

## NSAT PREVIOUS YEAR QUESTION PAPER - 1

### Section 1 - General

1. Mark the option best suited to replace the bold portion of the sentence given below.  
As soon as we **reached** there, we start working.
  - a. Reach
  - b. Reaches
  - c. Reaching
  - d. No correction required
2. Mark the option containing the word that has been used incorrectly in the sentence given below.  
I have an elder brother, / who is pursue his diploma / from Kelley School of Business.
  - a. I have an elder brother
  - b. who is pursue his diploma
  - c. from Kelley School of Business
  - d. No Error
3. Mark the option which best expresses the sentence in Passive voice.  
Montana offered her a seat.
  - a. A seat was offered to her by Montana.
  - b. Montana offer her seat.
  - c. Seat was offered to her.
  - d. Her seat offered by Montana
4. Mark the option which best expresses the given sentence in Indirect speech.  
My boss said to me, "Complete the work by fortnight, or else you are out."
  - a. My boss told me he'd completed the work for the fortnight, or else I was out.
  - b. My boss told me to complete the work by the fortnight, or else I'd be out.
  - c. My boss told me to complete the work by the fortnight, or else you are out.
  - d. None of the mentioned options
5. Mark the option which best expresses the given sentence in Indirect speech.  
"Where do my parents usually go on a holiday?", asked Robert.
  - a. Robert asked where my parents usually goes on a holiday.
  - b. Robert asked my parents where do they usually go on a holiday.
  - c. Robert asked where does my parents usually go on a holiday.
  - d. None of the mentioned options
6. Which MS office program can be used to carry out the accidents trend analysis?
  - a. Power Point
  - b. Word
  - c. Excel
  - d. Access
7. Select the correct example for a connectionless network, a type of computer communications network that groups and sends data in small packets.

- a. Internet
  - b. Protocol
  - c. Circuit
  - d. Cell
8. Observe the given options and identify in which unit internet speed is measured.
- a. Kbps
  - b. mhz
  - c. Megabyte
  - d. Gb
9. A web-based tool that enables users to locate information on the World Wide Web is called a search engine.  
Identify which of the following are search engines.
- A) Google
  - B) MSC
  - C) Yahoo
  - D) Orkut
  - E) Face Search
- a. B,C
  - b. A,C
  - c. C,D
  - d. A,B
10. The Internet Protocol is a set of rules for routing and addressing packets of data so that they can travel across networks and arrive at the correct destination.  
Which of the following options is NOT an internet protocol?
- a. FTP
  - b. RSA
  - c. IP
  - d. HTTP
11. Identify the process by which standards and traditions of behaviour, as well as beliefs and other views, are passed down and propagated.
- a. Individualism
  - b. Leadership
  - c. Tactics
  - d. Socialization
12. Authoritarian leaders make decisions without seeking input from anyone who reports to them, or none at all. Usually the style of authoritarian leaders' rule is referred to as \_\_\_\_\_.
- a. Autocratic Style
  - b. Participative Style

- c. Laissez-faire Style  
d. Leadership Style
13. Identify the leadership style where everyone is given a chance to speak their minds at meetings and silent team members are specifically asked for their opinions to make sure all perspectives are heard.
- a. Autocratic Style  
b. Participative Style  
c. Laissez-faire Style  
d. Leadership Style
14. This theory of leadership focuses on the personality of a leader and suggests that certain inborn qualities make a leader. Identify the theory.
- a. Trait Theory  
b. Personality Theory  
c. Group Theory  
d. Inspiration Theory
15. For every student, teacher leaders are the perfect example to start learning about leadership skill. Identify qualities that a teacher leader should demonstrate for student learning:
- A) Collaboration  
B) Empowerment  
C) Relationship  
D) Authoritative  
E) Ignorant
- a. A, B, C  
b. B, C, D  
c. C, D, E  
d. A, B, E
16. If the code assigned to 'ROSE' is 'ILHV', which of the following will be the correct code for the word 'TULIP'?
- a. HGQSL  
b. GFPRK  
c. FEOQJ  
d. KROEF
17. In a Family of 8 members (M, N, O, P, Q, R, S, T), there are 2 married couples and a widow. M is the Engineer and is married to a doctor. O is an architect and the wife of P. Q, a student who is the only child of O. S, the daughter of T, and the sister of R, who is the manager's niece. N, a teacher, is the mother of only M and P.  
Who is the manager?
- a. T

- b. S
- c. P
- d. M

18. Find the missing term in given series:

167, 173, \_\_, 185, 191

- a. 177
- b. 175
- c. 179
- d. 180

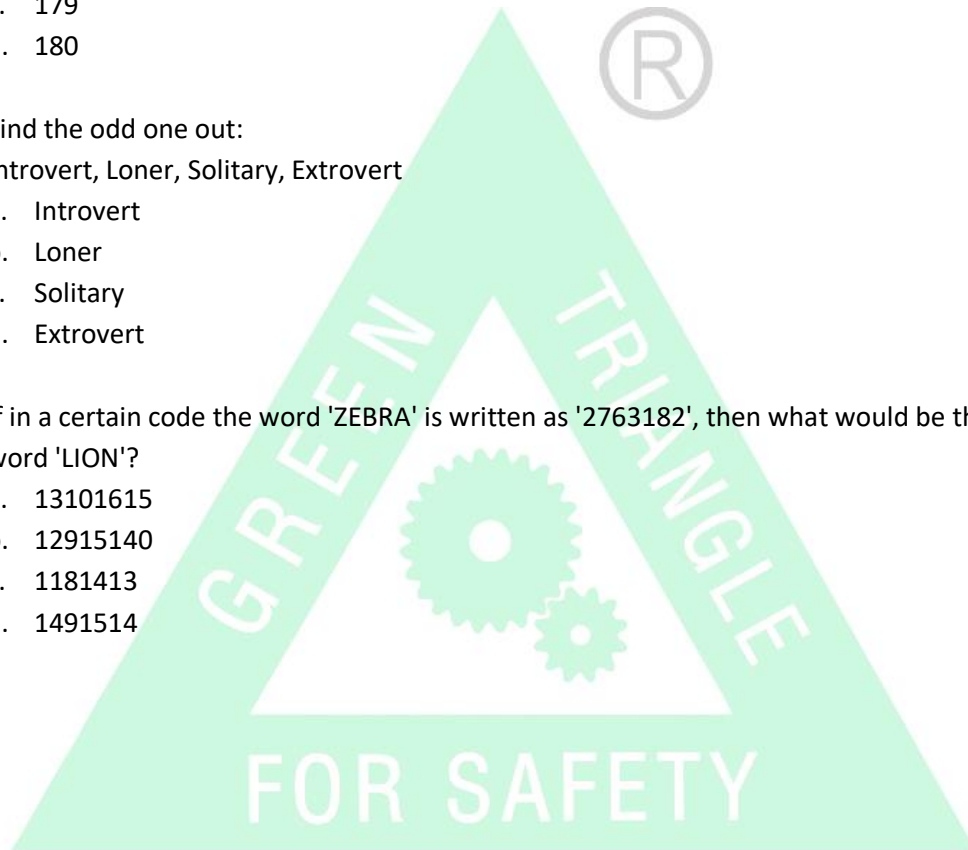
19. Find the odd one out:

Introvert, Loner, Solitary, Extrovert

- a. Introvert
- b. Loner
- c. Solitary
- d. Extrovert

20. If in a certain code the word 'ZEBRA' is written as '2763182', then what would be the code for word 'LION'?

- a. 13101615
- b. 12915140
- c. 1181413
- d. 1491514



**National Safety Council**  
Navi Mumbai

## Section 2 - OHS

1. As per IS- 9457, there are four safety colours i.e. Red, Yellow, Green and \_\_\_\_\_ , to which a safety meaning is attributed. Which is the missing colour?
  - a. Brown
  - b. Blue
  - c. Black
  - d. Purple
  
2. A company uses behavior-based safety to inform the management and employees about workplace safety. This would be done via \_\_\_\_\_.
  - a. Process Management
  - b. Process Optimization
  - c. Safety Operations
  - d. Safety Observations
  
3. Workers in a company are being provided safety training. Whom would this training benefit?
  - a. Employees
  - b. Employers
  - c. Government
  - d. Both A and B
  
4. Which of the following assemblies is used to regulate the compressed air in a breathing apparatus?
  - a. Face piece
  - b. Cylinder assembly
  - c. Regulator assembly
  - d. Back piece assembly
  
5. A firefighter is trying to control a fire accident. He is using a CO<sub>2</sub>-type extinguisher for the task. After the job, how will he find the discharge horn of the extinguisher?
  - a. Warm
  - b. Extremely Cold
  - c. Cold
  - d. Extremely Hot
  
6. Which of the following is NOT related to mechanical hazard under occupational health hazards?
  - a. No safety device
  - b. No fencing
  - c. Wrong layout of machinery
  - d. Unguarded machinery
  
7. Ram is assigned to work at a particular height and due to this he has to use a ladder to complete the job. In this situation, how many point(s) of contact he should maintain with the ladder?

- a. At least three
  - b. Four
  - c. One
  - d. At least two
8. A ladder should be turned so that its foundation is 1 foot far from the wall. What should be the ladder's height for every feet away from the wall?
- a. 4
  - b. 2
  - c. 8
  - d. 10
9. Among the following options, on which type of fire, a Class B type fire extinguisher should NOT be used?
- a. Paper
  - b. Paint
  - c. Grease
  - d. Oil
10. Which of the following correctly represents the properties of safety shoes necessary for maintaining the safety of feet?
- a. The shoes should be close-toed, non-slip, and made of thick material.
  - b. The shoes should be made from rubber.
  - c. The shoes should be resistant to dirt.
  - d. The shoes should have spikes for better grip and quick movement.
11. In any industry, it is necessary to have a safety manager to protect the company and workers from common workplace hazards.  
Which of the following are the key responsibilities of a safety manager?
1. Preparation and growth of the workers in the safety practices
  2. Judgment of requirement of safety procedures
  3. Modifying the work process to make it more inclined toward safety
  4. Regular testing and monitoring of the working environment
- a. 1, 2 and 3
  - b. 1, 2, 3 and 4
  - c. 1, 2 and 4
  - d. 1 and 2
12. "To achieve continuous improvement in safety efficiency, choose the correct option, which leads to the use of methods of applied behaviour analysis.
- a. Strategic behavioral analysis (SBA)
  - b. Behavior-based safety (BBS)
  - c. Providing feedback

- d. Observing to gather data on behaviors
13. Where \_\_\_\_\_ or more workers are employed in a factory, there shall be a Safety Committee in the factory.
- 100
  - 150
  - 200
  - 250
14. Who performs the joint site inspection before issuing the work permit?
- Workers and permit receiver
  - Workers and permit issuer
  - Area manager along with workers
  - Permit issuer and receiver
15. Indian Standard for Accident Prevention tags is \_\_\_\_\_.
- IS : 3786
  - IS : 8095
  - IS : 8519
  - None of the above
16. Which of the following type of detector is NOT used as an actuator of fire protection system?
- Line-type photoelectric smoke detectors
  - Rate-of-rise heat detectors
  - Flame detectors
  - Nitrogen sensors
17. According to Heinrich's theory, what percent of accidents occur at the workplace due to unsafe behaviour?
- 85%-90%
  - 15%-20%
  - 25%-35%
  - 50%-60%
18. What are the hazards associated with machine operation?
- Unguarded machine parts
  - Vibration
  - Flying objects during chipping & cutting works
  - All of the above
19. What is the purpose of machine guarding?
- To provide the physical barrier
  - To prevent machines to breakdown
  - To prevent machines to damage mechanically

- d. All of the above
20. The purpose of a lock-out/tag-out (LOTO) procedure is to \_\_\_\_.
- Improve productivity on the job
  - Secure harmful energy sources to prevent injury
  - Slow down work so technicians are less stressed
  - Identify personal items to avoid theft
21. Arc blast is caused by \_\_\_\_.
- poor contact within electrical wire splices
  - radio frequency omissions from high-power transmitters
  - ionization of gases near high-voltage electrical conductors
  - discharge of high electrical current through open air
22. The minimum height of toe board should be \_\_\_\_.
- 1 cm or more
  - 5 cm or more
  - 10 cm or more
  - None of the above
23. A job safety analysis is required to be followed in a company for better and safer working conditions.  
Which of the following has to be checked?
- Work Area
  - Men
  - Tools
- I and II
  - I and III
  - II and III
  - I, II and III
24. What type of hazard in the workplace represent noise greater than 85 dB?
- Biological hazard
  - Chemical hazard
  - Physical hazard
  - Ergonomic hazard
25. Which of the following is defined as a hazardous area created by two or more mechanical parts rotating in opposite direction within the same plane and in close interaction?
- Pinch point
  - Nip points or bites
  - Point of operation
  - Power transmission



26. Which of the following device can be used as an appliance to estimate earthquakes?
- Oscillograph
  - Seismograph
  - Bar graph
  - Telegraph
27. Under the Factory Act of 1948, in which section it is described regarding the safeguards of machinery?
- Section 21 to 40
  - Section 1 to 20
  - Section 41 to 60
  - Section 61 to 80
28. Which of the following option correctly describes the term "PASS"?
- Pick up, Aim, Squeeze, Squirt
  - Pull, Aim, Squeeze, Sweep
  - Push, Alarm, Swirl, Sweep
  - Pull, Aim, Swirl, Swat
29. Which among the following can affect the brain growth of children?
- Nitrogen
  - Zinc
  - Boron
  - Lead
30. What is the test load of the lifting gear of having 25 tonnes of SWL?
- 50 tonnes
  - 25 tonnes
  - 37 tonnes
  - 75 tonnes
31. How many notifiable diseases are listed in the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998?
- 29
  - 30
  - 15
  - 31
32. Among the following, which are the hazardous processes specified under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998?
- Roof Work
  - Demolition

