## **General Aptitude**

| C N - | O  | Ch -i 4                   | Chaire 2                              | Chaire 2                | Chaire 4                |
|-------|--|---------------------------|---------------------------------------|-------------------------|-------------------------|
| S.No  | Question   | Choice 1                  | Choice 2                              | Choice 3                | Choice 4                |
| 1     | Which of the following is a synonym for the word "abundant"?               | Scarcity                  | Limited                               | Rare                    | Plentiful               |
| 2     | Fill in the blank according to the passage:                                | had                       | take                                  | have                    | bought                  |
|       | They alreadya lot of food on platter, when waiter asked for                |                           |                                       |                         |                         |
|       | more pasta.  |                           |                                       |                         |                         |
| 3     | Fill in the blank according to the passage:                                | should                    | had                                   | will                    | are                     |
|       | Howyou pay the rent with no job?   |                           |                                       |                         |                         |
| 4     | Find the appropriate meaning of the highlighted phrase:                    | To give up on the project | To continue with                      | To delegate the project | To postpone the         |
|       |  |                           | the project                           | to someone else         | project                 |
|       | "I have decided to see the project through come what may."                 |                           | regardless of                         |                         |                         |
|       |  |                           | difficulties                          |                         |                         |
| 5     | Find the appropriate meaning of the highlighted phrase:                    | Feeling tired and         | Feeling indifferent                   | Feeling disappointed    | Feeling euphoric and    |
|       |  | exhausted                 | and uninterested                      | and upset               | extremely happy         |
|       | "After a long day of hiking, Sarah was <b>on cloud nine</b> as she watched |                           |                                       |                         |                         |
|       | the sunset from the mountaintop."  |                           |                                       |                         |                         |
| 6     | Convert the sentence into indirect speech.                                 | Martin asked her teacher  | Martin asks her                       | Martin asked her        | When is the             |
|       | Martin asked her teacher, "When is the assignment due?"                    | when would the            | teacher when the                      | teacher when the        | assignment due? Is      |
|       |  | assignment be due.        | assignment is due.                    | assignment would be     | asked by Martin.        |
|       |  |                           |                                       | due.                    |                         |
| 7     | Arrange the sentences given below in a meaningful sequence.                | 1<2<4<3                   | 3<2<1<4                               | 1<4<3<2                 | 3<1<4<2                 |
|       | where vibrant colours blended with the cacophony of diverse                |                           |                                       |                         |                         |
|       | cultures,  |                           |                                       |                         |                         |
|       | 2. painted against the canvas of time.                                     |                           |                                       |                         |                         |
|       | 3. Amidst the bustling city streets,                                       |                           |                                       |                         |                         |
|       | 4. each moment, a snapshot of human experience                             |                           |                                       |                         |                         |
| 8     |  |                           |                                       |                         |                         |
| 0     | N is the husband of E. W is the mother of N. How is W related to E?        | Daughter in law           | Daughter                              | Mother                  | Mother in Law           |
| 9     | Find the next term of the series: 11, 47, 89, 137, 191,                    | 261                       | 251                                   | 241                     | 27:                     |
| 10    |  |                           |                                       |                         |                         |
|       | Prabhash is standing 20 m north of Sumit, who is standing 15 m west        |                           | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |                         |                         |
|       | of Rahul. Pappu is standing 20 m south of Rahul, who is 15 m east of       |                           |                                       |                         |                         |
|       | Somesh. In which direction and how far is Prabhash from Somesh?            | South, 35 m               | South, 40 m                           | North, 35 m             | North, 40 m             |
| 11    | Arrange the following words in a meaningful sequence                       |                           |                                       |                         | ·                       |
|       | 1. Frog, 2. Grass, 3. Grasshopper, 4. Eagel, 5. Snake                      | 2, 3, 1, 5, 4             | 3, 2, 1, 4, 5                         | 2, 1, 3, 4, 5           | 4, 5, 1, 3, 2           |
| 12    | The day before yesterday was Saturday. What will be the day after tom      | Thursday                  | Friday                                | Wednesday               | Monday                  |
| 13    | Which leadership skill involves the ability to inspire and motivate        | Technical expertise       | Delegation                            | Communication           | Coaching and            |
|       | team members towards a shared vision or goal?                              |                           |                                       |                         | mentoring               |
| 14    | You are assigned a new team in order to build positive relationships       | Emotional intelligence    | Time management                       | Decision-making         | Conflict resolution     |
|       | and enhance team effectiveness. Which key skill will you require?          |                           |                                       |                         |                         |
|       |  |                           |                                       |                         |                         |
| 15    | A team leader consistently addresses disagreements and                     | Strategic thinking        | Problem solving                       | Adaptability            | Active                  |
|       | misunderstandings in a constructive manner. What leadership skill is       |                           | ÿ                                     |                         | communication           |
|       | exemplified in the scenario?   |                           |                                       |                         |                         |
| 16    | A critical task has been assigned to your team that requires strong        | Technical expertise       | Delegation                            | Communication           | Conflict resolution     |
|       | coordination, quick decision-making, and efficient problem-solving.        |                           | 1 -                                   |                         |                         |
|       | What leadership skill should you primarily focus on to ensure the          |                           |                                       |                         |                         |
|       | success of the project?  |                           |                                       |                         |                         |
| 17    | Which of the following is an example of a spreadsheet software?            | MS Excel                  | Powerpoint                            | MS Word                 | Paint                   |
|       |  |                           |                                       |                         |                         |
| 18    | Watson needs to collaborate with her team members who are                  | Web search engine         | Augmented                             | Cloud computing         | Artificial Intelligence |
| 19    | In a presentation of a power point, special effects used to introduce      |                           |                                       |                         |                         |
|       | slides is,   | Animation                 | Transition                            | Anotation               | None of the above       |
| 20    |  |                           |                                       |                         |                         |
|       | The error value correspondig to the Excell expression = (0/0) is;          | NULL                      | Zero                                  | Infinity                | None of the above       |
|       |  |                           |                                       | •                       | •                       |

