

CTET Paper 2 (Science & Mathematics) Mock Test - 1

Science Section (25 Questions)

Multiple Choice Questions

- Which of the following is a non-renewable resource?**
 - Solar energy
 - Wind energy
 - Natural gas
 - Biomass
- What is the primary function of the human heart?**
 - Digestion
 - Circulation
 - Respiration
 - Excretion
- Which planet is known as the "Red Planet"?**
 - Venus
 - Mars
 - Jupiter
 - Saturn
- The process by which plants lose water through small openings in their leaves is called:**
 - Photosynthesis
 - Respiration
 - Transpiration
 - Evaporation
- Which of the following materials is a good conductor of electricity?**
 - Plastic
 - Rubber
 - Copper
 - Wood
- The organ responsible for producing insulin in the human body is the:**
 - Liver
 - Kidney
 - Pancreas
 - Heart
- In which part of the plant does photosynthesis primarily occur?**
 - Roots
 - Stem
 - Leaves
 - Flowers
- What type of energy is stored in a stretched rubber band?**
 - Kinetic energy
 - Chemical energy
 - Potential energy
 - Thermal energy
- Which of the following is not a feature of mammals?**
 - Hair or fur
 - Laying eggs
 - Warm-blooded
 - Live births
- Which type of rock is formed from cooled molten lava?**
 - Sedimentary
 - Metamorphic
 - Igneous
 - Fossil
- What is the main source of energy for the Earth's climate system?**
 - Wind
 - Solar radiation
 - Geothermal heat
 - Ocean currents
- Which organ is primarily responsible for absorbing nutrients from food?**
 - Stomach
 - Liver
 - Small intestine
 - Large intestine
- What causes the phases of the Moon?**
 - The Earth's shadow
 - The Moon's shadow
 - The Sun's light reflecting off the Moon
 - The Moon's surface changes
- The chemical formula for water is:**
 - CO₂
 - H₂O
 - O₂
 - NaCl

15. **Which of the following is a biodegradable material?** a) Plastic bottle
b) Glass jar
c) Paper bag
d) Aluminum can
16. **Which gas is most abundant in the Earth's atmosphere?** a) Oxygen
b) Carbon dioxide
c) Nitrogen
d) Hydrogen
17. **What is the role of chlorophyll in plants?** a) To absorb water
b) To absorb sunlight
c) To absorb nutrients
d) To absorb carbon dioxide
18. **Which system in the human body is responsible for fighting infections?** a) Digestive system
b) Nervous system
c) Immune system
d) Respiratory system
19. **What kind of force keeps the planets in orbit around the Sun?** a) Magnetic force
b) Electromagnetic force
c) Gravitational force
d) Nuclear force
20. **The substance that makes up the cell wall of plants is called:** a) Starch
b) Cellulose
c) Glucose
d) Chlorophyll
21. **Which organ in the human body is primarily responsible for detoxification?** a) Kidneys
b) Liver
c) Heart
d) Lungs
22. **Which layer of the Earth is liquid?** a) Crust
b) Mantle
c) Outer core
d) Inner core
23. **What is the primary component of natural gas?** a) Ethanol
b) Methane
c) Propane
d) Butane
24. **The process by which water cycles between the atmosphere and Earth's surface is known as:** a) Photosynthesis
b) The water cycle
c) Respiration
d) Transpiration
25. **Which type of mirror is used in a magnifying glass?** a) Convex mirror
b) Concave mirror
c) Plane mirror
d) Reflecting mirror

Mathematics Section (25 Questions)

Multiple Choice Questions

1. **What is the value of $9 \times (6 - 4) + 3$?** a) 18
b) 21
c) 27
d) 24
2. **Which of the following is a prime number?** a) 21
b) 25
c) 29
d) 35
3. **What is the area of a rectangle with length 7 cm and width 3 cm?** a) 10 cm^2
b) 21 cm^2
c) 20 cm^2
d) 24 cm^2
4. **What is the perimeter of a square with side length 4 cm?** a) 12 cm
b) 16 cm
c) 8 cm
d) 20 cm
5. **What is the value of $15 \div 3 \times 2$?** a) 5
b) 10
c) 8
d) 12

