

KENDRIYA VIDYALAYA SANGATHAN, MUMBAI REGION
Common Pre-board Examination (II) 2007-2008

CLASS: X

MARKS: 20

SUBJECT: Science & Technology
(Practical skills)

TIME: 1½ Hrs

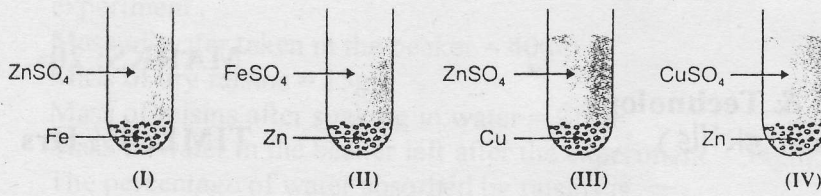
General Instruction –

1. Attempt all questions.
2. There are 30 multiple-choice questions in total. Only one of the options in every question is correct.
3. The question paper consists of two sections - Section A and Section B. Each of the 20 questions in Section A carries ½ Mark and each of the 10 questions in Section B carries 1 mark.
4. 15 minutes additional time will be given to you to read the questions.
5. The answer sheet is inside this Test booklet. When you are directed to open the text booklet take out the answer sheet and fill in the particulars on SIDE – 2 carefully with blue / black ball point only. In no case pencil is to be used. Read “General Instructions for candidates” on SIDE – 1
6. Use blue / black ballpoint pen for writing particulars on these pages / writing particulars and marking responses on SIDE – 2 of the answer sheet.
7. On completion of the test, the candidate must hand over the answer sheet to the invigilator in the room / hall. The candidates are allowed to take away this test booklet with them.
8. The candidate should ensure that the answer sheet is not folded. Do not make any stray mark on the answer sheet. Do not write your roll no. anywhere else except in the specified space in the Test booklet / Answer sheet.
9. Use of white fluid for correction is not permissible on the Answer sheet.

Section A

1. A student dipped pH paper in lemon juice. The colour of pH paper was
 a) Green b) Yellow c) Red d) Blue
2. A student dipped pH paper in distilled water. It changed into green colour. He added few drops of NaOH solution, the colour of the pH paper will change into
 a) Blue b) Red c) Dark green d) Orangish yellow
3. When the stopper of a bottle containing colourless liquid was removed, the bottle gave out smell of vinegar. The liquid in the bottle could be
 a) HCl solution b) NaOH c) Acetic acid d) saturated sodium bicarbonate solution
4. Which one of the following combinations of substances would you take to prepare sulphur dioxide(SO₂) gas
 a) Conc.H₂SO₄ with zinc b) Dil.H₂SO₄ with zinc
 c) Dil.H₂SO₄ with copper d) Conc.H₂SO₄ with copper

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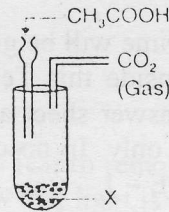


In which of the test tubes given above, reaction will not take place?

- (a) I & II (b) II & III (c) I & III (d) I & IV

6 X is :

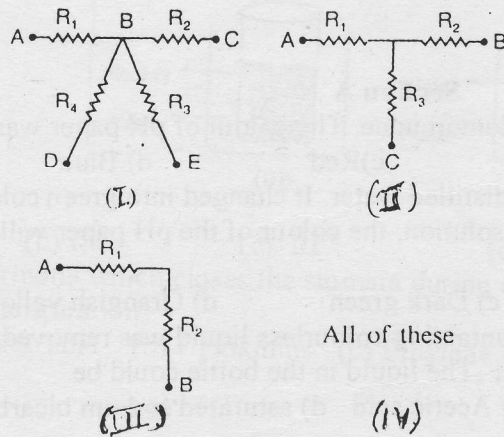
- (a) NaOH
 (b) Na_2CO_3
 (c) NaHCO_3
 (d) Either Na_2CO_3 or NaHCO_3



