

Sample Questions

The sample questions/guidelines are only informative and indicative for the candidates. The actual questions may vary in difficulty level and content dispersion.

Aptitude

Directions (Question 1): Fill in the blank with the most appropriate option out of the four given choices.

1. He _____ as a teacher before he became a politician.
(1) have worked (2) have been worked (3) was worked (4) had worked

Directions (Question 2): Choose the most appropriate word which is opposite in meaning to the underlined word.

2. Timmy was very enthusiastic to take up the new project.
(1) indifferent (2) ardent (3) eager (4) worried

Directions (Question 3): In the following question, choose the option which can be substituted for the given words.

3. To move people from a dangerous place to a safer place
(1) Evade (2) Evacuate (3) Exterminate (4) Avoid

Directions (Question 4): Choose the most appropriate word which is nearest in meaning to the underlined word.

4. It is mandatory for all the students to attend the morning assembly.
(1) compulsory (2) elective (3) voluntary (4) optional
5. Durand Cup is associated with which national sports/games?
(1) Football (2) Badminton (3) Cricket (4) Golf
6. Which is the hottest planet in the solar system?
(1) Mercury (2) Mars (3) Venus (4) Jupiter
7. Average of eleven observations is 30. Average of first five observations is 25 and last five is 28. Find the 6th term.
(1) 65 (2) 60 (3) 75 (4) 78
8. The simple interest on Rs 200 for 7 months at 5 paisa per rupee per month is_____.
(1) Rs 70 (2) Rs 7 (3) Rs 35 (4) Rs 30.50
9. Complete the series by replacing ‘?’ with the correct option.
2, 7, 17, 32, 52, ‘?’
(1) 77 (2) 64 (3) 72 (4) 81
10. In a certain code, BEGK is related to ADFJ in the same way as PSVY is related to_____.
(1) LOQT (2) ROUX (3) OTUZ (4) ORUX

Electrical Supervisor

11. Which of the following laws is used to determine the direction of induced current in a conductor?
(1) Ohm's Law (2) Faraday's Law (3) Lenz's Law (4) Kirchhoff's Law
12. In a power system, which component is responsible for reducing the high transmission voltage to a lower distribution voltage?
(1) Circuit Breaker (2) Transformer (3) Capacitor (4) Inductor
13. What is the primary function of a synchronous condenser in an AC power system?
(1) Increase voltage (2) Regulate power factor
(3) Convert DC to AC (4) Store electrical energy
14. Which device is used to protect an electrical circuit from damage caused by overload or short circuit?
(1) Fuse (2) Transformer (3) Resistor (4) Inductor

Mechanical Supervisor

15. Which manufacturing process involves the shaping of metal using localized compressive forces?
(1) Casting (2) Forging (3) Machining (4) Welding
16. Which principle states that the pressure in a fluid decrease as the fluid's velocity increases?
(1) Pascal's Principle (2) Archimedes' Principle
(3) Bernoulli's Principle (4) Continuity Equation
17. What is the primary function of a heat exchanger in thermal systems?
(1) Generate heat (2) Transfer heat between fluids
(3) Convert heat to work (4) Store thermal energy
18. Which of the following is defined as the maximum stress that a material can withstand while being stretched or pulled before breaking?
(1) Yield Strength (2) Compressive Strength
(3) Tensile Strength (4) Shear Strength

Mining Overman

19. Which mining method involves removing large quantities of overburden to access ore deposits?
(1) Cut and Fill Mining (2) Room and Pillar Mining
(3) Strip Mining (4) Shrinkage Mining
20. Which gas is commonly monitored in mines to prevent explosions and ensure safety?
(1) Oxygen (2) Methane (3) Nitrogen (4) Carbon
21. What is the primary goal of mine reclamation?
(1) Extraction (2) Restoration (3) Expansion (4) Monitoring
22. Which type of explosive is most commonly used in underground coal mining?
(1) ANFO (2) Dynamite (3) C-4 (4) Slurry

Magazine In-charge

23. As per the Indian Explosives Act, 1884, which of the following is a responsibility of a Magazine In-charge?
(1) Maintain records of stored explosives.
(2) Record the quantity and nature of explosives issued to competent persons.
(3) Inform authorities in case of shortage of explosives.
(4) All of the above
24. Which authority typically regulates the storage and handling of explosives in mining?
(1) EPA (2) OSHA (3) MSHA (4) ATF
25. Which type of drilling method is commonly used for creating blast holes in hard rock mining?
(1) Rotary drilling (2) Percussion drilling
(3) Auger drilling (4) Sonic drilling
26. What is the primary purpose of a Mine Safety Management Plan (MSMP)?
(1) To ensure efficient production levels.
(2) To outline emergency response procedures.
(3) To minimize environmental impact.
(4) To maintain compliance with legal requirements.

Vocational Training Instructor

27. What is the primary purpose of mine surveying in the development phase?
(1) Estimating ore grade. (2) Mapping underground structures.
(3) Determining mineral composition. (4) Designing mining equipment.
28. Which machine is commonly used to transport materials in an underground mine?
(1) Excavator (2) Loaders (3) Bulldozer (4) Rock Drills
29. Which practice is commonly used in mine reclamation to prevent soil erosion?
(1) Blasting (2) Drilling (3) Planting (4) Excavating
30. Which is a common method to control dust in surface mining?
(1) Heating (2) Watering (3) Exploding (4) Drilling

Junior Mine Surveyor

31. What instrument is commonly used to measure horizontal and vertical angles in surveying?
(1) Compass (2) Tape Measure (3) Theodolite (4) Level
32. Which sensor type is commonly used in remote sensing to capture images during the daytime?
(1) Radar (2) Lidar (3) Thermal (4) Optical
33. What is the main purpose of levelling in surveying?
(1) Measuring angles (2) Determining elevations
(3) Calculating distances (4) Finding coordinates
34. Which principle is triangulation based on?
(1) Angle addition (2) Trigonometry
(3) Coordinate geometry (4) Linear interpolation

Mining Sirdar

35. Which tool is commonly used to ensure ventilation systems are functioning properly in a mine?
(1) Thermometer (2) Anemometer (3) Barometer (4) Hygrometer
36. What is the primary function of a sump pump in a home's plumbing system?
(1) Heating water (2) Extracting excess water
(3) Filtering water (4) Regulating water pressure
37. What does DGPS stand for in the context of mining surveys?
(1) Digital Global Positioning System (2) Differential Global Positioning System
(3) Dynamic Global Positioning System (4) Diverse Global Positioning System
38. What is the main purpose of shot-firing in mining?
(1) Ventilating (2) Excavating (3) Blasting (4) Surveying