6. **Which of the following is the largest number?** a) 0.75
b) 0.7
c) 0.8
d) 0.65
7. **If the radius of a circle is 7 cm, what is its diameter?** a) 14 cm
b) 21 cm
c) 49 cm
d) 7 cm
8. **Which of the following shapes has only one pair of parallel sides?** a) Rectangle
b) Square
c) Trapezium
d) Rhombus
9. **What is the sum of the angles in a triangle?** a) 90 degrees
b) 180 degrees
c) 360 degrees
d) 270 degrees
10. **What is 25% of 200?** a) 25
b) 50
c) 75
d) 100
11. **The product of 8 and 12 is:** a) 96
b) 84
c) 88
d) 108
12. **What is the median of the following set of numbers: 2, 5, 7, 10, 12?** a) 7
b) 5
c) 10
d) 12
13. **If a triangle has two angles measuring 50 degrees each, what is the measure of the third angle?** a) 80 degrees
b) 90 degrees
c) 100 degrees
d) 60 degrees
14. **Which of the following is a multiple of both 4 and 6?** a) 12
b) 24
c) 30
d) 18
15. **The circumference of a circle is given by the formula:** a) $2\pi r$
b) πr^2
c) πd
d) $2\pi d$
16. **What is the value of $(3^2 + 4^2) \div 5$?** a) 4
b) 5
c) 7
d) 8
17. **What is the smallest prime number?** a) 1
b) 2
c) 3
d) 5
18. **Which fraction is equivalent to 0.5?** a) $1/2$
b) $2/3$
c) $3/4$
d) $1/4$
19. **What is the result of subtracting 8 from 3×6 ?** a) 10
b) 16
c) 18
d) 12
20. **The sum of the angles in a quadrilateral is:** a) 180 degrees
b) 360 degrees
c) 90 degrees
d) 270 degrees
21. **What is the value of 2^3 ?** a) 6
b) 8
c) 9
d) 10
22. **If a car travels 60 km in 1 hour, its speed is:** a) 60 km/h
b) 120 km/h
c) 40 km/h
d) 30 km/h
23. **What is the smallest even number greater than 0?** a) 0
b) 1
c) 2
d) 3
24. **Which of the following is a composite number?** a) 2
b) 3
c) 5
d) 6
25. **What is the average of the numbers 10, 20, and 30?** a) 15
b) 20

- c) 25
- d) 30

Answer Key

Science Section

1. c) Natural gas
2. b) Circulation
3. b) Mars
4. c) Transpiration
5. c) Copper
6. c) Pancreas
7. c) Leaves
8. c) Potential energy
9. b) Laying eggs
10. c) Igneous
11. b) Solar radiation
12. c) Small intestine
13. c) The Sun's light reflecting off the Moon
14. b) H₂O
15. c) Paper bag
16. c) Nitrogen
17. b) To absorb sunlight
18. c) Immune system
19. c) Gravitational force
20. b) Cellulose
21. b) Liver
22. c) Outer core
23. b) Methane
24. b) The water cycle
25. b) Concave mirror

Mathematics Section

1. d) 24

2. c) 29
3. b) 21 cm²
4. b) 16 cm
5. d) 10
6. c) 0.8
7. a) 14 cm
8. c) Trapezium
9. b) 180 degrees
10. d) 50
11. a) 96
12. a) 7
13. d) 60 degrees
14. b) 24
15. c) πd
16. c) 7
17. b) 2
18. a) 1/2
19. b) 16
20. b) 360 degrees
21. b) 8
22. a) 60 km/h
23. c) 2
24. d) 6
25. b) 20