7. Some crystals of copper sulphate were dissolved in water, the color of solution obtained would be

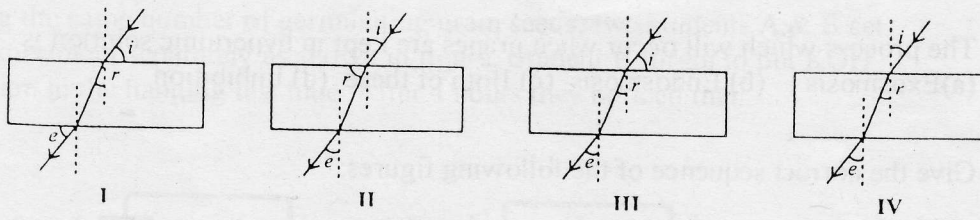
- a Green (b) Red (c) Blue (d) Brown

8. The combination exhibiting series combination of resistors is :



- (a) I (b) II (c) III (d) IV

9. In which of the following diagrams angle i, r and e are correctly marked



a) I

b) II

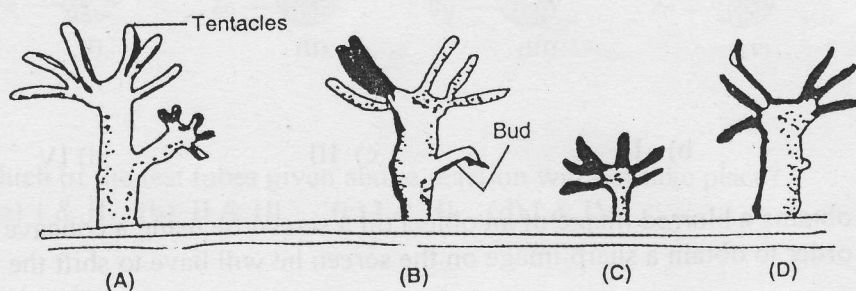
c) III

d) IV

10. A student obtains a blurred image of an object on a screen by using a concave mirror. In order to obtain a sharp image on the screen he will have to shift the mirror
- (a) Towards the screen (b) Away from the screen
 (c) To a position very far away from the screen
 (d) Either towards or away from the screen depending upon the position of the object
11. A sharp image of a distant object is obtained on a screen by using convex lens. In order to determine the focal length of the lens you need to measure the distance between the
- a) Lens and object b) Lens and screen
 c) Object and screen d) Lens and screen and also object and screen
12. An ammeter has 20 divisions between mark 0 and mark 2 on its scale. The least count of ammeter is
- (a) 0.02 A (b) 0.01 A (c) 0.2 A (d) 0.1 A
13. The error of parallax, while doing measurements can be avoided by the looking at the divisions:
- (a) From the left of the pointer
 (b) From the right of the pointer
 (c) Directly above the pointer
 (d) Any of these
14. Mamta soaked 15gm of raisins in 100 ml of distilled water in two beakers A and B each. She maintained beaker A at room temperature and beaker B at 43°C , after an hour the percentage of water absorbed will be
- a) More in A
 b) More in B
 c) Same in A and B
 d) Percentage of B is equal to twice the percentage of A

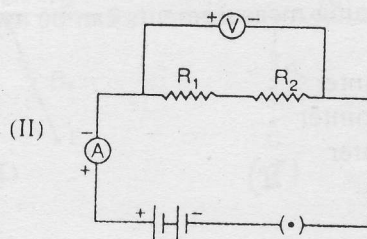
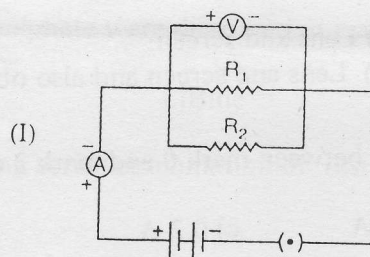
15. The process which will occur when grapes are kept in hypertonic solution is :
 (a) Exosmosis (b) Endosmosis (c) Both of these (d) Imbibition

