



## Electrical Safety Supervisor

**Time: 2 hours**

**Total Marks: 320**

**Obtained Marks : .....**

**Assessor Signature : .....**

**Candidate Name : .....**

**Father's Name .....**

**Candidate Id : .....**

**Name of the Center : .....**

**Batch id : .....**

**Date:.....**

### Instructions:

- all questions are attempted mandatory
- Read all instructions carefully before starting the exam.
- Choose the correct option from the given choices (A, B, C, or D)
- Mark your answers clearly on the OMR/answer sheet provided. Use a blue or black pen only
- Put a tick Mark (✓) against the right option
- Allocate time wisely for each section; incomplete answers may lead to loss of marks
- Do not use any unfair means, notes, or electronic devices during the exam.
- Fill in your name, candidate ID, and other details correctly on the answer sheet. Sign the candidate section on the answer sheet to confirm authenticity.

## Theory

### SSD/VSQ/N1301 – Introduction to Occupational Safety, Health & Environment (OSHE)

Q1. What is the main purpose of Occupational Safety and Health (OSH)? (5)

- A) Increase expenses
- B) Protect workers from risks
- C) Reduce worker attendance
- D) Increase power usage

Q2. Which PPE is essential for electrical safety? (5)

- A) Cotton gloves
- B) Rubber insulating gloves
- C) Plastic bags
- D) Woolen gloves



- Q3. Which of the following is a basic requirement under OSHE? (5)
- A) Excessive overtime
  - B) Safe work procedures
  - C) Unplanned maintenance
  - D) Removing warning signs
- Q4. What is the first step in hazard identification? (5)
- A) Ignoring near-misses
  - B) Conducting workplace inspection
  - C) Switching off lights
  - D) Asking workers to avoid work
- Q5. A "near miss" refers to: (5)
- A) A minor injury
  - B) A major fire
  - C) An incident that almost caused harm
  - D) A successful procedure
- Q6. Which document records workplace hazards and controls? (5)
- A) Visitor register
  - B) Hazard log or risk register
  - C) Canteen report
  - D) Payment sheet
- Q7. Which method is commonly used for analyzing root causes of an incident? (4)
- A) Random selection
  - B) 5-Why analysis
  - C) Guessing
  - D) Lottery method
- Q8. Which of the following is considered an unsafe act? (4)
- A) Using proper insulated tools
  - B) Working without lockout/tagout
  - C) Reporting hazards
  - D) Following safety signs
- Q9. What is the purpose of an Emergency Response Plan (ERP)? (4)
- A) Increase workload
  - B) Ensure quick and safe actions during emergencies
  - C) Reduce training needs
  - D) Stop audits
- Q10. What should be done before entering a confined electrical area? (4)
- A) Enter quickly
  - B) Skip PPE



- C) Test atmosphere and ensure isolation
- D) Ignore safety instructions

Q11. Which statement best describes "Environmental responsibility" for an electrical supervisor? (4)

- A) Waste disposal without segregation
- B) Following pollution control norms and safe waste handling
- C) Burning waste openly
- D) Avoiding reporting of spills

### **SSD/VSQ/N1302 (v1.0) Electrical Hazard Identification, Categories and Control**

Q12. What is the first step in electrical hazard prevention? (5)

- A) Ignoring damaged wires
- B) Identifying electrical hazards
- C) Working without PPE
- D) Switching off lights

Q13. Which of the following is an electrical hazard? (5)

- A) Clean workspace
- B) Exposed live wires
- C) Proper cable insulation
- D) Dry floor

Q14. Which condition increases the risk of electric shock? (5)

- A) Using insulated tools
- B) Dry surroundings
- C) Wet working environment
- D) Wearing rubber gloves

Q15. An overloaded circuit can cause: (5)

- A) Longer cable life
- B) Fire or equipment damage
- C) Reduced electricity flow
- D) More worker safety

Q16. What is an arc flash? (5)

- A) A cooling system
- B) A sudden release of heat/light due to an electrical fault



- C) A battery charger
- D) A water leak

- Q17. Which document helps in identifying electrical hazards at the site? (5)
- A) Safety audit checklist
  - B) Attendance sheet
  - C) Food register
  - D) Purchase report
- Q18. Which control measure is most effective for eliminating electrical hazards? (5)
- A) Training alone
  - B) Engineering controls like insulation and isolation
  - C) Using extension cords
  - D) Allowing temporary bypasses
- Q19. What should be done before working on energized electrical equipment? (5)
- A) Touch the wires to check
  - B) Test, isolate, lockout/tagout
  - C) Remove tags
  - D) Work quickly without protection
- Q20. Which category of electrical hazard relates to extremely high temperature release? (5)
- A) Shock
  - B) Arc flash
  - C) Noise
  - D) Vibration
- Q21. The purpose of grounding (earthing) in electrical systems is to: (5)
- A) Increase power bill
  - B) Provide a safe path for fault current
  - C) Overload the system
  - D) Reduce conductor size



