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

FSS003-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS003-01 COMMUNICATIVE ENGLISH AND COMPUTER FUNDAMENTALS

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 tiger _____ A deer

2) He is running _____ the road.

3) When _____ you meet him.

4) Let the door _____ opened.

5) Mouse is an _____ device

6) The letters in computer application is called _____

7) _____ is called father of computer

8) _____ is example for network operating system.(windows nt)

9) To colour a picture _____ is used

10) In C++ the error contents are based on _____

11) Who is the father of computer _____

12) She is _____ B.sc graduate

13) Rama was _____ ideal student

14) Pronouns are used instead of _____

15) Vowels are _____

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

1) Define what is noun?
2) What are the types of letters?
3) What is preposition?
4) What is meant by transitive verb?
5) Define software?
6) MS access
7) Digital computer
8) Clauses
9) Object
10) MS Access
11) Write the usage of Transformation?
12) Write about characteritics of computer?
13) Define Adjective?
14) Define keyboard?
15) Informal letter

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

1) Explain informal letter?
2) Explain few sentences using "across, at"?
3) Define degrees of comparison
4) Explain RAM and ROM
5) Custom filter
6) Line Tool
7) Substance abuse
8) Checking an injured (or) ill child (or) infant

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

1) Write a letter to the station master requesting him to reserve two coaches for your school excursion party
2) Explain briefly the job descriptions
3) Describe MS Windows
4) Explain structure of computer
5) What is Mail Merge

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FSS003-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS003-02 PHYSICS & CHEMISTRY - FUNDAMENTALS

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) Mechanical energy may be converted to heat energy due to _____

2) _____ is an energy unit which is used for all forms of energy.

3) Temperature is measured either on a _____ scale or by a _____ scale.

4) The _____ is defined as the quantity of heat required to raise the temperature of 1gm of water

5) _____ is made up of many atoms.

6) Noise should not exceed the limit of _____ db.

7) An accident which does not result any injury/death /and any other loss is known as _____

8) An injury due to which an employee cannot join back within 48 hours is called _____

9) Excessive work load is _____ hazard

10) Main reason that cause accidents are _____ and _____

11) Work environment should be _____ and healthy.

12) Health hazards such as _____ affect human health.

13) A physical harm to the body by _____

14) IOL and NGO stands for _____

15) Slipping on wet floor is _____ hazard.

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

1) How many type of class fire?
2) Electrical fire used what type of fire extinguisher?
3) Explain double hydrant?
4) How many fire extinguishing methods?
5) What is the meaning of the CFT?
6) What are they Fire engineer?
7) What are the sprinkler systems?
8) Explain the following to Electrical Fire?
9) How many type of fire fighting systems?
10) Define near miss accident?
11) Define hazard?
12) Define injury?
13) Define accident?
14) What is the conventional method of power production?
15) Explain M5DS?

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

1) Explain the working of a water sprinkler with a needsketh?
2) What is metallurgy?
3) Briefly explain about the highly hazardous chemicals?
4) Wright the types of metals?.
5) Safety in oil refinery?
6) Explain fire and safety precaution in oil fire station?
7) Explain the fire emergency planning".
8) Explain about work permit system?

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

1) Explain the working of a water sprinkler with a needsketh?
2) State briefly firefighting procedures adopted in chemical fire?
3) Explain safety in cylinder Handling?
4) Write Types of pump and ladders?
5) Write safe procedure in chemical Industry?

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FSS003-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS003-03 BASIC 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) An incident which does not result in any injury, death or any other loss is known as _____

2) A _____ can be defined as a accident that has potential to cause serious injury of loss of life.

3) The _____ and _____ cost of an accident must be carefully assessed and records must be maintained

4) _____ is the largest single organ in the body of fibrous tissues.

5) Which of the following are covered in welfare measures under the factories Act?

6) Define Life Line Signals

7) What is meant by thermal cutting equipment

8) _____ aims to reduce flood damage.

9) _____ and _____ are the main effects created by earthquakes.