#### **General Safety**

|       |   | General Safety   |  |   |  |  |
|-------|---|--|--|---|--|--|
| S.No. | Question  | Option 1   | Option 2   | Option 3  | Option 4                                   |  |
| 1     | What is the term used to describe the process of evaluating the severity (seriousness) and probability of risks?                        | Risk Assessment  | Probability Estimation                                     | Hazard Identification   | Incident Investigation                     |  |
|       | Match the following in Column A with their description in Column B.   |  | -  |   |  |  |
|       | Column B  |  |  |   |  |  |
|       | Column A     Column B  1. Process Safety Management a. Analyzing and understanding the root causes of accidents                         |  |  |   |  |  |
| 2     | Incident Investigation  |  |  |   |  |  |
|       | Safeguard Effectiveness c. Integrating risk management principles into safety practices   |  |  |   |  |  |
|       |   | 1-b, 2-c, 3-a  | 1-c, 2-a, 3-b  | 1-b, 2-a, 3-c   | 1-c, 2-b, 3-a                              |  |
| 3     | What was the main type of substance that played a central role in the Mexico Tank Farm disaster?  | Water  | Liquefied Petroleum Gas<br>(LPG)                           | Gasoline  | Coal                                       |  |
| 4     | What important regulatory body was established as a result of the Flixborough disaster to<br>oversee safety in major hazard industries? | Environmental Protection Agency (EPA)  | Occupational Safety and<br>Health Administration<br>(OSHA) | Hazardous Installations Directorate of<br>the Health and Safety Executive (HSE) | Industrial Safety Comittee (ISC)           |  |
| 5     | What is the name of gas leaked from LG Polymers at Visakhapatnam on 7th may 2020?   | Chlorine   | Styrene  | Methyl Isocynate  | Ammonia                                    |  |
|       | In India, Fire service week is observed in remembrance of the lives lost in the following   |  |  |   |  |  |
| 6     | disaster;   | Uphar cinema fire in delhi   | Bhopal gas disaster  Ensure safety,                        | Circus fire in Bangalore  | Bombay Port fire                           |  |
| 7     | What is the main objective of taking into account criteria for the location and arrangement of chemical plants?                         | Increasing Earnings  | environmental<br>protection, and<br>operational efficiency | Reduce Regulating Compliance  | Reduce Transportation Expenses             |  |
| 8     | What is the full form of the TWA in chemical safety?  | Time weighted average  | Total weighted average                                     | Threshold weighted average  | Total waste average                        |  |
| 9     | What does VOC stand for in the context of nitrogen blanketing?  | Volatile Oxygen Components   | Volatile Organic<br>Compounds                              | Ventillation of Oxygen Concentration  | Viscosity of Organic Chemicals             |  |
|       |   | Rinse the affected region with plenty of   | Rub the affected area to                                   | Bandage the area and continue   | Apply an alcohol-based sanitizer to        |  |
| 10    | What should you do if you accidently splash a corrosive chemical on your skin?  | water for at least 15 minutes  | remove the chemical  | working   | neutralize the chemical                    |  |
| 11    | Which form of combustion results in the production of carbon monoxide as a secondary product?   | Complete Combustion  | Incomplete Combustion                                      | Spontaneous combustion  | Rapid combustion                           |  |
|       | Which of the following is commonly employed to recognize potential dangers in operating   |  |  |   |  |  |
|       | chemical process plants?  |  |  |   |  |  |