- Q22. Which device is used to step up or step down voltage? (5)
- A) Motor
  - B) Generator
  - C) Transformer
  - D) Relay
- Q23. Which part rotates in an electric motor? (5)
- A) Stator
  - B) Rotor
  - C) Frame
  - D) Insulator
- Q24. The main function of a generator is to convert: (5)
- A) Electrical energy to heat
  - B) Mechanical energy to electrical energy
  - C) Heat energy to light
  - D) Chemical energy to sound
- Q25. Which of the following is a common type of electrical machine? (5)
- A) Boiler
  - B) Induction motor
  - C) Conveyor belt
  - D) Lathe machine
- Q26. In a 3-phase power system, how many conductors are typically used? (5)
- A) 1
  - B) 2
  - C) 3 or 4
  - D) 6
- Q27. Power factor is defined as: (5)
- A) Ratio of real power to apparent power
  - B) Total power consumption
  - C) Type of wiring
  - D) Cable size
- Q28. The slip in an induction motor is: (5)
- A) Always zero



- B) Difference between synchronous speed and rotor speed
- C) Sum of rotor and stator speed
- D) Voltage divided by current

Q29. Why is earthing essential in power systems? (5)

- A) To reduce power output
- B) To provide a low-resistance path for fault current
- C) To increase load
- D) To reduce voltage rating

Q30. What is the purpose of circuit breakers in power systems? (5)

- A) Increase circuit load
- B) Protect system by interrupting fault currents
- C) Reduce conductor life
- D) Add extra voltage

Q31. Synchronous generators operate at: (5)

- A) Variable speed
- B) Speed proportional to load
- C) Constant synchronous speed
- D) Zero speed

### **SSD/VSQ/N1304 – Electrical Switchgear & Protective Devices**

Q32. What is the main purpose of switchgear? (5)

- A) Increase voltage
- B) Control and protect electrical circuits
- C) Reduce electricity bill
- D) Generate power

Q33. A fuse protects the circuit from: (5)

- A) Low temperature
- B) Overcurrent
- C) Extra lighting
- D) Wire colour mixing

Q34. MCB stands for: (5)

- A) Main Circuit Board
- B) Miniature Circuit Breaker
- C) Motor Control Box
- D) Maximum Current Booster



- Q35. Which device interrupts a high fault current quickly? (5)
- A) Switch
  - B) Contactor
  - C) Circuit breaker
  - D) Relay only
- Q36. The function of a relay is to: (5)
- A) Increase power
  - B) Sense abnormal conditions and operate switchgear
  - C) Reduce load
  - D) Change frequency
- Q37. Which component is used to manually isolate electrical circuits? (5)
- A) Isolator
  - B) Transformer
  - C) Motor
  - D) Starter
- Q38. Arc quenching in circuit breakers is required to: (5)
- A) Increase arc duration
  - B) Safely extinguish arc during fault interruption
  - C) Maintain high temperature
  - D) Reduce insulation
- Q39. Protection against earth faults is generally provided by: (5)
- A) Overload relay
  - B) Earth leakage circuit breaker (ELCB)
  - C) Starter
  - D) Switch
- Q40. Which type of circuit breaker uses high-pressure gas for arc extinction? (5)
- A) Air circuit breaker
  - B) Oil circuit breaker
  - C) SF<sub>6</sub> circuit breaker
  - D) MCB
- Q41. What is the purpose of CTs (Current Transformers) in switchgear? (5)
- A) Increase voltage
  - B) Reduce current to measurable level for protection
  - C) Generate power
  - D) Control lighting system



