Class 10 science lab Skill March BOARD EXAM_JSUNIL

TEST PAPER_03 MCQ questions for class 10 science practical

1. What do we observe on pouring acetic acid on red and blue litmus papers ?

(A) Red litmus remains red and blue litmus turns red. (B) Red litmus turns blue and blue litmus remains blue.

(C) Red litmus turns blue and blue litmus turns red. (D) Red litmus becomes colourless and blue litmus remains blue.

Ans: (a)

2. While preparing soap a small quantity of common salt is generally added to the reaction mixture of vegetable oil and sodium hydroxide. Which one of the following may be the purpose of adding common salt ?

(A) To reduce the basic nature of the soap (B) To make the soap neutral

(C) To enhance the cleansing power of the soap (D) To favour the precipitation of the soap Ans: (d)

3. A student takes about 4 mL of distilled water in four test tubes marked P, Q, R and S. He then dissolves in each test tube an equal amount of one salt in one test tube, namely sodium sulphate in P, potassium sulphate in Q, calcium sulphate in R and magnesium sulphate in S. After that he adds an equal amount of soap solution in each test tube. On shaking each of these test tubes well, he observes a good amount of lather (foam) in the test tubes marked

(A) P and Q (B) Q and R (C) P, Q and S (D) P, R and S Ans: (a)

4. A student was asked to observe and identify the various parts of an embryo of a red kidney bean seed. He identified the parts and listed them as under :

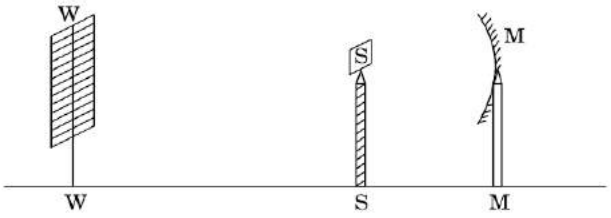
I. Tegmen II. Testa III. Cotyledon IV. Radicle V. Plumule Ans: (c)

The correctly identified parts among these are (A) I, II and III (B) II, III and IV (C) III, IV and V (D) I, III, IV and V

5. Given below is the list of vegetables available in the market. Select from these the two vegetables having homologous structures : Potato, sweet potato, ginger, radish, tomato, carrot, okra (Lady's finger) Ans: (b)

(A) Potato and sweet potato (B) Radish and carrot (C) Okra and sweet potato (D) Potato and tomato

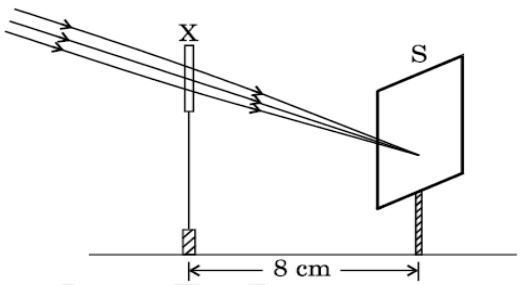
6. A student obtains a sharp image of the distant window (W) of the school laboratory on the screen (S) using the given concave mirror (M) to determine its focal length. Which of the following distances should he measure to get the focal length of the mirror ?



(A) MW (B) MS

(C) SW (D) MW – MS Ans: (b)

7. A student used a device (X) to obtain/focus the image of a well illuminated distant building on a screen (S) as shown below in the diagram. Select the correct statement about the device (X).



(A) This device is a concave lens of focal length 8 cm.

(B) This device is a convex mirror of focal length 8 cm.

(C) This device is a convex lens of focal length 4 cm.

(D) This device is a convex lens of focal length 8 cm.

Ans: (d)

8. A student traces the path of a ray of light through a rectangular glass slab for the different values of angle of incidence. He observes all possible precautions at each step of the experiment. At the end of the experiment, on analysing the measurements, which of the following conclusions is he likely to draw ? Ans: (d)

(A) $\angle i = \angle e < \angle r$

(B) $\angle i < \angle e < \angle r$

(C) $\angle i > \angle e > \angle r$

(D) $\angle i = \angle e > \angle r$

9. A student traces the path of a ray of light through a triangular glass prism for different values of angle of incidence. On analysing the ray diagrams, which one of the following conclusions is he likely to draw ?

(A) The emergent ray is parallel to the incident ray.

(B) The emergent ray bends at an angle to the direction of the incident ray.

(C) The emergent ray and the refracted ray are at right angles to each other.

(D) The emergent ray is perpendicular to the incident ray. Ans: (b)

Ans: (1) A (2) D (3) A (4) C (5) B (6) B (7) D (8) D 3 (9) B

10. When you add sodium hydrogen carbonate to acetic acid in a test tube, a gas liberates immediately with a brisk effervescence. Name this gas. Describe the method of testing this gas.

Ans: ☐ Carbon dioxide 1

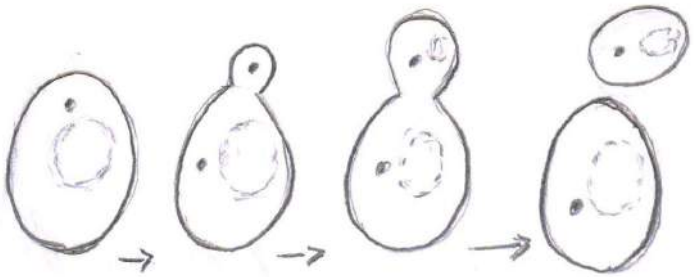
Lime Water turns milky when CO_2 is passed through it. / CO_2 extinguishes a burning splinter. 1

11. Students were asked to observe the permanent slides showing different stages of budding in yeast under high power of a microscope.

(a) Which adjustment screw (coarse/fine) were you asked to move to focus the slides ?

(b) Draw three diagrams in correct sequence showing budding in yeast.

Ans: Fine



12. A 4 cm tall object is placed on the principal axis of a convex lens. The distance of the object from the optical centre of the lens is 12 cm and its sharp image is formed at a distance of 24 cm from it on a screen on the other side of the lens. If the object is now moved a little away from the lens, in which way (towards the lens or away from the lens) will he have to move the screen to get a sharp image of the object on it again ? How will the magnification of the image be affected ?

Ans: Towards the lens 1 Magnification decreases 1