- c) Work in confined Spaces  
d) Steel erection
- a. Only a and c  
b. Only c  
c. Only a and b  
d. All of the above
33. John is a construction worker working at a height. He has been asked to fix the top of a tall building. For John's safety, what must be done?  
a. Several People standing under for protection  
b. Safety nets  
c. Strong machinery  
d. Both B and C
34. Due to the Bhopal gas tragedy, among the following given chemicals, identify the one that is liable for the lung disease.  
a. Methylcyanate  
b. Methylisocyanate  
c. Methyl  
d. Methylisocyanide
35. 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?  
a. Carbon  
b. Dust  
c. Methane  
d. Slags
36. Which type of fire cannot be addressed with water?  
a. Class A  
b. Class D  
c. Class B  
d. Class C
37. For carrying out a Process Hazard Analysis such as HAZOP, the team will need to have all of the following safety information, except:  
a. A block flow diagram or simplified process flow diagram  
b. Plant layout  
c. Area electrical classification  
d. Applicable design codes & standards
38. The catastrophic failure of a hydrocarbon storage tank due to intense heating from an external fire is commonly known as:

- a. UCVCE
  - b. CE
  - c. Cascading effect
  - d. BLEVE
39. A hazardous chemical can be identified by which of the following number?
- a. ID number
  - b. UN number
  - c. NFPA number
  - d. Hazard Index number
40. In risk estimation, a FN-Curve depicts which of the following risk?
- a. Individual risk
  - b. Process risk
  - c. Societal risk
  - d. None of the above
41. Emergency Information Panel contains:
- a. Class Label
  - b. UN number
  - c. HAZCHEM code
  - d. All of the above
42. The chemical involved in Flixborough disaster was \_\_\_\_.
- a. Methyl isocyanate (MIC)
  - b. Tetrachloro Dibenzotioxin (TZ DD)
  - c. Cyclohexane
  - d. None of the above
43. Transporting hazardous material by road require proper identification as per which statutes?
- a. The Motor Vehicles Act, 1988
  - b. The Environment (Protection) Act, 1986,
  - c. The Factories Act, 1948
  - d. The Dangerous Machines (Regulation) Act, 1983
44. Among the following gases which one is flammable?
- a. Carbon Dioxide
  - b. Carbon Monoxide
  - c. Chlorine
  - d. Nitrogen
45. Among the following words, which is not a guide word of HAZOP study?
- a. NO
  - b. LESS

- c. GOOD  
d. MORE
46. Which colour is being used in a hazard class label for explosives substances?  
a. Red  
b. Green  
c. White  
d. Orange
47. IS 2825, the code for unfired pressure vessels, does NOT include which of the following?  
1. Pressure exceeding 200 kgf/cm<sup>2</sup>.  
2. When the ratio of outside to inside diameter of the shell is more than 1.5  
3. Vessels ID not more than 150 mm.  
a. 1 only  
b. 1 and 2 only  
c. 2 and 3 only  
d. All Three
48. In a HAZCHEM code, e.g. LPG HAZCHEM code is 2WE, what does the number 2 indicates?  
a. Extinguishing medium  
b. Hazard level  
c. Serial No.  
d. Molecular weight
49. What is the word used to describe a chemical reaction which absorbs heat?  
a. Exothermic reaction  
b. Continuous reaction  
c. Endothermic Reaction  
d. None of the above
50. As per IS: 3786, scheduled charges in days of earning capacity lost due to amputation through shoulder joint upper limb (either arms) is \_\_\_\_\_.  
a. 4200 days  
b. 3600 days  
c. 6000 days  
d. 5400 days
51. Safety performance is measured usually through \_\_\_\_\_.  
a. Leading indicators  
b. Lagging indicators  
c. Both a & b  
d. None of the above

52. In case of accident, if the worker does NOT report to the duty within \_\_\_\_\_, it is known as Reportable accidents.
- 48 hrs
  - 24 hrs
  - 36 hrs
  - 54 hrs
53. Why should near miss be reported?
- To ensure complete recovery
  - To meet legal requirement
  - To prevent occurrence of a more serious incident
  - To test the first aider
54. Frequency Rate = ? X 1000000 / Total man-hours worked as per Indian Standard 3786. Find "?".
- No. of persons employed
  - No. of days of absent from work
  - No. of injury(s)
  - No. of man-day(s) lost
55. In a particular factory, the number of injuries occurred per year are 6, the number of workers working in the factory are 600, and the average number of hours worked by a worker per year is 1000. Determine the frequency rate of injury in the factory.
- Frequency rate = 6
  - Frequency rate = 8
  - Frequency rate = 10
  - Frequency rate = 5
56. Suppose you are in the risk assessment control team in your plant, and you are given the task of identifying why the problem occurred in the first place.  
Which root cause tool is best suitable for finding potential causes?"
- Fault tree analysis
  - Pareto chart
  - Scatter plot diagram
  - Fishbone diagram
57. As per the section 36-A of the Factories Act, 1948, \_\_\_\_\_ volts of electric light is permitted for working in a confined space.
- 60
  - 220
  - 240
  - 24
58. In an industry, several machines are operating, the temperature at this location is very high, and the surroundings are hot. Which of the following would be true here?

- a. More ventilation leading to more stress
  - b. More ventilation leading to health issues
  - c. Low ventilation leading to less stress
  - d. Low ventilation leading to health issues
59. Noise hazard is required to be avoided in an industry. The exposure of sound here is 85 dB (A). For how many hours at maximum can this sound be heard before causing issues?
- a. 14
  - b. 8
  - c. 5
  - d. 3
60. A scientist is looking for a parameter that can be expressed by using candela. Among all the options, which one parameter could be suitable for him?
- a. Frequency
  - b. Luminous flux
  - c. Luminous intensity
  - d. Wavelength
61. Elbert is looking for an earplug that possesses a fixing agent and silicon rubber. From the given options, which one could be used by him?
- a. Prefabricated earplugs
  - b. Semi insert protectors
  - c. Canal caps
  - d. Custom moulded earplugs
62. What is the short term exposure time limit for certain chemicals/substances specified in the Section 41-F of the Factories Act, 1948?
- a. 60 minutes
  - b. 15 minutes
  - c. 10 minutes
  - d. 8 hours
63. In any factory, the air movement should be of at least \_\_\_\_\_ meters per minute.
- a. 60
  - b. 15
  - c. 30
  - d. 45
64. The general illumination in a factory where people are regularly employed shall not be less than \_\_\_\_\_ lux measures in the horizontal plane at a level of 90 centimetres above the floor:
- a. 65
  - b. 85
  - c. 105

- d. 45
65. Which one of the given options can be implemented in a workplace to prevent hearing loss?
- Always wear ear protection everywhere you go
  - Monitor noise levels through engineering and administrative controls to minimize over exposure
  - No need to wear PPEs
  - Monitor your hearing loss over time with a routine hearing test
66. The safety of worker's life and person's property is to be maintained from the dangers of steam boiler explosion. In which year an act was passed for this? "
- 1923
  - 1935
  - 1905
  - 1915
67. As per the Petroleum act passed in 1934, which of the following is checked concerning petroleum?
- Refining
  - Blending
  - Import
- I and II
  - I and III
  - II and III
  - I, II and III
68. The government discovered the possession and importation of explosive goods by an organisation. According to which act does the government have the authority to prohibit the manufacture of such substances?
- The Explosives Act, 1984
  - Hazardous Explosives Act, 1983
  - Hazardous Explosives Act, 1883
  - The Explosives Act, 1884
69. Among the following, what should be the exceeding capacity of the container for a class C petroleum so that its type can be approved by the Chief controller of Explosives?
- 5 liters
  - 1 liter
  - 3 liters
  - 2 liters