**SSD/VSQ/N1305 v 1.0: Statutes & Legislative : Safety, Health & Electricity.**

- Q42. Which Act governs overall safety and health of workers in industrial establishments (5)
- A) Water Act
  - B) Factories Act
  - C) Motor Vehicles Act
  - D) RTI Act
- Q43. What is the purpose of the Indian Electricity Rules (IER)? (5)
- A) Increase power consumption
  - B) Ensure safe operation of electrical systems
  - C) Promote electrical sales
  - D) Replace safety officers
- Q44. As per statutory requirements, who is responsible for ensuring electrical safety at workplace? (5)
- A) Only workers
  - B) Only government
  - C) Employer and supervisor
  - D) Neighbours
- Q45. What is the minimum requirement for electrical installations as per safety legislation? (5)
- A) Weekly shutdown
  - B) Periodic inspection and certification
  - C) No records needed
  - D) Random testing
- Q46. Which authority enforces safety and health legislation in industrial establishments? (5)
- A) Electricity shop owner
  - B) Labour Department / Directorate of Industrial Safety
  - C) Local school
  - D) Hotel management
- Q47. According to statutory safety rules, what must be done before working on live equipment? (5)
- A) Increase voltage
  - B) Isolate and lockout/tagout
  - C) Wear sandals
  - D) Work faster
- Q48. As per the Electricity Act, what is required before commissioning a new electrical installation? (5)
- A) Verbal approval from workers
  - B) Fitness certificate from licensed electrical inspector
  - C) Permission from neighbours



D) Submission of attendance sheet

Q49. Under statutory regulations, what records must be maintained for electrical accidents? (5)

- A) Festival photos
- B) Accident register, investigation report & remedial action record
- C) Travel bills
- D) Food coupons

Q50. According to safety legislation, what is mandatory for high-voltage installations? (5)

- A) Use of plastic ropes
- B) Proper fencing and danger signage
- C) Open access to public
- D) No earthing required

Q51. The Electricity Act requires what action for repeated non-compliance of electrical safety rules? (5)

- A) Verbal warning only
- B) Disconnection of power supply and legal penalties
- C) Free training
- D) Salary hike

### **SSD/VSQ/N1306 v 1.0: Plan & Organize Electrical Emergency protocols**

Q52. What is the first action during an electrical emergency? (5)

- A) Run away
- B) Switch off the power source
- C) Touch the victim immediately
- D) Pour water

Q53. What should be readily available in all electrical emergency areas? (5)

- A) Musical instruments
- B) Emergency contact numbers and first-aid kit
- C) Extra food packets
- D) Office attendance sheet

Q54. Which team is primarily responsible for executing electrical emergency protocols? (5)

- A) Gardening team
- B) Emergency Response Team (ERT)
- C) Sales team
- D) Transport team

Q55. During an electrical fire, which extinguisher must be used? (5)

- A) Water extinguisher
- B) CO<sub>2</sub> or Dry Chemical Powder (DCP) extinguisher



- C) Foam only
- D) Sand

- Q56. What is the purpose of an Emergency Evacuation Plan? (5)
- A) To increase working hours
  - B) To safely move all personnel away from danger
  - C) To reduce attendance
  - D) To increase power usage
- Q57. What must be documented after an electrical emergency? (5)
- A) Festival list
  - B) Emergency incident report
  - C) Transport schedule
  - D) Tea break timings
- Q58. Before rescuing a person from electrical contact, what is mandatory? (5)
- A) Wearing wet gloves
  - B) Ensuring complete isolation and verifying zero-energy state
  - C) Running toward the victim
  - D) Pulling the wire with bare hands
- Q59. Which advanced control measure helps prevent electrical emergencies? (5)
- A) Random tool usage
  - B) Arc-flash risk assessment and PPE category selection
  - C) Using damaged cables
  - D) Skipping insulation testing
- Q60. What should be included in an Electrical Emergency Preparedness Plan? (5)
- A) Holiday calendar only
  - B) Roles, responsibilities, resources, and communication flow
  - C) Music playlist
  - D) Only training certificates
- Q61. After a major electrical incident, what is the correct approach? (5)
- A) Restart equipment immediately
  - B) Conduct root cause analysis and implement corrective actions
  - C) Blame workers
  - D) Ignore near-misses

### **DGT/VSQ/N0102 – Employability Skills (Medium-Level MCQs)**

- Q62. Which of the following is an essential component of effective communication at the workplace? (5)
- A) Speaking loudly
  - B) Listening actively



- C) Avoiding eye contact
- D) Interrupting frequently

Q63. What is the primary purpose of maintaining a professional CV? (5)

- A) To display your hobbies
- B) To present your skills, experience, and qualifications to employers
- C) To show salary expectations
- D) To compare with others

Q64. Which of the following helps in improving problem-solving skills at the workplace? (5)

- A) Ignoring issues
- B) Analyzing the situation and evaluating different solutions
- C) Blaming others
- D) Waiting for someone else to decide

Q65. Why is time management important in employability? (5)

- A) It helps increase stress
- B) It leads to missed deadlines
- C) It improves productivity and efficiency
- D) It reduces work quality