| 12    |   | Process optimization   | Safety audit   | Environmental impact assessment   | Hazard and Operability Study (HAZOP)       |  |
| 13    | What is the time limit of STEL for chemical exposure to a person?   | 8 Hours  | 60 Minutes   | 15 Minutes  | 5 Minutes                                  |  |
| 14    | nd of details are usually incorporated into a safety checklist?  Safety Precautions and Procedures                                      |  | Equipment Purchase<br>Dates                                | Task Deadlines  | Employee Salaries                          |  |
| 15    | Which device employs light-emitting diodes (LEDs) and phototransistors to accomplish electric isolation?                                | ice employs light-emitting diodes (LEDs) and phototransistors to accomplish                          |  | Capacitors  | Optoisolators                              |  |
|       | electric isolation?   |  | Demonstrating the  |   |  |  |
| 16    | What is the primary purpose of analyzing near-miss incidents?   | Assigning blame to persons involved  | effectiveness of safety<br>systems                         | Learning from potential hazards and<br>preventing future accidents              | Playing down the impact of small incidents |  |
|       |   | (Total number of incidents / Total hours (Total Man-days lost due (Total number of accidents / Total |  |   |  |  |
| 17    |   | worked) x 200,000  | to injuries / Total Man-<br>hours worked) x 100,000        | number of employees) x 100  | Total hours worked) x 100,000              |  |
| 18    | How is the Severity Rate (SR) calculated?  Which Indian Standard (IS) is used for analysis of accidents?                                | IS3786   | IS5216   | IS5327  | IS5557                                     |  |
|       |   | Elimination, Substitution, Engineering   | PPE, Substitution,   | Engineering Control, Substitution,  | Substitution, PPE, Elimination,            |  |
| 19    | What is correct sequence of hierarchy of control?   | control, Administrative & PPE  | Engineering control,<br>Elimination                        | Elimination, PPE  | Engineering control                        |  |
|       | Match the Following in Column A with their description in Column B  |  |  |   |  |  |
|       | Column A Column B   |  |  | •   |  |  |
|       | I. Identify Hazards     a. Putting designed control measures into practice  |  |  |   |  |  |
| 20    | Determine Control Measures b. Identifying potential sources of danger   | 1-a, 2-c, 3-c  | 1-c, 2-b, 3-a  | 1-b, 2-c, 3-a   | 1-b, 2-a, 3-c                              |  |
|       | Implement Controls c. Proposing strategies to mirigate or eliminate hazards   |  |  |   |  |  |
|       | or exherent contests  |  |  |   |  |  |
| 21    | Which indian standard is referred for conducting safety audit?  | IS3786   | IS14489  | IS15793   | IS45001                                    |  |
| 22    | What control method entails making physical changes to the workplace environment or   | Administrative Controls  | Substitution   | Changing the Process  | Engineering Controls                       |  |
| 23    | equipment in order to lessen or remove hazards?  Which legal framework lays down requirements for working conditions, including         | mework lays down requirements for working conditions, including                                      |  |   |  |  |
| 23    | ventilation, in Indian factories?   | ISO 14001  | OSHA Act   | Factories Act, 1948   | ASHRAE Standard 62.1                       |  |
|       |   |  |  |   |  |  |
| 24    | What is the maximum permisible noise level limit in a factory for 8 hours duration?   | 60dB   | 75dB   | 115dB  Optimizing collaboration between   | 85dB                                       |  |

