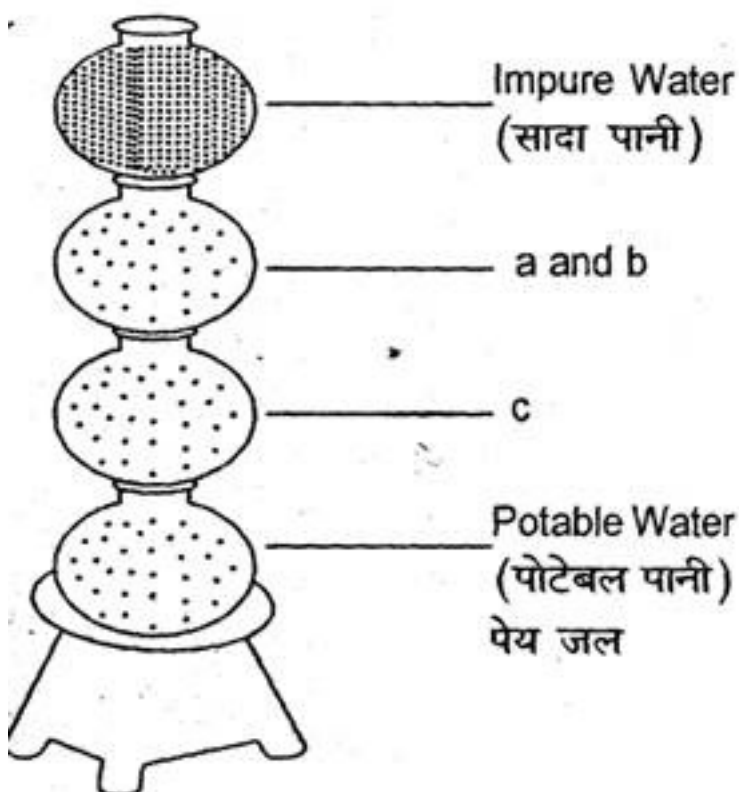
(ii) What special precaution should be taken at LPG godowns or petrol pumps?

16. Look carefully at the given (3)

(i) What name is given to the technique shown in the figure?

(ii) Label the parts a, b, and c. 1 a and b

(iii) What do you understand by potable water?



17. (i) How does domestic sewage affect aquatic animals? (3)

(ii) What is the purpose of purification of water? (two points)

18. (i) How is the virtual image, formed by a convex lens, different from that formed by a concave lens? (5)

(ii). Complete the given ray diagram.

(iii) Mention any two practical devices that make use of convex lenses.

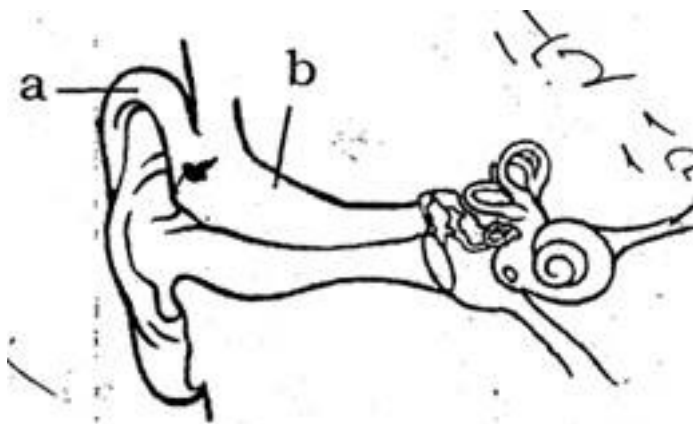
19. (i) Enlist any three measures that can help to limit noise pollution. (5)

(ii) We hear the thunder a little after we see the flash of lightning...Why?

(iii) What is sign language? For whom is it useful? -5

**OR**

- (i) Label the parts A a, b, and c in the following diagram of the human ear.
- (ii) State the functions of each of these three parts.
- (iii) Name the three bones present in the middle ear.
- (iv) What does persistence of hearing of a normal human ear imply?



20. (i) With the help of an activity explain that non-luminous zone is the hottest part of a flame. (5)
- (ii) Calorific value of wood is  $18000 \text{ kJ/kg}$ . How much wood is required to produce heat energy of  $1,000 \text{ kJ}$ ?
- (iii) Why are gaseous fuels considered the best? (Give any two reasons)
21. (i) "Excessive use of plastic is a threat Comment. (5)
- (ii) Write full form of PET.
- (iii) How are synthetic fibres better than fibres? (Give two reasons)

**OR**

- (i) State any three characteristics of synthetic plastics.
- (ii) Differentiate between biodegradable and non-biodegradable wastes. Give one example of each.

