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Section : Industrial Safety

Q.1 How many existing central laws relating to health, safety and working conditions are consolidated under “Occupational Health, Safety and Working Conditions Code 2020”?

- A. 11
- B. 12
- C. 13
- D. 14

Ans ☒ 1. A
☒ 2. B
☒ 3. C
☒ 4. D

Question ID : 5834934103

Q.2 Pressure vessels fitted with burst discs are to be replaced once in

- A. 6 Months
- B. 12 Months
- C. 18 Months
- D. 24 Months

Ans ☒ 1. A
☒ 2. B
☒ 3. C
☒ 4. D

Question ID : 5834934113

Q.3 Activated carbon is used for

- A. Disinfection
- B. Removing hardness
- C. Removing odours
- D. Removing corrosiveness

Ans ☒ 1. A
☒ 2. B
☒ 3. C
☒ 4. D

Question ID : 5834934096

Q.4 As per ACGIH, the limit of non-ionizing radiation is.

- A. 1Wm^{-2} for period exceeding to 1000 sec and 1kJm^{-2} for period less than 1000 sec
- B. 10Wm^{-2} for period exceeding to 1000 sec and 1kJm^{-2} for period less than 1000 sec
- C. 1Wm^{-2} for period exceeding to 1000 sec and 10kJm^{-2} for period less than 1000 sec
- D. 10Wm^{-2} for period exceeding to 1000 sec and 10kJm^{-2} for period less than 1000 sec

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934120

Q.5 Checklist for Job Safety Analysis (JSA) consists of

- A. Work area, Material, Machine & tools
- B. Men, Machine, Material & tools
- C. Men, Machine, Work area & tools
- D. Men, Work area, Material & tools

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934075

Q.6 The theme of “National Safety Day 2022” was

- A. Cultivate and sustain a safety culture for building nation
- B. Nurture young minds – develop a safety culture
- C. Cultivate and motivate safety culture for building nation
- D. Reinforce positive environment at the workplace to achieve Safety & Health goals

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934074

Q.7 The total stored energy in human body with body capacitance of 200 pF and voltage potential of 12000 V is

- A. 0.0144 J
- B. 0.0288 J
- C. 0.0823 J
- D. 0.0913 J

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934094

Q.8 Calculate the theoretical capacity of the traffic lane with one-way traffic flow for the given data.

- i. Traffic flow at a stream speed = 40 kmph
- ii. Average center to center spacing of vehicles = 12.8 m

- A. 312.5 Vehicles/hour/lane
- B. 3125 Vehicles/hour/lane
- C. 3.125 Vehicles/hour/lane
- D. 31.25 Vehicles/hour/lane

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934108

Q.9 100 mA current passage through human body leads to

- A. Paralysis of respiratory muscles
- B. Ventricular fibrillation threshold
- C. Cardiac standstill and internal organ damage
- D. Fatal

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934092

Q.10 Representative gas for IIC gas group fittings is

- A. Methane
- B. Propane
- C. Ethylene
- D. Hydrogen

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934114

Q.11 Beyond which height a building is termed as high-rise buildings

- A. 15 m
- B. 20 m
- C. 25 m
- D. 30 m

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934087

Q.12 Name the theory which highlighted the importance of property damage incidents?

- A. Heinrich theory
- B. Domino Theory
- C. Iceberg Theory
- D. Frank Bird Theory

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934073

Q.13

1 kg of TNT is approximately equal to

- A. 3184 kJ
- B. 4184 kJ
- C. 5184 kJ
- D. 6184 kJ

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934077

Q.14

As per road accident survey for the year 2019 in India, the most probable reason for persons killed in road accidents are:

- A. Drunken driving / Consumption of alcohol & drugs
- B. Use of mobile phones
- C. Over speeding
- D. Driving on wrong side/ Lane indiscipline

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934107

Q.15

The required dielectric strength of insulating mat of Class C type is

- A. 30 kV
- B. 45 kV
- C. 65 kV
- D. 110 kV

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934121

Q.16 To avoid static charge buildup RH shall not be below

- A. 30%
- B. 40%
- C. 60%
- D. 80%

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934097

Q.17 As per ATEX code “T3” corresponds to a maximum surface temperature of

- A. 450°C
- B. 300°C
- C. 200°C
- D. 180°C

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934093

Q.18 What is the principal reason for wearing a dosimeter?

- A. It signifies that worker is authorized to work with radiation
- B. To record of individual's occupational radiation exposure history
- C. The use of the badge replaces the need for surveys in the lab
- D. It will absorb the radiation and reduce exposure level

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934118

Q.19 As per Factories Act 1948 which section describes about lifting machines, chains, ropes and lifting tackles

- A. 27
- B. 28
- C. 29
- D. 30

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934104

Q.20 In development of gas dispersion models, for prediction of the effects of an accidental release, which of the following properties of the gas is the most critical factor?

- A. Boiling point
- B. Flash point
- C. Density
- D. Wind speed and direction

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934099

Q.21 A constant factor which is used in converting ppm to mg/m^3 is

- A. 12.45
- B. 24.45
- C. 34.55
- D. 44.55

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934083

Q.22 Which of the following compounds is widely used for algae control?

- A. Sodium Sulphate
- B. Copper Sulphate
- C. Sodium Chloride
- D. Calcium Chloride

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934098

Q.23 In India, MSDS has been mandated under which law?