| Description of the control of the    |
|--|
| And worker without activation, which and the control of the service of the servic |
| See that is procrated command genoted for the chieves carrying hashedous goods by road under the face for certain beauty with the face for certain beauty and the face for certain beauty |
| Among the foliosing topics, which is after randy by Concernition and State of State registration strictings.  State registration strictings.  What is the frequency of medical examination of the building evotine soles all years of age inspired of discon, spartners of thing applicance and to surprise spartners under the Drice is 3 years.  Once is 3 years |
| Once in a year Once i |
| Which disablements required for greater under the BLOCV Act 1999)  Which classification required for greater under the BLOCV Act 1999)  Which classification required for greater under the BLOCV Act 1999)  Which classification required for greater under the BLOCV Act 1999)  Which classification required for greater under the BLOCV Act 1999)  Which classification and the second of the second o |
| Which establishments are required for register under the BOCW Act 1999.  3   |
| ## Percent of least once in a period of months.  ## Age of the Masterionian reaching the Masterionian reaching the Masterionian reaching the Masterionian reaching received are employed at construction step. Ever shall be   |
| When the following workers are employed at construction site, there shall be 350 1500 1500 150 123 150 150 150 150 150 150 150 150 150 150   |
| Section   South   So   |
| Display of emergency information panel in a mandatory on the vehicles arrying hazardous growing (company).  At what minimum depth the underground cable of voltage exceeding 33 M shall be last?  1 m 0.8 m 0.5 m 0.5 m 1.2 m 1 m 0.8 m 0.5 m 1.5 m 1. |
| 18 At what minimum depth the underground cible of voltage exceeding 33 kV shall be late?  19 What is the frequency of hydradic test for pressure plant at construction site under the Once in 6 months Once in 12 months. Once in 2 years Once in 4 years of 6, fee every 3 month every 6 months every 6 months or 12 months.  41 Which of the explores mentioned best describes the context of the state of the conditions of this shall be conditioned, at feator date.  42 Which of the explores mentioned best describes the context of organizing to ensure safety, health, and efficient work purctices?  43 Which of the explores does let describes the context of organizing to ensure safety, health, and efficient work purctices?  44 Which of the explores does let describes the context of organizing to ensure safety, health, and efficient work purctices?  45 Statistics following question with the right side name of the theories and their explorations.  46 Statistics following question with the right side name of the theories and their explorations.  47 Statistics following question with the right side name of the theories and their explorations.  48 Statistics following question with the right side name of the theories and their explorations.  49 Statistics following question with the right side name of the theories and their explorations.  40 Which into if emergency in industrial extration, and the organizations are greatly industrial factings and the explorations are greatly industrial extrations are deep for exacting in distings.  40 Which the find find if the province of energy and recalling in machine expension?  41 What is the main objective of safety guarding in machine operation?  42 What is the main objective of safety guarding in machine operation?  43 What safety mechanization are employed to avoid unintended or repeated press strokes in joiner province from the fill of the province of the provin |
| What is the frequency of hydraulic test for pressure plant at construction site under the Once in 6 years Once in 4 years Once in 5 years Once in 4 years Once in 5 years Once in 6 years Once |
| Approximate protocol Building Code, 2015, for high rise buildings more than two years oils, free every 3 month every 6 months every 2 months every 12 months every 12 months every 12 months every 12 months every 13 month every 6 months every 12 months every 13 month every 14 months every 12 months every 12 months every 14 months every 14 months every 15 months ever |
| Which of the options mentioned best describes the concept of organizing to ensure safety, health, and efficiency work practices?  42 What purpose does data processing serve within an M62 Collection of data from various sources  43 March the following question with the right side name of the theories and their optionations.  44 March the following question with the right side name of the theories and their optionations.  45 Single-processing serve within an M62 Collection of data from various sources  46 All Single-processing serve within an M62 Collection of data from various sources  47 Which find of emergency in indications are sourced in distributions.  48 Single-processing serve within an M62 Collection of data from various sources  49 Which find of emergency in indications are sourced in distributions.  40 Single-processing serve within an M62 Collection of data from various sources  40 Single-processing serve within an M62 Collection of data from various sources  41 Single-processing serve within an M62 Collection of data from various sources  42 Single-processing serve within an M62 Collection of data from various sources  43 Single-processing serve within an M62 Collection of data from various sources  44 Single-processing serve within an M62 Collection of data from various sources  45 Which find of emergency in indication serve ser |