70. As per Rule 74 of the Petroleum Rules 2002, vehicles carrying petroleum by road, shall not be parked at a place within \_\_\_\_\_ meters of any source of fire.
- 11
  - 8
  - 9
  - 10
71. As per model factory rules First-aid box is to be provided for every \_\_\_\_\_ workers in a factory.
- 50
  - 160
  - 135
  - 125
72. As per the classification in the Petroleum Rules, 2002, the Petroleum Class "B" means \_\_\_\_.
- Petroleum having a flash point of  $23^{\circ}\text{C}$  and above but below  $65^{\circ}\text{C}$
  - Petroleum having a flash point of  $65^{\circ}\text{C}$  and above but below  $93^{\circ}\text{C}$
  - Petroleum having a flash point below  $23^{\circ}\text{C}$
  - Petroleum having a flash point above  $93^{\circ}\text{C}$
73. Under the Provisions of which Act, the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 have been notified?
- The Factories Act, 1948
  - The Explosive Substances Act, 1908
  - The Environmental (Protection) Act, 1986
  - None of the above
74. Whether "National Policy for Safety, Health & Environment at workplace" is available in India?
- No
  - Not sure
  - Yes
  - None of the above
75. Under which section of the Factories Act, 1948 the notifiable diseases are listed?
- 89
  - 95
  - 106
  - 42
76. The maximum travel distance for fire exit specified in the model Factories Rule is \_\_\_\_.
- 50 meters
  - 40 meters
  - 30 meters
  - 20 meters



77. The Health & Safety Policy to be signed by \_\_\_\_\_ as per the Factory Model Rules under the Factories Act, 1948.
- Occupier
  - Medical Officer
  - Safety Officer
  - Fire Officer
78. Every wire rope of lifting appliances used at construction work is required to be inspected by a responsible person at least \_\_\_\_\_.
- every 12 months
  - every 36 months
  - every 3 months
  - every 60 months
79. What is the frequency of testing of lifting appliances after erecting at construction site as per BOCW Rules, 1998?
- every 3 years
  - every 5 years
  - every 2 years
  - every 1 year
80. How many industries are categorised as hazardous processes under the section 2 (cb) of the Factories Act, 1948?
- 26
  - 30
  - 40
  - 29

**National Safety Council**  
Navi Mumbai

### Section 3 - Environment

1. As per Biomedical Waste Management Rules 2016, what is the colour of the baggage in which sharp types of medical waste must be packed?
  - a. Yellow
  - b. Red
  - c. White translucent
  - d. Blue
  
2. The diesel generators manufactured after 1st Jan 2005 need to adhere to the noise pollution standards. What is the maximum noise permitted for the DGs?
  - a. 50 dB for a DG capacity of above 1000 KVA
  - b. 75 dB for a DG capacity of upto 1000 KVA
  - c. 75 dB for a DG capacity of above 1000 KVA
  - d. 50 dB for a DG capacity of upto 1000 KVA
  
3. If the stack should be 3.5 m above the building height, what is the capacity of the Diesel Generator?
  - a. 250 to 300 KVA
  - b. 300 to 350 KVA
  - c. 100 to 150 KVA
  - d. 200 to 250 KVA
  
4. What is the standard for the TDS for the discharge of effluents from Tanneries as per the Central Pollution Control Board?
  - a. 2100 mg/ L
  - b. 2200 mg/ L
  - c. 2000 mg/ L
  - d. 1900 mg/ L
  
5. Name the card that must be carried by the people involved in transportation of hazardous wastes.
  - a. TREM Cards
  - b. OSHA cards
  - c. MSDS Cards
  - d. TRAM Cards"
  
6. As per pollution control index, CPCB have categorized industrial sectors in 4 categories. Among the following, which is not a part of the categories?
  - a. White
  - b. Green
  - c. Red
  - d. Brown

7. As per the National Ambient Air Quality Standards, the concentration of PM<sub>10</sub> in ambient air for Industrial area for 24 hours in microgram/m<sup>3</sup> is \_\_\_\_.
- 60
  - 120
  - 100
  - 30
8. In India, the limit of Ambient Air Quality Standards with respect to noise [dB(A) Leq] for residential areas is \_\_\_\_.
- 90
  - 55
  - 75
  - 85
9. Which of the following wastes can be recycled?
1. Glass bottles
  2. Candy wrappers
  3. Paper
  4. Ceramic items
- 1, 2 and 3
  - 1 and 2
  - 3 and 4
  - 1 and 3
10. VER is a type of carbon credit that is represented by which of the given options?
- Voluntary Emission Reduction certified by third party
  - Valued Emission Reduction certified by third party
  - Valued Emission Reduction
  - Voluntary Emission Reduction
11. What are the real-time air and water quality monitoring systems?
- CEMS - Air, CEQMS – Water
  - CAAQMS - Air, CEMS – Water
  - CEMS - Air, CAAQMS – Water
  - CEQMS - Air, CEMS - Water
12. Observe all the options and identify the option which is NOT a result of burning fossil fuels.
- Increased ethane levels
  - Increased greenhouse gases
  - Emission of carbon dioxide
  - Emission of hydrogen gas
- a. b and d

- b. a and d  
c. a and c  
d. a, c and d
13. Which option is incorrect regarding greenhouse impact?  
a. Life on earth is possible due to the greenhouse effect.  
b. More the emission of greenhouse gases, more the temperature of the earth's atmosphere.  
c. Increased emission of greenhouse gases is a natural process.  
d. The greenhouse effect is a natural process that maintains the earth's temperature.
14. Which is NOT correct for the comparative contribution of different greenhouse gases to complete global warming?  
a. Methane – 20%  
b. CFCs – 14%  
c. Carbon dioxide – 60%  
d.  $N_2O$  – 12%
15. Among all the greenhouse gases, which one has the highest atmospheric lifetime?  
a. Methane  
b. Nitrous oxide  
c. CFC  
d. Carbon tetrafluoride
16. Observe the given options and identify the one which is correct regarding the half-life period of methane.  
a. 10 years  
b. 50-55 years  
c. 28-36 years  
d. 100 years
17. Among all the options, which option describes Carbon Sequestration?  
a. Storage of  $CO_2$  by depositing it in the reservoir  
b. Removal of  $CO_2$  from the atmosphere & storing it by depositing it in the reservoir  
c. Storage of carbon dioxide by sedimentation  
d. Removal of  $CO_2$  from the atmosphere
18. Observe and identify the one which is not a sink for carbon.  
a. Living beings  
b. Ocean  
c. Soil  
d. Forest
19. Identify which among the following is NOT a renewable source of energy.  
a. Hydro-power

- b. Biomass energy
  - c. Solar energy
  - d. Geothermal energy
20. Identify the one which is a drawback of most renewable energy sources.
- a. Unreliable supply
  - b. High waste disposal cost
  - c. Highly pollution inducing
  - d. High running cost



