CENTRAL BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVT. OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

FSS033-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS033-02 SAFETY HEALTH & ENVIRONMENTAL MANAGEMENT

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) If worker is not able Lo work atleast for 21 days after the accident is called _____

2) If after the accident worker rejoin back within 24 hours is called _____

3) Working on the machine by making safety device non-operative is an _____

4) Play during working at work place is _____

5) Accidents are of _____ types.

6) If worker is not able to work for more than 48 hours is called _____

7) Injury rate is _____

8) Severity Rate is _____

9) To work in confined space _____ work permit is required.

10) PEL full form is _____

11) If death of person is occurring during accident is called _____ accident.

12) SCBA set, air supply filter are _____ personal protective equipments.

13) To issue a work permit in tank min. % of oxygen required is _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Define "competent person" as per factory act 1948?
2) Define "young person" as per factory act 1948?
3) What is Dust?
4) What is Risk assessment?
5) What is Workpermit System?
6) What is legal requirement?
7) What is confined space?
8) What is JSA?
9) What is unsafe act?
10) What is unsafe condition?
11) What is unsafe condition?
12) What is LC50?
13) What is HAZOP?
14) What is lost time accident?
15) What is fatal accident?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain the section 27 & 28 or factory act 1948, chapter-IV?
2) Heinrich theory?
3) Explain 5E of accident prevention?
4) What are work permit system and its type?
5) Explain any 3 schedule of chapter III of factory act 1948?
6) Write the hazards in confined space.
7) Explain HAZOP or HIRA in detail.
8) Explain different types of chemical effects?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) What is confined space? Hazards in confined space and safely precaution needed during working in confined space?
2) What is emergency? Write On site emergency plan in detail?
3) Write the name all schedule of chapter III of factory act 1948?
4) Explain safety precaution required for the storage of gas cylinders?
5) What is HAZOP, guide words, benefits with example?

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FSS033-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS033-03 SAFETY ENGINEERING

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Frequency rate formula is _____

2) For Alcohol in storage area _____ type extinguishers is best.

3) IS code of safety goggle is _____

4) IS code of beltis _____

5) IS code of ear plugis _____

6) Construction work comes under _____ act.

7) If workers is moving on the sharp parts at construction site _____ PPE's is mandatory.

8) Safety belt is mandatory at _____ height.

9) Length of lanyard of full body harness is _____

10) Most common crane used at construction site is _____

11) Working with welding machine _____ permit is required.

12) Permits are _____ types.

13) For metal fire _____ extinguisher is required.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Define excavation? Any two hazards in construction:
2) Write the hazards during working on electric pole?
3) Write the safety measure in excavation work?
4) What is welding? Any two safety measure?
5) What is Accident rate?
6) Any two hazards in gas cutting operations?
7) Define rigger?
8) What is hazard and explain any two hazards during working on tower crane?
9) Any-two hazards in painting?
10) Which extinguisher in best used in electricity?
11) Explain hazards in cutting operations?
12) Explain hazards in gas cylinder (Oxygen) handlings?
13) Make a sketch of step cutting during excavation.
14) Hazards of overhead electrical lines?
15) Hazards in pipelines works?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Safety precautions during working road?
2) Write 1O hazards in power plant construction work?
3) What is Scaffolding and its types?
4) Define any five parts or scaffolding?
5) Write the hazards in glass cleaning work at high rise building?
6) What Safety measure is required during manual handling?
7) What is excavation and hazards in excavation?
8) Write hazards in building construction activities?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Make a sheet of JSA of activity of working at height?
2) Hazards in sand blasting operations?
3) Write in detail about tower crane or Overhead crane with sketch?
4) Write any 15 hazards in construction work?
5) What is accident with example, injury, frequency rate, severity rate?

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FSS033-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS033-05 SAFETY HEALTH & ENVIRONMENTAL LEGISLATION

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Technology is a _____ Environment.

2) Rain is a _____ environment.

3) Freedom from those conditions which cause injury to person, damage to property or a environment is called _____

4) The potential to cause injury to a person, damage to property or an environment called _____

5) The probability to cause injury to a person, damage to property or an environment called _____

6) Surrounding around us in which organism live and thus consist of air, water, food and sunlight is known as _____

7) Environment is of _____ types.

8) Forest, land is a _____ environment.

9) Housing, technology is a _____ environment

10) Yellowing color of TAJMAHAL is due to _____

11) In normal _____ lux illumination is required.

12) For fine assembly work _____ lux illumination is required.