| Which of the options mentioned best describes the concept of organizing to ensure safety, health, and efficient work practices?  What purpose does data processing serve within an MS?  Collection of data from various sources  What purpose does data processing serve within an MS?  Match the following question with the right side name of the theories and their explanations.  Let die.  **Bigs sate**  **Limitation demonstrated relate**  **Regional institute of the state of  |
| Match the following question with the right side name of the theories and their explanations.  **Bet side:  **Bet side:  **Body electric and funding:  **Bod |
| explanations.  Left aide: Listentian of mining. 1. Sendination denging what one delaber equipments are control of mining. 1. Sendination denging what one delaber equipments. 1. Edge and for industrial settings can arise due to flammable gases, or chemical reactions, dust, potentially causing abrupt releases of energy and resulting in damage?  45 Which for the following is/are physical hazard agent(s)  46 ABC in the First  47 What is the main objective of safety guarding in machine operation?  48 What is the main objective of safety guarding in machine operation?  49 What is the main objective of safety guarding in machine operation?  49 What is the main objective of safety guarding in machine operation?  49 What is the main objective of safety guarding in machine operation?  40 What is the main objective of safety guarding in machine operation?  40 What is the main objective of safety guarding in machine operation?  40 What is the main objective of safety guarding in machine operation?  41 What is the main objective of safety guarding in machine operation?  42 What is the main objective of safety guarding in machine operation?  43 What is the main objective of safety guarding in machine operation?  44 Left Machine Operation and the following is a safe advantage of the safety of the s |
| 43 Sidiry deuterinated mining. 1. Simulation demograps mininted entire quilyone repress. 2. P. J., C.3 a. 2, b.3, c.1 a. 1, b.2, c.3, c.3, c.1 a. 1, b.2, c.3, c.3, c.1 a. 1, b.2, c.3, c. |
| resplace by:   Which kind of emergency in industrial settings can arise due to flammable gases, or chemical reactions, dust, potentially causing abrupt releases of energy and resulting in damage?   45 Which of the following is/are physical hazard agent(s)   Falls   Electricity   Inhabition   All of the following is/are physical hazard agent(s)     46 ABC in the First   Airway, Bandage and Call medical emergency   Ariway, Breathing and Circulation   Ambulance, Bandage and Circulation   Am |
| chemical reactions, dust, potentially causing abrupt releases of energy and resulting in damage?  45 Which of the following is/are physical hazard agent(s)  46 ABC in the First  47 What is the main objective of safety guarding in machine operation?  48 What is the main objective of safety guarding in machine operation?  48 Unintentional machine shutdown  49 What is seemed in the following.  48 Intergravy Stop Button  49 What safety mechanisms are employed to avoid unintended or repeated press strokes in power presses?  50 What safety mechanisms are employed to avoid unintended or repeated press strokes in mitigate the risks associated with radiation exposure?  51 Stress management programs  52 Stress management programs  53 Explosions  Chemical leakage and spillage  Radiological In Section Plantage  All of the Excitivy  All of the Excitivy  All of the Excitivy  All of the Excitivy  All of the Fisls  Annuary, Breathing and Circulation  Circulation  Ambulance, Bandage and Circulation  Ambulance, Bandage and Circulation  Annuary, Breathing and Circulation  Circulation  Provide physical barrier  More efficient machine operation  Extended maintena  1-th, 2-c, 3-a, 4-d  1- |
| Alrway, Bandage and Call medical emergency  What is the main objective of safety guarding in machine operation?  Unintentional machine shutdown  Match the Following.  Left safet:  Left sa |
| ARC in the First  What is the main objective of safety guarding in machine operation?  Unintentional machine shutdown  Provide physical barrier  More efficient machine operation  Extended maintena  Extended maintena  Extended maintena  1-b, 2-c, 3-b, 4-a  1-b, 2-c, 3-a, 4-d  1-b, 2-a, 3-c, 4-d  1-c, 2-c, 3-a,  What safety mechanisms are employed to avoid unintended or repeated press strokes in power presses?  What preventive action can be taken in the IT, electronic, and related service sectors to mitigate the risks associated with radiation exposure?  ARC in the First  More efficient machine operation  Extended maintena  1-d, 2-c, 3-b, 4-a  1-b, 2-c, 3-a, 4-d  1-b, 2-c, 3-c, 4-d  1-c, 2-c, 3-a, 4-d  1-d, 2-c, 3-a, 4-d  Vibrational machine shutdown  Ambularies, learning machine operation  Extended maintena  1-d, 2-c, 3-b, 4-a  1-b, 2-c, 3-a, 4-d  1-c, 2-c, 3-a, 4-d  1-d, 2-c, 3-a, 4-d  1-d, 2-c, 3-a, 4-d  1-d, 2-c, 3-a, 4-d  Suppression systems  Two-hand controls  Vibration dan  Stress management programs  Singling and safety  |
| Match the Following.  1. Machine Operations a Mentitiving premote for the machinery of the production of the production of the machinery of the production of the p |
| Left take:    Steps towarding:   1-td, 2-c, 3-b, 4-a   1-b, 2-c, 3-a, 4-d   1-b, 2-a, 3-c, 4-d   1-d, 2-c, 3-a, 4- |
| power presses?  What preventive action can be taken in the IT, electronic, and related service sectors to  Stress management programs  Egyonomic furniture  Suppression systems  Shielding and safety  |
| 30 Intigate the risks associated with radiation exposure? Stress management programseugonomic rurnture = Suppression systems Shieting and safety   |
|  |
|  |
|  |