**National Safety Council**  
Navi Mumbai

## NSAT PREVIOUS YEAR QUESTION PAPER - 2

### Section 1 - General

1. Which of the following will be the passive voice of the given sentence?  
Please give me my bag.
  - e. You are ought to give me a bag.
  - f. You are asked to give me my bag.
  - g. You are requested to give me my bag.
  - h. You are ordered to give me my bag.
2. Which part of the sentence given below has an error in it?  
Tristan went to Kai's store and waited through endless lines only to have a young boy hand him a pamphlet of two singers in their sixties'.
  - a. through endless lines only to
  - b. a pamphlet of two singers in their sixties'.
  - c. have a young boy hand him
  - d. Tristan returned to Kai's store and waited
3. Mark the option which best expresses the given sentence in Indirect speech.  
"Where do my parents usually go on a holiday?", asked Robert.
  - a. Robert asked where my parents usually goes on a holiday.
  - b. Robert asked my parents where do they usually go on a holiday.
  - c. Robert asked where does my parents usually go on a holiday.
  - d. None of the mentioned options
4. Mark the option which best expresses the given sentence in Indirect speech.  
My boss said to me, "Complete the work by fortnight, or else you are out."
  - a. My boss told me he'd completed the work for the fortnight, or else I was out.
  - b. My boss told me to complete the work by the fortnight, or else I'd be out.
  - c. My boss told me to complete the work by the fortnight, or else you are out.
  - d. None of the mentioned options
5. Mark the option which best expresses the sentence in Passive voice.  
Montana offered her a seat.
  - a. A seat was offered to her by Montana.
  - b. Montana offer her seat.
  - c. Seat was offered to her.
  - d. Her seat offered by Montana
6. Sam was working on a webpage and suddenly got an urgent requirement to work on a Word document. Now he realizes that his mouse was not allowing him to minimize the current application. Identify the shortcut key that he should use.
  - a. Window key+M
  - b. Window key+E
  - c. Window key+D
  - d. Window key+A

7. Roy created a PowerPoint file. Can you guide him on identifying which extension of the file he has created?
  - a. .ppt
  - b. .web
  - c. .sld
  - d. .docx
  
8. Identify the type of crime that happens when a website looks like real website but was created to obtain confidential details.
  - a. Malware
  - b. Phishing Scam
  - c. Ransomware
  - d. Website Spoofing
  
9. The Internet Protocol is a set of rules for routing and addressing packets of data so that they can travel across networks and arrive at the correct destination. Which of the following options is NOT an internet protocol?
  - a. FTP
  - b. RSA
  - c. IP
  - d. HTTP
  
10. A web-based tool that enables users to locate information on the World Wide Web is called a search engine. Identify which of the following are search engines.
  - A) Google
  - B) MSC
  - C) Yahoo
  - D) Orkut
  - E) Face Search
  - a. B,C
  - b. A,C
  - c. C,D
  - d. A,B
  
11. You are the leader in the XYZ organization. The members of your team express worries about a rumored organizational change. Which of the following will be the best course of action for managing this situation?
  - a. Reassure employees that everything is going to be all right and that the company's upper management is working to develop an effective plan.
  - b. Invite employees to express their concerns and share ideas to help ease the stress they are feeling and empower them to work together to contribute toward a shared solution.
  - c. Minimize discussion on the rumors until a clear plan is ready for implementation. This gives senior managers time to develop an effective plan.
  - d. Setting up one-on-one meetings with every employee to understand their concerns and take appropriate action.
  
12. Consider a situation where your boss permits you to make any essential and meaningful decisions for the efficient working of the organization without consulting anyone. Which is the type of leadership described in the above situation?

- a. Autocratic style  
b. Democratic style  
c. Hands on style  
d. Laissez-faire
13. Albert is a leader in the XYZ organization and he wants to ensure the organization's long-term success.  
Which of the following statements best describes the nature of the leadership that Albert will adopt for success?  
a. Leaders focus on budgeting, aligning people with a shared vision, and solving problems.  
b. Leaders focus on setting direction, aligning people with a shared vision, and motivating people.  
c. Leaders focus on motivating people, planning and organizing, and staffing.  
d. Leaders focus on following the processes that they agreed to follow.
14. This theory of leadership focuses on the personality of a leader and suggests that certain inborn qualities make a leader. Identify the theory.  
a. Trait Theory  
b. Personality Theory  
c. Group Theory  
d. Inspiration Theory
15. For every student, teacher leaders are the perfect example to start learning about leadership skills.  
Identify qualities that a teacher leader should demonstrate for student learning:  
A) Collaboration  
B) Empowerment  
C) Relationship  
D) Authoritative  
E) Ignorant  
a. A, B, C  
b. B, C, D  
c. C, D, E  
d. A, B, E
16. If the code assigned to 'ROSE' is 'ILHV', which of the following will be the correct code for the word 'TULIP'?  
a. HGQSL  
b. GFPRK  
c. FEOQJ  
d. KROEF
17. In a Family of 8 members (M, N, O, P, Q, R, S, T), there are 2 married couples and a widow. M is the Engineer and is married to a doctor. O is an architect and the wife of P. Q, a student who is the only child of O. S, the daughter of T, and the sister of R, who is the manager's niece. N, a teacher, is the mother of only M and P.  
Who is the manager?  
a. T  
b. S



- c. P
- d. M

18. Find the missing term in given series:

167, 173, \_\_, 185, 191

- a. 177
- b. 175
- c. 179
- d. 180

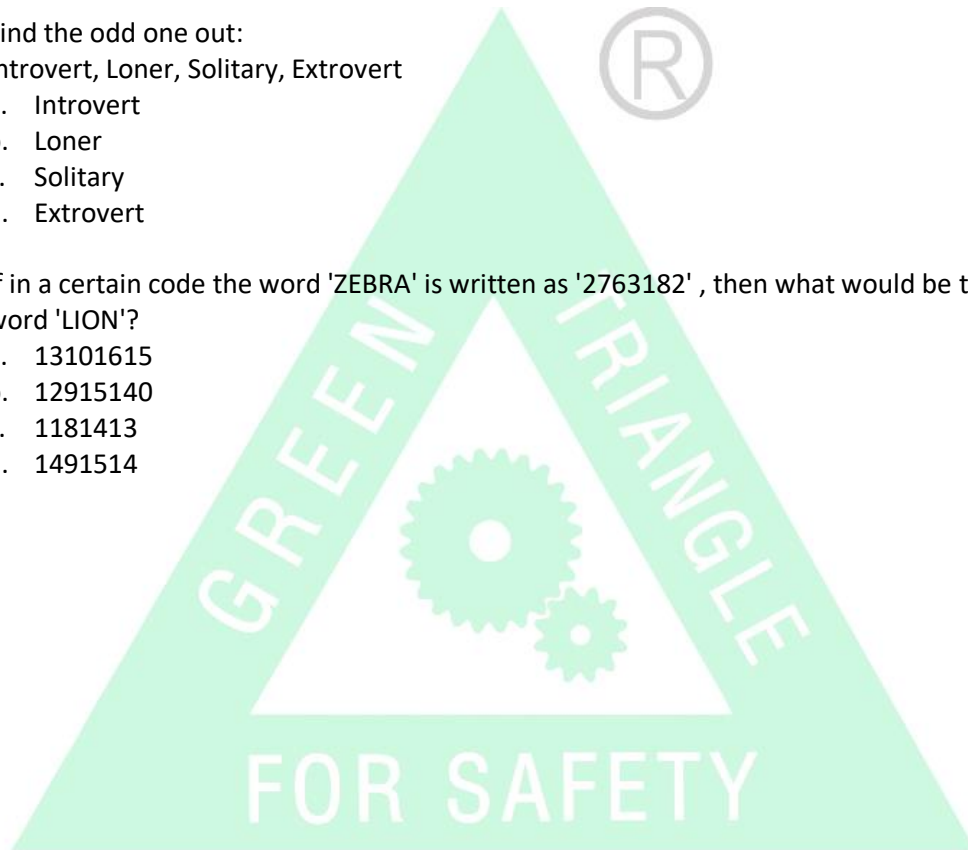
19. Find the odd one out:

Introvert, Loner, Solitary, Extrovert

- a. Introvert
- b. Loner
- c. Solitary
- d. Extrovert

20. If in a certain code the word 'ZEBRA' is written as '2763182' , then what would be the code for word 'LION'?

- a. 13101615
- b. 12915140
- c. 1181413
- d. 1491514



**National Safety Council**  
Navi Mumbai

## Section 2 - OHS

- Which colour is being used in a hazard class label for explosives substances?
  - Red
  - Green
  - White
  - Orange
- In a HAZCHEM code, e.g. LPG HAZCHEM code is 2WE, what does the number 2 indicates?
  - Extinguishing medium
  - Hazard level
  - Serial No.
  - Molecular weight
- IS 2825, the code for unfired pressure vessels, does NOT include which of the following?
  - Pressure exceeding 200 kgf/cm<sup>2</sup>.
  - When the ratio of outside to inside diameter of the shell is more than 1.5
  - Vessels ID not more than 150 mm.
  - 1 only
  - 1 and 2 only
  - 2 and 3 only
  - All Three
- What is the word used to describe a chemical reaction which absorbs heat?
  - Exothermic reaction
  - Continuous reaction
  - Endothermic Reaction
  - None of the above
- As per OISD- STD\_116, the fire water network shall be kept pressurised at minimum \_\_\_\_\_ all the time.
  - 6 kg/cm<sup>2</sup>
  - 6.5 kg/cm<sup>2</sup>
  - 7.0 kg/cm<sup>2</sup>
  - 7.5 kg/cm<sup>2</sup>
- What is the frequency of external examination of pressure vessel or plant in use by a competent person as per the Factory Model Rules?
  - every 1 month
  - every 6 months
  - every 12 months
  - every 3 months

7. Which are the correct types of smoke detectors?
  - a. Ionization & Photo Electric
  - b. Photo Electric & Rate of Rise
  - c. Ionization & Rate of Rise
  - d. Rate of Rise & Flame
  
8. Which is not a common unit for the concentration of chemicals in the workplace air?
  - a. fibres/cc
  - b. mg/kg
  - c. ppm
  - d. mg/m<sup>3</sup>
  
9. Threshold Limit Values (TLVs) and Permissible Exposure Limits (PELs) are published by which of the following agencies?
  - a. NIOSH & OSHA
  - b. ACGIH & MSHA
  - c. OSHA & MSHA
  - d. ACGIH & OSHA
  
10. A valve in the pipeline is not properly functioning, and you want to change with the reserve available in the stores. Which element of risk-based process safety is to be considered in this situation?
  - a. Element 2 Compliance with standards
  - b. Element 16 Emergency management
  - c. Element 13 Management of Change
  - d. Element 18 Measurement and Metrics
  
11. Mention the Indian standard, which defines the colour code for piping systems?
  - a. IS 2379
  - b. IS 2380
  - c. IS 2378
  - d. IS 2381
  
12. Which one of the following diseases is not associated with coal mining?
  - a. Silicosis
  - b. Pneumoconiosis
  - c. Asthama
  - d. Angiosarcoma
  
13. Which type of physical hazards are recognized in the industrial hygiene?
  - a. Extreme temperature & extreme cold
  - b. Opening in surfaces & railways
  - c. Accumulated water
  - d. Damaged & corroded platforms

14. Among the following gases which one is flammable?
- Carbon Dioxide
  - Carbon Monoxide
  - Chlorine
  - Nitrogen
15. In an industry, several machines are operating, the temperature at this location is very high, and the surroundings are hot. Which of the following would be true here?
- More ventilation leading to more stress
  - More ventilation leading to health issues
  - Low ventilation leading to less stress
  - Low ventilation leading to health issues
16. Noise hazard is required to be avoided in an industry. The exposure of sound here is 85 dB (A). For how many hours at maximum can this sound be heard before causing issues?
- 14
  - 8
  - 5
  - 3
17. A scientist is looking for a parameter that can be expressed by using candela. Among all the options, which one parameter could be suitable for him?
- Frequency
  - Luminous flux
  - Luminous intensity
  - Wavelength
18. Elbert is looking for an earplug that possesses a fixing agent and silicon rubber. From the given options, which one could be used by him?
- Prefabricated earplugs
  - Semi insert protectors
  - Canal caps
  - Custom moulded earplugs
19. What is the short term exposure time limit for certain chemicals/substances specified in the Section 41-F of the Factories Act, 1948?
- 60 minutes
  - 15 minutes
  - 10 minutes
  - 8 hours
20. In any factory, the air movement should be of at least \_\_\_\_\_ meters per minute.
- 60
  - 15

- c. 30  
d. 45
21. The general illumination in a factory where people are regularly employed shall not be less than \_\_\_\_\_ lux measures in the horizontal plane at a level of 90 centimetres above the floor:
- a. 65  
b. 85  
c. 105  
d. 45
22. Which one of the given options can be implemented in a workplace to prevent hearing loss?
- a. Always wear ear protection everywhere you go  
b. Monitor noise levels through engineering and administrative controls to minimize over exposure  
c. No need to wear PPEs  
d. Monitor your hearing loss over time with a routine hearing test
23. "How many accidents of the same kind involving the same person are there in H.W. Heinrich theory?"
- a. 300  
b. 330  
c. 360  
d. 400
24. "According to W.H. Heinrich's (1931) domino theory, the five-factor accident sequences are,  
i) ancestry & social environment,  
ii) worker fault,  
iii) unsafe act together with mechanical & physical hazard,  
iv) \_\_\_\_\_ and  
v) damage or injury.  
What is the factor at iv)
- a. Risk  
b. Behaviour  
c. Danger  
d. Accident
25. "Which statement is true about a safety committee?"
- a. The safety officer should chair the committee  
b. Everyone should be obligated to take his/her turn as a committee chairman  
c. The committee should evaluate its performance against its established goals  
d. Committee should comprise of top management

26. "A system safety programme plan usually has a narrative analysis in conjunction with an analysis of:
- Fault tree
  - Scheduled time and resources
  - System hazards
  - Failure modes and effects
27. Which of the following adds considerably to the protection offered by a helmet?
- Bump cap
  - Chin Strap
  - Paint applied after manufacture of helmet
  - All of the above
28. In a hierarchy of controls for accident prevention which should be the first?
- Incorporate safety devices
  - Apply administrative control
  - Eliminate or reduce risk
  - Provide PPE
29. To achieve continuous improvement in safety efficiency, choose the correct option, which leads to the use of methods of applied behaviour analysis.
- Strategic behavioral analysis (SBA)
  - Behavior-based safety (BBS)
  - Providing feedback
  - Observing to gather data on behaviors
30. In any industry, it is necessary to have a safety manager to protect the company and workers from common workplace hazards.
- Which of the following are the key responsibilities of a safety manager?
- Preparation and growth of the workers in the safety practices
  - Judgment of requirement of safety procedures
  - Modifying the work process to make it more inclined toward safety
  - Regular testing and monitoring of the working environment
- 1, 2 and 3
  - 1, 2, 3 and 4
  - 1, 2 and 4
  - 1 and 2
31. Which of the following correctly represents the properties of safety shoes necessary for maintaining the safety of feet?
- The shoes should be close-toed, non-slip, and made of thick material.
  - The shoes should be made from rubber.