### **Section - 'B'**

22. The crop, which is sown during rainy season, is: (1)
- (a) wheat (b) mustard (c) maize (d) linseed
23. Hydra reproduces by: (1)

(a) budding (b) multiple fission (c) binary fission (d) laying eggs

24. How is transplantation advantageous? (2)

25. (a) What is lodging? (2)

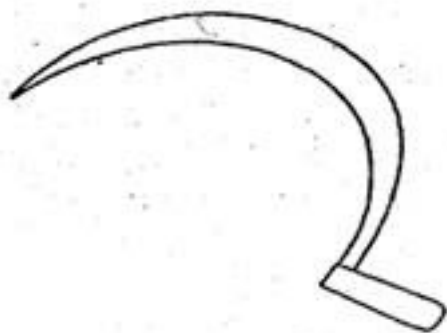
(b) Why is it advisable to minimize the use of fertilizers?

**OR**

(a) Name the agricultural implement, shown in the figure.

(b) For which agricultural practice is this implement used?

(c) How is large scale storage of grains done?



26. Name and explain the process by which new varieties of crops are developed? (3)

27. (a) What are hermaphrodites? Give one examples (3)

(b) In which parts of the female reproductive system does:

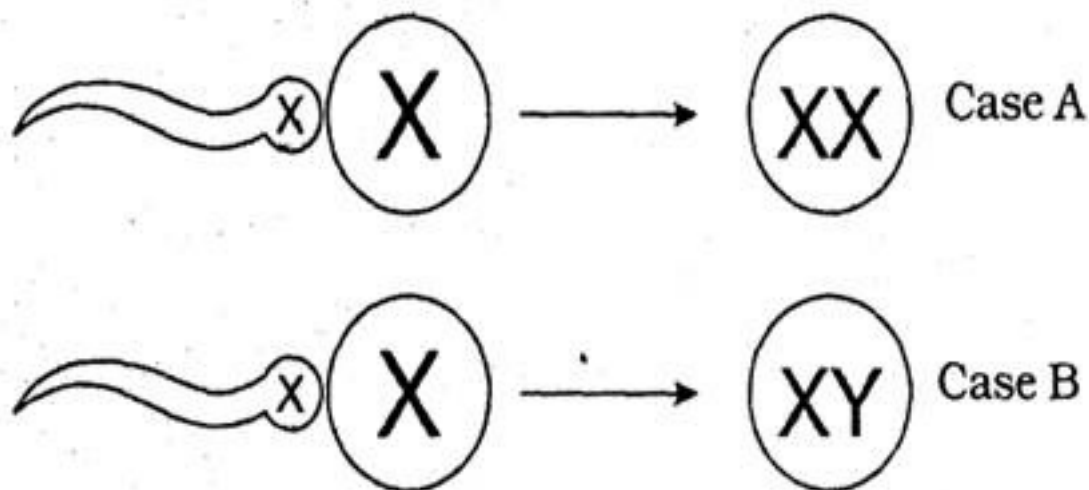
(i) production of eggs takes place □ □★

(ii) fusion of eggs with sperms takes place.

(c) What are the functions of the hormones produced by the ovaries?

28. (a) The following diagram shows the fertilization of an egg cell by a sperm cell. What is the possibility of sex of the child in case Anand case B (3)

(b) Is mother responsible for determining the sex of the child 2 Give reason.



29. (a) Differentiate between oviparous and viviparous animals. Give one example of each.

(5)

(b) How are egg shells formed?

(c) Draw a neat labelled diagram of a human sperm Cell.

30. (a) Why do some tadpoles fail to grow into adult frogs? (5)

(b) Name the gland that secretes: is:

(i) growth hormone

(ii) thyroxine

(iii) insulin

(c) How is diabetes caused?

(d), Where is adrenal gland located? Write two functions of the hormone, secreted by the adrenal gland.

**OR**

(a) Name any two minerals and any two vitamins that are needed to build strong and healthy bones.

(b) How is physical exercise beneficial?

(c) What circumstances may provoke an adolescent towards taking drugs?

(Discuss any two) (a)