#### Construction

| S. No. | Item/Question  | Option 1  | Option 2  | Option 3   | Option 4  |
|--------|--|---|---|--|---|
| 1      | Which of the following is a crucial step to ensuring effective liaison for safety with local authorities under the BOCW Act?   | Displaying promotional banners of the construction company on-site.   | Organizing weekly parties for construction workers.               | Registration of establishment                              | Buying premium construction equipment for faster project completion.                |
| 2      | Which property of soil significantly affects the potential for a trench collapse when using an excavator?  | Soil pH level   | Soil texture  | Soil's organic matter content                              | Soil's electrical conductivity  |
| 3      | Construction Safety Training should be provided for  | Managers  | Supervisors   | Workers and Contractors                                    | All of the above  |
| 4      | While working below ground level on the foundations for plant, machinery, and structure, which of the following considerations is essential to ensuring both the stability of the structure and the safety of the workers? | The depth of the water table in relation to the foundation depth.   | The colour of the soil at the deepest excavation point.           | The distance between two adjacent structures above ground. | The type of plants to be grown on the surface after construction.                   |
| 5      | When working on a fragile roof, which of the following equipment is essential for preventing damage and ensuring worker safety while accessing the roof from a ladder?   | Safety net positioned below the ladder.   | Ladder stabilizers or stand-off brackets.                         | Heavy-duty work gloves.                                    | High-visibility safety vest.  |
| 6      | For maintenance tasks on a 150-meter-tall communication tower, which temporary installation is most suitable for ensuring safe access and stability?   | Suspended Scaffolding System  | Aerial Lift (Cherry Picker)                                       | Rope Access System (Rope<br>Descent)                       | Cantilevered Platform System  |
| 7      | As per risk control hierarchy, replacing old generation Hydra with new generation pick and carry crane is  | Elimination   | Substitution  | Administrative Controls                                    | Engineering controls  |
| 8      | When designing a scaffold for workers operating at height, identify the correct base to height ratio for scaffold's stability?   | 1:4   | 4:1   | 1:6  | 6:1   |
| 9      | Why is maintaining neutral buoyancy crucial for diver safety during underwater maintenance operations?   | Reduces the risk of decompression sickness.   | Extends the dive time by conserving breathing gas.                | Enables more effective handling of heavy equipment.        | Prevents uncontrolled ascent or descent, reducing the risk of barotrauma.           |
| 10     | As per the BOCW central rules what is the frequency of conduction safety committee meetings.   | Quarterly   | Six monthly   | Yearly   | Monthly   |
| 11     | Which of the following is a most common hazard associated with working in confined spaces?   | Eye injuries  | Oxygen deficiency   | Fall from height   | Electric shock  |
| 12     | The minimum height of toe board should be  | 1 cm or more  | 5 cm or more  | 10 cm or more  | None of the above   |
| 13     | Identify the safe option during reversing from the statements given below  | Put your hazard warning<br>lights on and perform the<br>maneuver as quickly as<br>possible to minimize danger | Unbuckle your seat belt so you can reverse as quickly as possible | Sound your horn to warn other drivers                      | Take care and never reverse<br>for a greater distance and<br>time than is necessary |
| 14     | Which of the following is a safe practice for lifting heavy objects in construction?   | Lifting with the back instead of the legs   | Rushing to lift objects quickly                                   | Using mechanical lifting aids<br>or equipment              | Lifting objects alone without assistance  |
| 15     | What type of common protection is must for everyone at a construction site?  | Safety helmet   | Hand gloves   | Apron  | Ear plug  |
| 16     | Which factor is crucial in determining the optimal handle diameter for hand tools to minimize the risk of hand-arm vibration syndrome (HAVS) in construction?  | Maximum static grip strength of workers.  | Weight of construction materials.                                 | The length of work shifts.                                 | Ambient temperature at the construction site.                                       |
| 17     | For the safe and structurally sound storage of 15-foot-tall precast concrete panels on a construction site, which method is most recommended?  | Laying flat on timber battens every 5 feet.   | Storing vertically with spacers and upper corner support.         | Inclining at 75° using A-frame racks with rubber padding.  | Hanging vertically with crane hooks 10 feet apart.                                  |
| 18     | On a construction site, which temporary power supply system arrangement provides protection against electric shock   | Residual Current Circuit<br>Breaker   | Miniature Circuit Breaker   | Over Current Protection device                             | HRC Fuse  |
| 19     | John is a construction worker working at a height. He has<br>been asked to fix the top of a tall building. For John's safety,<br>what must be done?  | Several People standing under for protection  | Safety nets   | Strong machinery   | Option 1 & 3  |
| 20     | Who has the ultimate responsibility for the safety and health programme at a construction site.  | Safety Officer  | Supervisor  | Top management   | Welfare officer   |
| 21     | What is the test load of the lifting gear of having 25 tonnes of SWL?  | 50 tonnes   | 25 tonnes   | 37 tonnes  | 75 tonnes   |
| 22     | Duke is working in a foundry within a company and he is having a lung infection due to that. Among the given options, which substance's presence in the foundry may cause this infection?                                  | Carbon  | Dust  | Slags  | Methane   |
| 23     | What is the purpose of a Job Safety Analysis (JSA) at construction site?   | Identifying potential hazards   | Monitoring employee attendance                                    | Analyzing project profitability                            | Conducting equipment inspections  |
| 24     | Which of the following is an example of a fall protection system in construction?  | Safety glasses  | Hard hats   | Guardrails   | Faceshield  |
| 25     | What does the term "excavation" refer to in construction safety?   | The process of removing debris from a construction site   | The installation of electrical systems                            | The digging of trenches or foundation pits                 | The transportation of construction materials  |
| 26     | Which of the following is NOT a safe practice for using ladders in construction?   | Using ladders on stable and<br>level surfaces   | Overreaching while on the<br>ladder                               | Inspecting ladders for damage before use                   | Securing the ladder to prevent slipping   |
| 27     | Which of the following is a safe practice for handling hazardous materials at construction site?   | Storing them near heat sources  | Mixing them with other<br>materials to save space                 | Pouring them down drains for disposal                      | Using appropriate containers and labels   |
| 28     | What is the purpose of a safety signage at construction sites?   | To indicate the project completion date   | To direct workers to rest areas                                   | To communicate safety warnings and instructions            | To display project<br>specifications and<br>requirements                            |
| 29     | As per the Rule 159 of the BOCW Central Rules, 1998 not exceeding () volts of portable electric light is permitted for working in a confined space at an excavation or tunnelling work.                                    | 60  | 240   | 40   | 24  |
| 30     | What is the limit prescribed under the BOCW Central Rules, 1998 for stacking of cement and other material bags at construction site?   | 10  | 20  | 30   | 50  |