- c. The shoes should be resistant to dirt.  
d. The shoes should have spikes for better grip and quick movement.
32. Among the following options, on which type of fire, a Class B type fire extinguisher should NOT be used?
- Paper
  - Paint
  - Grease
  - Oil
33. A ladder should be turned so that its foundation is 1 foot far from the wall. What should be the ladder's height for every feet away from the wall?
- 4
  - 2
  - 8
  - 10
34. Which of the following is NOT related to mechanical hazard under occupational health hazards?
- No safety device
  - No fencing
  - Wrong layout of machinery
  - Unguarded machinery
35. A firefighter is trying to control a fire accident. He is using a CO<sub>2</sub>-type extinguisher for the task. After the job, how will he find the discharge horn of the extinguisher?
- Warm
  - Extremely Cold
  - Cold
  - Extremely Hot
36. "Which of the following assemblies is used to regulate the compressed air in a breathing apparatus?"
- Face piece
  - Cylinder assembly
  - Regulator assembly
  - Back piece assembly
37. "A company uses behavior-based safety to inform the management and employees about workplace safety. This would be done via \_\_\_\_\_."
- Process Management
  - Process Optimization
  - Safety Operations
  - Safety Observations

38. The Dock Workers (Regulation of Employment) Act extends to India except in which of the following states?
- Assam
  - Jammu & Kashmir
  - Sikkim
  - Mizoram
39. In the Explosives Rules 2008, the explosives are divided into ----- categories according to risks for safety distances.
- Three
  - Five
  - Two
  - four
40. Among the following, what should be the exceeding capacity of the container for a class C petroleum so that its type can be approved by the Chief controller of Explosives?
- 2 litres
  - 3 litres
  - 5 litres
  - 1 litre
41. Under the Provisions of which Act, the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 have been notified?
- The Factories Act, 1948
  - The Explosive Substances Act, 1908
  - The Environmental (Protection) Act, 1986
  - None of the above
42. As per the classification in the Petroleum Rules, 2002, the Petroleum Class "B" means \_\_\_\_.
- Petroleum having a flash point of  $23^{\circ}\text{C}$  and above but below  $65^{\circ}\text{C}$
  - Petroleum having a flash point of  $65^{\circ}\text{C}$  and above but below  $93^{\circ}\text{C}$
  - Petroleum having a flash point below  $23^{\circ}\text{C}$
  - Petroleum having a flash point above  $93^{\circ}\text{C}$
43. Which of the following is not related with worker safety, health and & welfare?
- The Dock Workers (Safety, Health & welfare) Act, 1986
  - The Factories Act, 1948
  - Equal Remuneration Act, 1976
  - The Mines Act, 1952
44. As per model factory rules First-aid box is to be provided for every \_\_\_\_\_ workers in a factory.
- 50
  - 125



- c. 135  
d. 160
45. As per Rule 74 of the Petroleum Rules 2002, vehicles carrying petroleum by road, shall not be parked at a place within \_\_\_\_\_ meters of any source of fire.
- a. 11  
b. 9  
c. 8  
d. 10
46. Under which section of the Factories Act, 1948 the notifiable diseases are listed?
- a. 89  
b. 42  
c. 95  
d. 106
47. How many industries are categorised as hazardous processes under the section 2 (cb) of the Factories Act, 1948?
- a. 26  
b. 30  
c. 29  
d. 40
48. The maximum travel distance for fire exit specified in the model Factories Rule is \_\_\_\_.
- a. 50 meter  
b. 40 meters  
c. 20 meters  
d. 30 meters
49. Fire buckets shall be placed on hooks attached to a suitable stand or wall in such a way that their bottom is \_\_\_\_\_ above the floor level.
- a. 400 mm  
b. 750 mm  
c. 200 mm  
d. 1000 mm
50. Every wire rope of lifting appliances used at construction work is required to be inspected by a responsible person at least \_\_\_\_\_.
- a. every 12 months  
b. every 36 months  
c. every 3 months  
d. every 60 months

51. What is the frequency of testing of lifting appliances after erecting at construction site as per BOCW Rules, 1998?
- every 3 years
  - every 5 years
  - every 2 years
  - every 1 year
52. All transport or earth moving equipment and vehicles are required to be inspected at construction site every \_\_\_\_\_.
- Month
  - fortnight
  - six month
  - week
53. As per IS: 3786, scheduled charges in days of earning capacity lost due to amputation through shoulder joint upper limb (either arms) is \_\_\_\_\_.
- 4200 days
  - 3600 days
  - 6000 days
  - 5400 days
54. Safety performance is measured usually through \_\_\_\_\_.
- Leading indicators
  - Lagging indicators
  - Both a & b
  - None of the above
55. In case of accident, if the worker does NOT report to the duty within \_\_\_\_\_, it is known as Reportable accidents.
- 48 hrs
  - 24 hrs
  - 36 hrs
  - 54 hrs
56. Why should near miss be reported?
- To ensure complete recovery
  - To meet legal requirement
  - To prevent occurrence of a more serious incident
  - To test the first aider
57. Frequency Rate = ? X 1000000 / Total man-hours worked as per Indian Standard 3786. Find "?".
- No. of persons employed
  - No. of days of absent from work
  - No. of injury(s)

- d. No. of man-day(s) lost
58. In a particular factory, the number of injuries occurred per year are 6, the number of workers working in the factory are 600, and the average number of hours worked by a worker per year is 1000. Determine the frequency rate of injury in the factory.
- Frequency rate = 6
  - Frequency rate = 8
  - Frequency rate = 10
  - Frequency rate = 5
59. "Suppose you are in the risk assessment control team in your plant, and you are given the task of identifying why the problem occurred in the first place. Which root cause tool is best suitable for finding potential causes?"
- Fault tree analysis
  - Pareto chart
  - Scatter plot diagram
  - Fishbone diagram
60. As per the section 36-A of the Factories Act, 1948, \_\_\_\_\_ volts of electric light is permitted for working in a confined space.
- 60
  - 220
  - 240
  - 24
61. What is the test load of the lifting gear of having 25 tonnes of SWL?
- 50 tonnes
  - 25 tonnes
  - 37 tonnes
  - 75 tonnes
  - 50 tonnes
62. "How many notifiable diseases are listed in the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998?"
- 29
  - 30
  - 15
  - 31
63. "Among the following, which are the hazardous processes specified under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998?"
- Roof Work
  - Demolition
  - Work in confined Spaces

- d) Steel erection
- Only a and c
  - Only c
  - Only a and b
  - All of the above
64. John is a construction worker working at a height. He has been asked to fix the top of a tall building. For John's safety, what must be done?
- Several People standing under for protection
  - Safety nets
  - Strong machinery
  - Both B and C
65. Due to the Bhopal gas tragedy, among the following given chemicals, identify the one that is liable for the lung disease.
- Methylcyanate
  - Methylisocyanate
  - Methyl
  - Methylisocyanide
66. 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
67. What type of hazard in the workplace represent noise greater than 85 dB?
- Biological hazard
  - Chemical hazard
  - Physical hazard
  - Ergonomic hazard
68. Which of the following is defined as a hazardous area created by two or more mechanical parts rotating in opposite direction within the same plane and in close interaction?
- Pinch point
  - Nip points or bites
  - Point of operation
  - Power transmission
69. The minimum height of toe board should be \_\_\_\_\_.
- 1 cm or more
  - 5 cm or more