13) For fine work _____ lux illumination is required.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Name any two manmade environments?
2) Name any 2 natural environments?
3) What is pollution?
4) What is water pollution?
5) What is land pollution?
6) What is ergonomics?
7) What are biotic components?
8) What is housekeeping?
9) What is first aid?
10) What is Abiotic Component?
11) What is noise?
12) What is environment?
13) What is environment pollution?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain types of environment?
2) Write any five environment destructive activities?
3) What is soil pollution and source of soil pollution?
4) What is water pollution and explain various source of water?
5) What is noise and types of noise?
6) Explain classification of ventilation?
7) Explain the concept of ozone?
8) What is air pollution and source of air pollution?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Write any 10 effect of ozone holes
2) Explain Nitrogen cycle or environment policy?
3) Explain Hydrological cycle?
4) What is solid waste management and its sources?
5) Explain Aerobic process?

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FSS033-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS033-06 INDUSTRIAL HYGIENE & OCCUPATIONAL HEALTH

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) The potential to cause injury to a person, damage to property or an environment is called _____

2) The probability to cause injury to a person, damage to property or an environment is called _____

3) Medical checkup of employees in hazardous industry is mandatory in _____ months.

4) Medical checkup of employees in non-hazardous industry is mandatory in _____ months.

5) Exposure of coal dust lead to _____ occupational diseases.

6) Vibration lead to _____ diseases.

7) Improper posture of body during office work lead to _____ hazard.

8) In Computer office _____ lux illumination is required.

9) For rough work _____ lux illumination is required.

10) For fine work _____ lux illumination is required.

11) White finger is a occupational disease occur due to _____

12) Exposure of coals dust beyond TLV leads to _____ diseases.

13) Freedom from those conditions which cause injury to person, damage to property or an environment is called _____

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) What is Industrial hygiene?
2) What is housekeeping?
3) What is first aid?
4) What are Communicable diseases?
5) What is noise?
6) Name any two biological hazards?
7) Name any two chemical hazards?
8) What is occupation Health?
9) What is occupational disease?
10) How many occupational diseases are listed in factory act 1948?
11) Which schedule give information about occupational diseases in factory act 1948?
12) What is food sanitation?
13) What is ergonomics?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Explain about community health?
2) Principal of first aid?
3) Explain occupational Dermatitis?
4) Explain five hazardous factors and their effect on health?
5) Define any five occupational diseases?
6) Explain diseases of lungs caused due to dust?
7) What is water pollution and explain various source of water?
8) What is noise and types of noise?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Explain in detail about preventive measure of occupational diseases?
2) Write about stress management in detail?
3) Explain care of eyes, car, nose, throat, teeth and skin?
4) Write the safety measure to improve housekeeping?
5) Explain factory act 1948 health provision (Section 11-20)?

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FSS033-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS033-07 SAFETY IN CHEMICAL & CONSTRUCTION INDUSTRY

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Severity rate formula is _____

2) For Toluene in storage area _____ type extinguishers is best.

3) IS code of safety goggle is _____

4) IS code of belt is _____

5) IS code of ear plug is _____

6) Construction work comes under _____ act.

7) If workers is moving on the sharp parts at construction site _____ PPE's is mandatory.

8) Safety belt is mandatory at _____ height.

9) Length of lanyard of full body harness is _____

10) Most common crane used at construction site is _____

11) Working with welding machine _____ permit is required.

12) Permits are _____ types.

13) For metal fire _____ extinguisher is required.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Hazards in use of slings
2) Write the hazards on ladder?
3) Write the safety measure in excavation work?
4) What is welding? Any two safety measure?
5) What is Accident rate?
6) Any two hazards in gas cutting operations?
7) Define safety?
8) What is hazard and explain any two hazards during working on scaffolding?
9) Any two hazards in cutting work?
10) Which extinguisher is best used on electricity fire?
11) Explain hazards in cutting operations?
12) Explain hazards in gas cylinder (Oxygen) handlings?
13) Make a sketch of step cutting during excavation.
14) Hazards of overhead electrical lines?
15) Hazards in pipelines works?

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Safety precautions during work of tower?
2) Write 10 hazards in power plant construction work?
3) What is Scaffolding and its types?
4) Define any five parts of scaffolding?
5) Write the hazards in glass cleaning work at high rise building?
6) What Safety measure is required during manual handling?
7) What is excavation and hazards in excavation?
8) Write hazards in building construction activities?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) Make a sheet of JSA of activity of working at height?
2) Hazards in sand blasting operations?
3) Write in detail about tower crane or Overhead crane with sketch?
4) Write any 15 hazards in construction work?
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