#### **Environment**

| S. No. | Question  | Choice 1  | Choice 2  | Choice 3  | Choice 4   |
|--------|---|---|---|---|--|
| 1      | What is the primary objective of the State Pollution Control Board (SPCB) as per the<br>Water (Prevention and Control of Pollution) Act, 1974?  | Finance the water conservation<br>projects  | Groundwater extraction  | Implement water conservation  | Control water pollution  |
| 2      | Which of the following activities would require a 'consent to operate' from the State<br>Pollution Control Board (SPCB) under the Air Act, 1981?  | Setting up a small-scale industry   | Household cooking using<br>LPG  | Public transportation using<br>electric vehicles  | Planting trees in urban<br>areas   |
| 3      | Which of the given options represents the purpose of the Public Liability Insurance Act?  | To regulate the use of public spaces<br>for commercial activities   | To regulate the import and<br>export of hazardous<br>chemicals  | To promote public awareness about environmental protection  | To ensure liability<br>coverage for damage<br>caused by pollution  |
| 4      | Mark Industries, a major manufacturing company, operates in a state where strict<br>regulations under the Water and Air Acts. Which of the following roles is likely to be<br>carried out by the State Pollution Control Board(SPCB)? | Monitoring local transportation routes  | Regulating the emission of<br>pollutants from the<br>Industries   | Ensuring proper waste disposal<br>at households   | Managing public parks<br>and recreational areas  |
| 5      | A major industrial plant in the state is suspected of releasing toxic pollutants into the air.  What would likely be the course of action of state pollution control board?   | Focus solely on promoting tourism in the region   | Ignore the situation as it's<br>beyond their scope  | Wait for public complaints before taking any action   | Conduct an investigation<br>and take necessary<br>regulatory actions   |
| 6      | Which waste management technique can lead to soil pollution?  | Landfilling   | Composting  | Recycling   | Reusing  |
| 7      | The local environmental authorities have mandated the implementation of a Common<br>Effluent Treatment Plant (CETP) in the industrial area. How will CETP contribute to<br>environmental protection?                                  | By allowing industries to bypass wastewater treatment regulations   | By concentrating all industrial wastewater at a single point of discharge   | By releasing treated effluents without any monitoring   | By increasing pollution<br>levels in the water body  |
| 8      | Which of the following symbol is found in label of bio hazardous waste materials?   |   |   |   |  |
| 9      | Which of the following is the correct group of greenhouse gases?  | Oxygen (O <sub>2</sub> ), Nitrogen (N <sub>2</sub> ), Carbon Dioxide ( $CO_2$ ), Sulphur Dioxide ( $SO_2$ ) | Carbon Dioxide (CO <sub>2</sub> ),<br>Methane (CH <sub>4</sub> ), Oxygen<br>(O <sub>2</sub> ), Nitrogen (N <sub>2</sub> ) | Hydrogen (H <sub>2</sub> ), Nitrous Oxide<br>(N <sub>2</sub> O), Water Vapour (H <sub>2</sub> O),<br>Carbon Monoxide (CO) | Carbon Dioxide (CO <sub>2</sub> ),<br>Methane (CH <sub>4</sub> ), Nitrous<br>Oxide (N <sub>2</sub> O), Ozone (O <sub>3</sub> ) |
| 10     | Which type of light is considered to be the most energy efficient?  | Halogen bulbs   | LED bulbs   | CFL bulbs   | Incandescent bulbs   |
| 11     | Which of the following are key elements of the energy management system ISO 50001?  | Energy policy, energy planning, and energy performance evaluation   | Quality management,<br>safety management, and<br>financial management   | Energy efficiency, waste<br>reduction, and resource<br>conservation   | Employee training,<br>product marketing, and<br>customer relations   |
| 12     | Which of the following is the essence of Sustainable Operations Management?   | Short-term profit optimization  | Cost reduction  | Quick fixes for environmental challenges  | Integration of environmental, social, and economic factors   |
| 13     | The full form of MINAS in respect of effluent standards achievable by industry is   | Minimum National Standards  | Maximum National<br>Standards   | Minimal National Standards  | All of these   |
| 14     | Zero Liquid Discharge (ZLD) refers to   | No process effluent is generated inside factory   | All process effluent<br>generated is used within<br>factory without any<br>treatment                                      | All process effluent generated is used within factory after required treatment  | None of these  |
| 15     | In Air Quality Index (AQI) of the Central Pollution Control Board, RED colour signifies which category?   | Very Poor   | Poor  | Moderate  | Good   |
| 16     | Permissible concentration of SO2 in ambient air for industrial areas as per National<br>Ambient Air Quality Standards based on 24 hourly monitored values is  | 60 microgram per cubic meter  | 80 microgram per cubic meter  | 120 microgram per cubic meter   | None of these  |
| 17     | CRZ stands for  | Coastal Registration Zone   | Coastal Regulation Zone   | Coastal Red Zone  | None of these  |
| 18     | United Nations came up with how many sustainable development goals?   | 15  | 16  | 17  | 20   |
| 19     | Name the card that must be carried by the people involved in transportation of hazardous wastes.  | TREM Cards  | OSHA cards  | MSDS Cards  | None of these  |
| 20     | Ambient air quality standard in respect of noise for industrial area during night time is () dB(A) Leq  | 70  | <b>5</b> \$   | 45  | 40   |