- c. 10 cm or more  
d. None of the above
70. Arc blast is caused by \_\_\_\_\_.  
a. poor contact within electrical wire splices  
b. radio frequency omissions from high-power transmitters  
c. ionization of gases near high-voltage electrical conductors  
d. discharge of high electrical current through open air
71. Suppose you want to select a circuit breaker for use in household cables and some small units in the house. Which of the following would be suitable for use in this case?  
a. MCB  
b. ACB  
c. OCB  
d. MCCB
72. A safety management team is trying to find out the substance that leads to bronchial maladies. Which of the following options is correct for the same?  
a. Hexavalent chromium  
b. Plastic  
c. Lead  
d. Barium
73. Which among the following can affect the brain growth of children?  
a. Nitrogen  
b. Zinc  
c. Boron  
d. Lead
74. Which of the following option correctly describes the term "PASS"?  
a. Pick up, Aim, Squeeze, Squirt  
b. Pull, Aim, Squeeze, Sweep  
c. Push, Alarm, Swirl, Sweep  
d. Pull, Aim, Swirl, Swat
75. Under the Factory Act of 1948, in which section it is described regarding the safeguards of machinery?  
a. Section 21 to 40  
b. Section 1 to 20  
c. Section 41 to 60  
d. Section 61 to 80
76. Which of the following type of detector is NOT used as an actuator of fire protection system?  
a. Line-type photoelectric smoke detectors

- b. Rate-of-rise heat detectors
  - c. Flame detectors
  - d. Nitrogen sensors
77. According to Heinrich's theory, what percent of accidents occur at the workplace due to unsafe behaviour?
- a. 85%-90%
  - b. 15%-20%
  - c. 25%-35%
  - d. 50%-60%
78. What are the hazards associated with machine operation?
- a. Unguarded machine parts
  - b. Vibration
  - c. Flying objects during chipping & cutting works
  - d. All of the above
79. "A job safety analysis is required to be followed in a company for better and safer working conditions. Which of the following has to be checked?"
- I) Work Area
  - II) Men
  - III) Tools
- a. I and II
  - b. I and III
  - c. II and III
  - d. I, II and III
80. The purpose of a lock-out/tag-out (LOTO) procedure is to \_\_\_\_.
- a. improve productivity on the job
  - b. secure harmful energy sources to prevent injury
  - c. slow down work so technicians are less stressed
  - d. identify personal items to avoid theft

### Section 3 – Environment

1. What is the frequency for updating the safety report for MAH installations specified under the MSIHC Rules, 1989?
  - a. within a year
  - b. within 3 years
  - c. within 5 years
  - d. Not required
  
2. In India, the limit of Ambient Air Quality Standards with respect to noise [dB(A) Leq] for residential areas is \_\_\_\_\_.
  - e. 90
  - f. 55
  - g. 75
  - h. 85
  
3. As per the National Ambient Air Quality Standards, the concentration of PM10 in ambient air for Industrial area for 24 hours in microgram/m<sup>3</sup> is \_\_\_\_\_.
  - e. 60
  - f. 120
  - g. 100
  - h. 30
  
4. As per pollution control index, CPCB have categorized industrial sectors in 4 categories. Among the following, which is not a part of the categories?
  - e. White
  - f. Green
  - g. Red
  - h. Brown
  
5. Name the card that must be carried by the people involved in transportation of hazardous wastes.
  - e. TREM Cards
  - f. OSHA cards
  - g. MSDS Cards
  - h. TRAM Cards
  
6. What is the standard for the TDS for the discharge of effluents from Tanneries as per the Central Pollution Control Board?
  - e. 2100 mg/ L
  - f. 2200 mg/ L
  - g. 2000 mg/ L
  - h. 1900 mg/ L

7. If the stack should be 3.5 m above the building height, what is the capacity of the Diesel Generator?
- 250 to 300 KVA
  - 300 to 350 KVA
  - 100 to 150 KVA
  - 200 to 250 KVA
8. The diesel generators manufactured after 1st Jan 2005 need to adhere to the noise pollution standards. What is the maximum noise permitted for the DGs?
- 50 dB for a DG capacity of above 1000 KVA
  - 75 dB for a DG capacity of upto 1000 KVA
  - 75 dB for a DG capacity of above 1000 KVA
  - 50 dB for a DG capacity of upto 1000 KVA
9. Name the term which integrates the concept of integrating sustainable environmental processes with the traditional supply chain.
- Green energy
  - Green supply chain management
  - Supply chain management
  - Green energy management
10. Which of the following is a major reason for landslides, global warming, floods, and soil erosion?
- Deforestation
  - Afforestation
  - Overpopulation
  - Global warming
11. Observe the given options and identify the substance that can be used as lignite.
- Biogas
  - Nuclear fuel
  - Natural gas
  - Coal
12. "Among the following, identify which statements are incorrect about crude oil:
- It is a smelly yellow to black liquid
  - It is composed of the remains of ancient marine organisms
  - It is an odourless yellow to black liquid
  - It is a mixture of hydrocarbons"
- Only d
  - Only a
  - Only c
  - Only b



13. Observe the given options and identify the one associated with REDD, a United Nations-backed framework.
- Reducing Emissions from Decentralization and Deforestation
  - Reducing Emissions from Deforestation and Degradation
  - Reducing Energy from Degradation and Decompositions
  - Reducing Energy of Dissolved Decompositions
14. Which of the following options is the calculated half-life of nitrous oxide?
- 8 to 15 years
  - 90 to 95 years
  - 250 years
  - 120 years
15. Identify the one which is a drawback of most renewable energy sources.
- Unreliable supply
  - High waste disposal cost
  - Highly pollution inducing
  - High running cost
16. Observe and identify the one which is not a sink for carbon.
- Living beings
  - Ocean
  - Soil
  - Forest
17. Among all the options, which option describes Carbon Sequestration?
- Storage of CO<sub>2</sub> by depositing it in the reservoir
  - Removal of CO<sub>2</sub> from the atmosphere & storing it by depositing it in the reservoir
  - Storage of carbon dioxide by sedimentation
  - Removal of CO<sub>2</sub> from the atmosphere
18. Observe the given options and identify the one which is correct regarding the half-life period of methane.
- 10 years
  - 50-55 years
  - 28-36 years
  - 100 years
19. Which is NOT correct for the comparative contribution of different greenhouse gases to complete global warming?
- Methane – 20%
  - CFCs – 14%
  - Carbon dioxide – 60%
  - N<sub>2</sub>O – 12%

20. Which option is incorrect regarding greenhouse impact?
- a. Life on earth is possible due to the greenhouse effect.
  - b. More the emission of greenhouse gases, more the temperature of the earth's atmosphere.
  - c. Increased emission of greenhouse gases is a natural process.
  - d. The greenhouse effect is a natural process that maintains the earth's temperature.



**National Safety Council**  
Navi Mumbai