16. Give the correct sequence of the following figures:



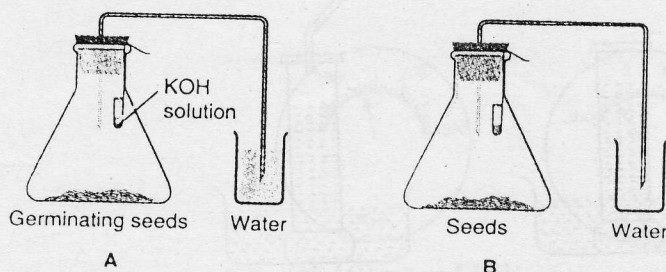
(a) D, A, C, B (b) D, B, A, C (c) B, C, A, D (d) C, D, B, A

17. Two students are using the two circuits shown below. They are doing the experiment to find the equivalent resistance of a

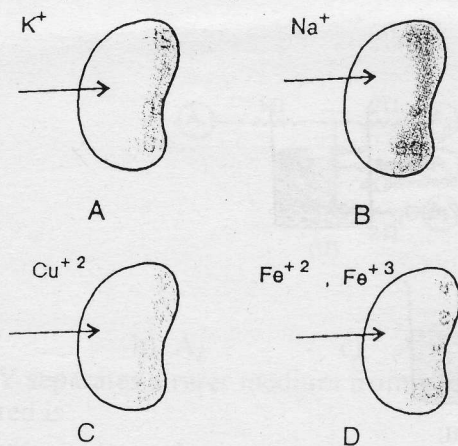


- (a) Series combination & parallel combination respectively of the two given resistors
 (b) Parallel combination & series combination respectively of the two given resistors
 (c) Series combination of the two given resistors in both the cases
 (d) Parallel combination of the two given resistors in both the cases

- 18 Using the same number of germinating gram seeds, two students A & B set up experiment separately as shown in figure. Student B forgot to put KOH solution in the hanging test tube. After 4 hours they noticed that:



- a) Water level increased in bent tube only of A
 b) Water level increased in bent tube only of B
 c) Water level decreased in bent tube only of B
 d) Water level remains same in both A & B
- 19 Which of the following represents the mechanism of opening and closing of stomata?

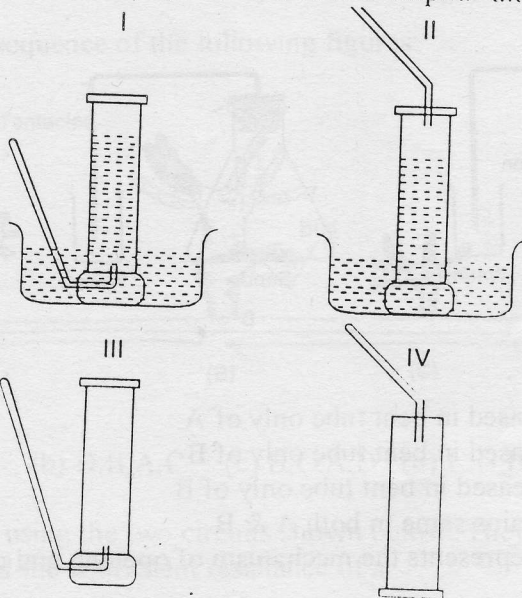


- (a) B and C
 (b) A and B
 (c) Only A
 (d) Only B.

- 20 After adding iodine solution, the region of leaf under black strip remains colourless because that part:
- (a) Does not receive CO_2
 (b) Transpiration not occur
 (c) Sunlight not received
 (d) Exchange of gases can not take place

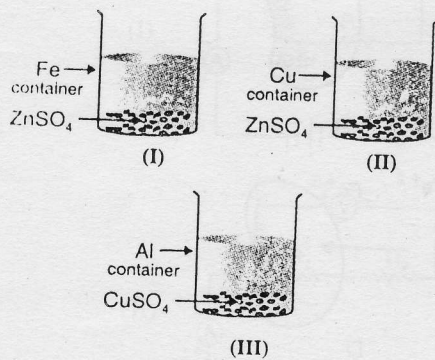
Section B

- 21 The proper experimental arrangement to collect sulphur dioxide is as shown in