## **Answer Key**

## **General Aptitude**

| S.No    | 1      | 2      | 3      | 4      | 5      | 6      | 7      |        | 9      | 10     |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.140   |        |        |        |        |        |        |        | 8      |        |        |
| Correct | Choice |
| answer  | 4      | 1      | 3      | 2      | 4      | 3      | 4      | 4      | 2      | 4      |

| S.No    | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Correct | Choice |
| answer  | 1      | 3      | 4      | 1      | 2      | 3      | 1      | 3      | 2      | 3      |

# **General Safety**

| S.No           | 1 | 2 | 3 | 4 5 | 6 | 7 | 8 | 9 | 10 |
|----------------|---|---|---|-----|---|---|---|---|----|
| Correct option | 1 | 2 | 2 | 3 2 | 4 | 2 | 1 | 2 | 1  |

| S.No           | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Correct option | 2  | 4  | 3  | 1  | 4  | 3  | 2  | 1  | 1  | 3  |

| S.No           | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Correct option | 2  | 4  | 3  | 4  | 3  | 2  | 3  | 3  | 3  | 2  |

| S.No           | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Correct option | 2  | 2  | 2  | 1  | 1  | 4  | 4  | 1  | 4  | 2  |

| S.No           | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
|----------------|----|----|----|----|----|----|----|----|----|----|
| Correct option | 2  | 3  | 2  | 2  | 4  | 2  | 2  | 4  | 1  | 4  |

#### Construction

| S.No              | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------------|---|---|---|---|---|---|---|---|---|----|
| Correct<br>answer | 3 | 2 | 4 | 1 | 2 | 3 | 2 | 1 | 4 | 4  |

| S.No           | 11 | 12 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|----------------|----|-------|----|----|----|----|----|----|----|
| Correct answer | 2  | 3 4   | 3  | 1  | 1  | 3  | 1  | 2  | 3  |

| S.No    | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---------|----|----|----|----|----|----|----|----|----|----|
| Correct | 1  | 2  | 1  | 3  | 3  | 2  | 4  | 3  | 4  | 1  |

#### **Environment**

| S.No           | 1           | 2           | 3           | 4           | 5           | 6           | 7           | 8           | 9        | 10          |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------|-------------|
| Correct answer | Choice<br>4 | Choice<br>1 | Choice<br>4 | Choice<br>2 | Choice<br>4 | Choice<br>1 | Choice<br>2 | Choice<br>2 | Choice 4 | Choice<br>2 |

| S.No    | 11     | 12     | 13     | 14     | 15     | 16     | 17     | 18     | 19     | 20     |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Correct | Choice |
| answer  | 1      | 4      | 3      | 3      | 1      | 2      | 2      | 3      | 1      | 1      |