

MP BOARD CLASS 10 EM SCIENCE MODEL PAPER SET 7 2020

म.प्र. बोर्ड कक्षा 10 EM विज्ञान मोडल पेपर सेट 7 2020

Time : 3 Hrs.

M. M.: 80

Instructions :

- (i) All questions are compulsory.
- (ii) Q. No. 1 to 4 are Objective type questions. Each question carries 5 marks and each sub questions carries 5 mark.
- (iii) Q. No. 5 to 9 are very short answer type questions. Each question carries 2 marks. Maximum word limit of the answer is 30 words.
- (iv) Q. No. 10 to 14 are short answer type questions. Each question carries 3 marks. Maximum word limit of the answer is 50 words.
- (v) Q. No. 15 to 19 are Short answer type questions. Each question carries 4 marks. Maximum word limit of the answer is 75 words.
- (vi) Q. No. 20 to 22 Long answer type questions. Each question carries 5 marks. Maximum word limit of the answer is 120 words.

Q. 1. Choose the correct answer:

1. The reactions in which heat is released are called :
(a) Exothermic reactions (b) Endo thermic reactions (c) Photochemical reactions (d) None of these.
2. Rhizobium is a :
(a) Symbiotic (b) Parasite (c) Saprophyte (d) Auto troph.
3. Estrogen is secreted by :
(a) Pituitary gland (b) Ovary (c) Testis (d) Thyroid.
4. Which is known as father of Genetics :
(a) Mendel (b) Watson and Crick (c) Aristotle (d) Charak and Sushruta.
5. The number of chromosomes found in human cell is :
(a) 23 pairs (b) 22 pairs (c) 20 pairs (d) 24 pairs.

Ans. 1. (a), 2. (a), 3. (b), 4. (a), 5. (a). Q. 2. Fill in the blanks :

1. The chemical formula of bleaching powder is
2. The speed of all light rays in vacuum remains
3. The can be removed by using concave lens.
4. The angle between two edges of a prism is called
5. World environments day is celebrated on

Ans. 1. CaOCl_2 , 2. Same, 3. Myopia, 4. Angle of prism, 5. 5th June.

Q. 3. Match the columns :

'A'

1. Newland
2. Kreb's cycle
3. Master gland

'B'

- (a) Pyruvic acid
- (b) Octaves
- (c) Water vapours

4. Green house effect. (d) Pituitary gland

5. Kuhl (e) Kerala.

Ans. 1. (b), 2. (a), 3. (d), 4. (c), 5. (e).

Q. 4. Answer the following in one word/sentence :

1. What is the chemical formula of quick lime ?
2. What type of plant is Drosera according to nutrition ?
3. What is function of MnO, in dry cell ?
4. Write SI unit of specific resistance.
5. Chipko moment is related to ?

Ans. 1. CaO, 2. Insectivorous, 3. Oxydation, 4. Ohm-metre, 5. Conservation of forests.

Q.5. Why do we apply point on iron articles ? <http://www.mpboardonline.com>

Or

What is PH value of pure water ?

Q. 6. What were the criteria used by Mendeleev in creating his periodic table ?

Or

What are valence electrons ?

Q.7. How many types of pollination are there?

Or

How is it possible to control fertilization ?

Q.8. Will geographical isolation be a major factor in the specialization of a self pollination plant species? why or why not?

Or

How do Mendel's experiment show that traits may be dominant or recessive ?

Q.9. What is reflection of light ?

Or

What do you mean by denser and rarer medium ?

Q. 10. What is balanced chemical reaction ?

Or

Write basic principle of photography.

Q. 11. Write uses of lenses.

Or

What is microscope ? How many types of microscopes are there?

Q. 12. What is electromagnetic induction ?

Or

Draw a domestic electric circuit for a room in which a play socket. A bulb and fan with regulation is to be fitted. <http://www.mpboardonline.com>

Q. 13. Give difference between alternating current and direct current.

Or

Draw a labelled diagram of D.C. motor.

Q. 14. What are the advantages of using solar water heater?

Or

Why is the combusting of food in body (or respiration) is called slow combustion ?

Q.15. What is neutralization reaction ? Give two examples.

Or

Why does distilled water not conduct electricity whereas rain water does ?

Q. 16. What is homologous series ? explain with on example.

Or

Explain the formation of scum when hard water is treated with soap.

Q. 17. In how many part the brain is divided ?

Or

What is synapsis? Explain it.

Q. 18. Draw labelled diagram of structure of Nephron.

Or

Write difference between respiration and photosynthesis.

Q. 19. State Faraday's laws of electrolysis.

Or

What is meant by thermal effect of electric current ?

Q. 20. Define the following terms :

(i) Minerals (ii) Ores (iii) Gangue.

Or

Compare the chemical properties of metals and non metals.

Q. 21. Describe with diagram the reproduction in hydra by budding process.

Or

What is fertilization? explain the process of formation of embryo in flowering plant.

Q. 22. What are real and virtual images ? Distinguish between them with the help of ray diagram.

Or

The radius of curvature of a spherical mirror is 20cm what will be its focal length ?