10) Tankers used to transport hazardous materials on vehicles must be marked with _____

11) When transporting hazardous loads, you must check the tires at least _____

12) Special requirements for hazardous materials shipping papers include _____

13) Leader means _____

14) Your first appearance is your _____

15) Training starts with _____

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

1) What do you mean by unsafe conditions?
2) Define work permit? And its types.
3) Define PPE?
4) What are the causes of accident theory?
5) What is ERT stands for?
6) Flash point of petrol is?
7) Define safety?
8) Gas welding equipments consist of what materials?
9) Mention the types of droughts?
10) What is meant by bio-terrorism?
11) What is an environmental hazard?
12) What do you mean by disaster occurrence?
13) Identify three major mitigation measures to reduce earthquake risk?
14) Can Work Safe measure the levels of airborne chemical contaminants in my workplace?
15) What are the sprinkler systems?

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

1) How is JSA Created?
2) Mention some of the safety organization and its functions?
3) What accident should be investigated?
4) What are the Unsafe conditions?
5) Explain on-site emergency planning?
6) What are the safety promotional activities?
7) Discuss the method of measuring risk and danger?
8) How to do relating to Lifting cranes?

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

1) Explain the main function of supervisor?
2) How tremors are occurring? Describe the safe design of building to over come this?
3) Different between Education and Training?
4) Explain the working of a water sprinkler with a need sketch?
5) What about foams and their fire fighting systems?

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FSS003-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS003-04 OCCUPATION HEALTH & SAFETY

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 form of energy that produce the sensation of hearing is called _____

2) Any one example of physical pollutants _____

3) _____ is known as quick silver and is liquid at room Temperature.

4) MAC stands for _____

5) Asbestos dust can cause a form of pneumoconiosis called _____

6) TDS stands for _____

7) Define Hydraulics

8) Light (Luminous) source is evaluated by the unit of _____

9) Which of the following have been provided for the workmen to work in hot atmosphere? _____

10) The purpose of ventilation is to _____ the work area according to the requirement

11) The exhaust system which is the most effective in removing contaminants from the point of origin is _____

12) As per Indian standard Is : 3646 is _____

13) _____ analysis is a supplement to HAZOP studies

14) Excessive work load is _____ hazard

15) Work environment should be _____ and healthy

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

1) What is Ecology?
2) Define Good Housekeeping?
3) Explain about ESP?
4) What is on-the job safety?
5) Define Repetitive work?
6) Define TLV?
7) Name the categories of TLV's?
8) Mention some of the disease caused by bacteria?
9) Define Electromagnetic sensor?
10) What are the three purpose of Disaster aid?
11) What are the two alternatives of the risk manager?
12) What related common diseases?
13) Human being in general can Fair with stand a temperature how many Fern heif?
14) Occupational Diseases or Health Hazards chemicals name writing?
15) How do we know if a substance we heave purchased for use at work is 'hazardous substance' or not?

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

1) Explain five common occupational injuries?
2) Give a short note on Home safety & its Benefits?
3) What are the tips for safety during an earthquake?
4) Explain about the occupational disease dermatitis and its control measures?
5) What are the ways of imroving mental health at work?
6) Write about LPG in detail
7) Describe the safety in manual handling?
8) What are the factors affecting heat-balance of the body?

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

1) What are the hazards of pollutants for occupational health an environment?
2) What are the safety measures in using of L.P.G in home?
3) Explain the promotive of occupational health and safety?
4) Explain Noise and Types of NOISE?
5) How cost effectiveness of risk assessment in identified?

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FSS003-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS003-05 FIRE PREVENTION & CONTROL

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) Proper _____ activities reduce accidents and losses

2) What are the types of water relay

3) You must carry a gas mask with you when transporting _____

4) Define safety?

5) _____ PPE is used to control the noise problem

6) For what purpose chair knots is used?

7) ILO was inaugurated in the year _____

8) Fire triangle consists of _____, _____ and _____

9) Class D fire is _____?