- A. The Manufacture, Storage and Import of Hazardous Chemicals Rules 1989
- B. The Chemical Accidents (Emergency Planning, Preparedness and Response) Rules 1996
- C. The Factories Act, 1948
- D. The Environmental (Protection) Act 1986

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934101

Q.24 What is the minimum age required to appoint apprentice in a factory?

- A. 15
- B. 16
- C. 17
- D. 18

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934102

Q.25 Which of the following statistical distribution can be used to compare sample means?

- A. Chi-Square
- B. Normal
- C. t test
- D. Exponential

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934112

Q.26 Fanning type inversion occurs during

- A. Day time
- B. Night time
- C. Cloudy day time
- D. Cloudy evening time

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934100

Q.27 The operational proof test of a chain pulley block shall be subjected to _____ times of WLL. (When each tooth of the gear comes under load)

- A. 1.5 times
- B. 1.25 times
- C. 1.1 times
- D. 1.2 times

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934106

Q.28 Reportable accidents are defined as an accident which causes bodily injury by reason of which the person injured is prevented from working for a period of

- A. 12 hours or more
- B. 24 hours or more
- C. 48 hours or more
- D. 72 hours or more

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934072

Q.29 A unit for measuring the amount of gamma or X rays in air is termed as

- A. Rad
- B. Rem
- C. Roentgen
- D. Curie

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934119

Q.30 What should be the minimum electrical clearances as per IE rules 1956 for uninsulated electrical conductor operating at 220 KV

- A. 3.05 m
- B. 5.20 m
- C. 6.10 m
- D. 7.00 m

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934095

Q.31 Materials that can block radiation has

- A. High density with low atomic number
- B. High density with high atomic number
- C. Less density with low electro negativity
- D. High density with high electro negativity

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934110

Q.32 The decibel level of common sounds between 100-125 dB are termed as

- A. Loud
- B. Uncomfortable
- C. Severe
- D. Dangerous

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934084

Q.33 Atmospheric lifetime of Halon 1301 is

- A. 12 Years
- B. 25 Years
- C. 45 Years
- D. 65 Years

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934086

Q.34 Respirable particulate matter will be in the size of

- A. 0.1 to 5 microns
- B. 0.2 to 10 microns
- C. 0.1 to 20 microns
- D. 0.2 to 25 microns

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934082

Q.35 For High hazard building what should be the minimum pressure required at furthest point

- A. 3.5 bar
- B. 5.25 bar
- C. 7 bar
- D. 8 bar

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934088

Q.36 Very early smoke detection and aspiration system has the sensitivity range of

- A. 0.005 to 20 % obs/m
- B. 0.001 to 4 % obs/m
- C. 0.003 to 10% obs/m
- D. 0.02 to 5% obs/m

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934090

Q.37 National Safety Council of India has how many chapters across India as on Jan 2022?

- A. 35
- B. 28
- C. 20
- D. 17

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934076

Q.38 The overall dimension of the emergency information panel for the transportation of hazardous good is

- A. 600 x 400 mm
- B. 800 x 600 mm
- C. 1200 x 800 mm
- D. 1200 x 900 mm

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934078

Q.39 The NIOSH Standard for exposure levels to chemical are denoted as

- A. TLV
- B. PEL
- C. REL
- D. STEL

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934111

Q.40 All of these forms explosive dust except

- A. Starch
- B. Pulverized Mica
- C. Sulphur
- D. Soyabean flower

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934081

Q.41 Globally Harmonized System (GHS) uses how many classes of hazards?

- A. Three
- B. Four
- C. Five
- D. Six

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934116

Q.42 After how many years/period MSDS sheets are normally required to be updated?

- A. Every Year
- B. Every 2 Years
- C. Every 3 Years
- D. Every 5 Years

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934079

Q.43 Poor Air Quality Index is denoted by the range of

- A. 51 – 100
- B. 101 – 200
- C. 201 – 300
- D. 301 – 400

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934115

Q.44

The flammability range of LPG is

- A. 3.2 to 12.1 % in air
- B. 5.5 to 27.3 % in air
- C. 1.8 to 9.5 % in air
- D. 2.2 to 19.5 % in air

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934089

Q.45 Body which regulates the transport of radioactive material within India is

- A. BARC
- B. AERB
- C. IGCAR
- D. NPCIL

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934109

Q.46 Assigned Protection Factor (APF) for N95 respirator is of the order of

- A. 5
- B. 10
- C. 50
- D. 100

Ans  1. A
 2. B
 3. C
 4. D

Question ID : 5834934117

Q.47 What is the chemical name of FM200 Fire Suppression agent

- A. Penta Fluro Ethane
- B. Hepta Fluro Propane
- C. Chloro Difluro Methane
- D. Chloro Tetra Fluro Ethane

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934080

Q.48 Name the flammable gas which is generated during charging of Lead Acid batteries

- A. Hydrogen
- B. Acetylene
- C. Methane
- D. Ammonia

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934091

Q.49 Prolonged static posture and heat exposure results in

- A. Heat stress and varicose
- B. Heat syncope
- C. Heat rash
- D. Heat cramp

Ans  1. A

 2. B

 3. C

 4. D

Question ID : 5834934085

Q.50 Kink in a steel wire rope is produced

- A. When the rope is permanently elongated due to overloading
- B. When some strands are broken
- C. When a rope with a loop or twist in its length is pulled tight
- D. When the rope loses its springing action

Ans  1. A

 2. B

 3. C

 4. D

Question ID : **5834934105**