- a) I b) II c) III d) IV

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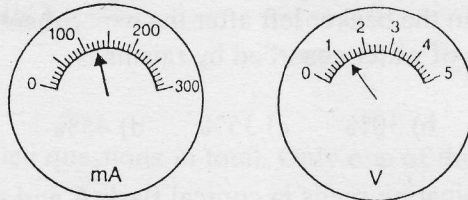
In which of above, solution can not be stored?

- (a) I, II, III (b) II, III (c) I, III (d) III

- 23 Acetic acid when dissolved in water gives

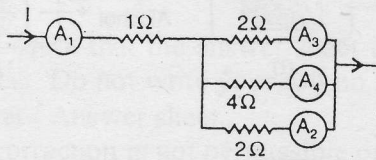
- (a) H_3O^+ ions (b) OH^- ions
(c) COOH^- ions (d) None of these

- 24 The figures given below show the readings of a milliammeter and a voltmeter connected in an electrical circuit. Assuming that the instruments do not have any zero error, the correct readings of the milliammeter and the voltmeter are :

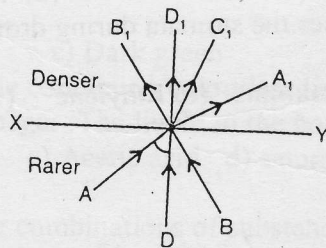


- (a) 160 mA and 1.1V
- (b) 130 mA and 1.2V
- (c) 103 mA and 1.1V
- (d) 130 mA and 1.5V

- 25 The ammeter showing maximum current is:



- a) A_1
 - b) A_2
 - c) A_3
 - d) A_4
- 26 The line XY separates a rarer medium from a denser medium. The best of the rays indicated is



- a) AA_1
- b) BB_1
- c) AC_1
- d) DD_1

- 27 A student recorded the following observation while performing the experiment

Mass of water taken in the beaker = 40gm

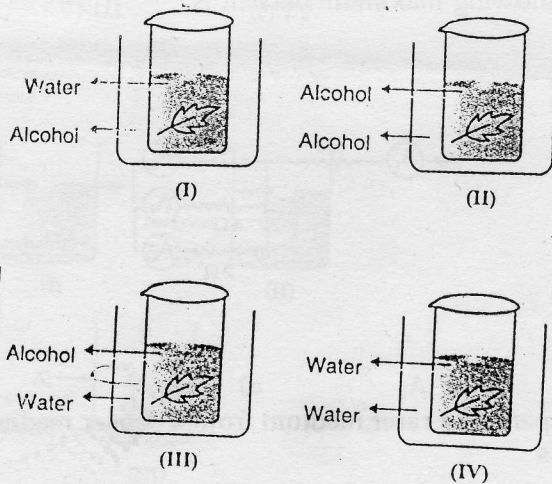
Mass of dry raisins = 15gm

Mass of raisins after soaking in water = 21gm

Mass of water in the beaker left after the experiment = 34gm

The percentage of water absorbed by raisins is

- a) 40% b) 30% c) 35% d) 45%
28. Karan put germinating seeds in conical flask A and some earthworm in conical flask B and set up both the apparatus separately. After some time, he observed that water level rises in both the bent tubes. It shows that
- (a) Both plant and animal respire
 (b) Only plants respire
 (c) Only animals respire
 (d) Neither plants nor animals respire.
29. The figures given below illustrate boiling of leaf to remove chlorophyll. This is one of the steps in the experiment to show that light is necessary for photosynthesis.



- (a) I (b) II (c) III (d) IV
30. Name the hormone which closes the stomata during drought and checks loss of water by transpiration.
- (a) Abscissic acid (b) Cytokinins (c) Ethylene (d) Gibberellins.