10) The elements of fire triangle is _____, _____ and _____

11) _____ is substances that have no shapes and or volume of their own.

12) An atom consists of and_____, _____ and _____

13) "A" class fire is called _____

14) Smothering is the method of _____

15) LPG is _____ than air.

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

1) What are the fire fighting techniques?
2) What is cooling?
3) What is delivery hose?
4) Sprinkler systems are how many types?
5) For hand protection what PPE used?
6) Define FIRE?
7) Define Fire extinguisher?
8) Define Centrifugal pump?
9) Define Density?
10) Define Exothermic reaction 6)Explain Convection?
11) Write 4 principal to Extinguish the fire?
12) Explain about High pressure pump?
13) What is ship?
14) Write the purpose of C02 horn?
15) Define fire man axe?

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

1) What are smoke detectors and its types?
2) Explain fire extinguishing method?
3) Explain types of burns / scalds?
4) Calculate degree Fahrenheit of 100 degree centigrade of water?
5) What is the discharge in liters per minute of 20 mm. nozzle with a nozzle pressure 4 Bars?
6) Write about the first - aid treatment of Burn injury?
7) Write about LPG Leakage tn fifth floor of a multistoried building?
8) Write about Salvage?

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

1) Explain dry chemical powder extinguisher?
2) What are the types of positive displacement pumps, explain briefly?
3) 27 cubic meter water reservoir, capacity of a centrifugal pump is 400 GPM, State the actual time to exhaust the water for firefighting purpose with two nozzles 1" dia?
4) Write about Extension ladder?
5) Write about Cooling system?

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FSS003-BSS DIPLOMA IN INDUSTRIAL SAFETY

ONE YEAR EXAMINATION NOVEMBER-2025

FSS003-06 INDUSTRIAL SAFETY

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) Generator sets shall be located at level _____ feel from building or materials that may catch fire.
2) AFFF stands for _____
3) In every factory where in one thousand or more workers are employed, all other factories involving manufacturing process with risk to bodily injury on disease _____ should be appointed
4) HCN means _____
5) When an alternating current is passed through a wire and induces a current in another wire parallel to it, a form of heat is called _____
6) _____ may be defined as something which possesses mass and occupy space.
7) _____ can be defined as a harmful condition sustained by the body.
8) LPG can cause _____ contact with the skin.
9) There is _____ type of pollutant in OH.
10) The form of energy that produces the sensation of hearing is called _____
11) _____ kills most people in fires?
12) Convection occur in _____
13) _____ techniques can be effectively employed to treat the casualties.
14) Supporting documents are procured to satisfy a permit user regarding safety precautions are _____?
15) The name of gas contain within the cylinder shall be clearly stenciled in letter not less than _____ cm height on the cylinder body.

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

1) What are they safety Tag systems?
2) Explain short notes of excavation?
3) How will you identify the hazard?
4) How do we know I have asbestos containing material?
5) What is prime mover?
6) What is T - Square?
7) What hazards are mainly occurred in electric welding work?
8) How will you detect the gas leakage?
9) Define personal production?
10) Define Industrial health?
11) Identify the various routes of entry of chemicals
12) Explain excavation?
13) Define Green House effect?
14) What are the biological pollutants?
15) How to prevent the occupational health problems?

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

1) Safety fundamentals explain?
2) Explain - ventilation for special operations?
3) Explain the fundamentals of loss control?
4) What are the factors affecting the erosion rate?
5) What are the hazard and prevention measure for forklift safety?
6) How do you assess the fire damage to concrete structural members?
7) Give a short note on emergency planning & emergency preparedness?
8) How is JSA Created?

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

1) Describe the need for permit in the work system design a format and write down the procedure for a vessel entry permit systems?
2) List the Do's and Don'ts of a welder?
3) Define Disease. Explain Communicable and Non-communicable Diseases with examples.
4) What is artificial lighting? Why we require artificial lighting?
5) What are the responsibilities of an employer in an organization?