

**JHARKHAND ACADEMIC COUNCIL, RANCHI**  
**MODEL QUESTION PAPER**

**Subject : SCIENCE**

**Time : 2 Hours**

**Class : 8 (VIII)**

**Marks : 80**

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- Q. 1. **There are four alternatives in the following questions. Choose the correct alternative :** 20 × 1 = 20
- i. What is most essential for the life of human being ?  
(a) Air (b) Water  
(c) Food (d) None of these.
- ii. What is the percentage of nitrogen gas in atmosphere ?  
(a) 21% (b) 78%  
(c) 3% (d) 80%.
- iii. What is the percentage of oxygen in atmosphere ?  
(a) 21% (b) 78%  
(c) 0·9% (d) 1%.
- iv. Which of the following is a bad conductor of electricity ?  
(a) Copper (b) Iron  
(c) Aluminium (d) Rubber.
- v. What is absent in animal cell ?  
(a) Cell membrane (b) Nucleus  
(c) Cell wall (d) Protoplasm.
- vi. Which of the following is a metal found in liquid state ?  
(a) Graphite (b) Mercury  
(c) Iron (d) Copper.
- vii. Who discovered the vaccine of smallpox ?  
(a) Fleming (b) Robert Koch  
(c) Edward Jenner (d) Louis Pasteur.
- viii. The main factor of communicable disease is  
(a) ant (b) dragonfly  
(c) spider (d) housefly.
- ix. The process of converting sugar into alcohol is known as  
(a) molding (b) fermentation  
(c) infection (d) none of these.
- x. Bite of which organism causes malaria ?  
(a) Spider (b) Mosquito  
(c) Honeybee (d) Housefly.

[ Turn over

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- xi. The male hormones which secretes at the beginning of puberty is called
- (a) testosterone (b) estrogen  
(c) adrenaline (d) none of these.
- xii. How many pairs of chromosomes are found in the nucleus of a human cell ?
- (a) 22 pairs (b) 23 pairs  
(c) 24 pairs (d) 25 pairs.
- xiii. Which force is required to press on a door ?
- (a) Pull (b) Push  
(c) Gravitational attraction (d) None of these.
- xiv. Due to which force a substance falls on the earth ?
- (a) Gravitational attraction (b) Pull  
(c) Contact force (d) None of these.
- xv. The unit of force is
- (a) metre/second (b) hertz  
(c) newton (d) pascal.
- xvi. The unit of pressure is
- (a) newton (b) pascal  
(c) hertz (d) metre/second.
- xvii. Which of the following substances is incombustible ?
- (a) Wood (b) Coal  
(c) Petrol (d) Stone.
- xviii. Which animal in the following is viviparous ?
- (a) Human being (b) Hen  
(c) Crow (d) Duck.
- xix. The values of angle of incidence and angle of reflection are
- (a) unequal (b) equal  
(c) zero (d) none of these.
- xx. The largest planet of solar family is
- (a) Saturn (b) Venus  
(c) Mars (d) Jupiter.

- Q. 2. **Fill in the blanks :** 15 × 1 = 15
- (i) The nearest star of the earth is .....
  - (ii) The nearest planet of the earth is .....
  - (iii) Unwanted sound or noise is called .....
  - (iv) ..... exists between equal charges.
  - (v) The transmission of sound does not occur in .....
  - (vi) The unit of frequency is .....
  - (vii) Like synthetic fibre plastic is also .....
  - (viii) Friction depends on ..... of the surface.
  - (ix) ..... gas of atmosphere is taken by green plants for photosynthesis.
  - (x) The friction becomes ..... by spraying powder on a carom board.
  - (xi) By the application of ball bearing friction becomes .....
  - (xii) ..... occurs in internal fertilization.
  - (xiii) ..... planet is called sister of earth.
  - (xiv) There are ..... planets in solar family.
  - (xv) ..... sex chromosomes are found in males.

- Q. 3. **Match correct pair :** 5 × 1 = 5
- | <b>Part A</b>      | <b>Part B</b>        |
|--------------------|----------------------|
| i. Bacteria        | Cuddling of card     |
| ii. Rhizobium      | Vector of cholera    |
| iii. Lactobacillus | Fixation of nitrogen |
| iv. Rabi crop      | Paddy, maize         |
| v. Kharif crop     | Wheat, gram, pea     |

- Q. 4. **Short Answer Questions :** **( 20 )**
- (i) Differentiate between manure and fertilizer. 3
  - (ii) What is the meaning of R in 4R ? 3
  - (iii) What is the difference between noise and music ? 3
  - (iv) What is malleability ? Name any two metals in which this property exists. 3
  - (v) What is nitrogen fixation ? 3
  - (vi) What do you mean by acid rain ? 3
  - (vii) What is Red Data Book ? 2

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Q. 5. **Long Answer Questions :** ( 20 )

Answer any *four* questions :

- (i) Differentiate between degradable and non-degradable natural resources. 5
- (ii) What do you mean by air pollution ? Mention the measures to control it. 5
- (iii) Why should we save paper ? 5
- (iv) We should avoid using plastic as far as practicable. What measures should be taken to do this ? 5
- (v) Draw the diagrams of plant cell and animal cells and write three differences between them. 5
- (vi) Draw a labelled diagram of the flame of a candle. 5

