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

FSS001-BSS DIPLOMA IN FIRE & SAFETY METHODS

ONE YEAR EXAMINATION NOVEMBER-2025

FSS001-01 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) _____ Lotus is lovely flowers

2) I _____ coffee everyday

3) My school is _____ the church.

4) 'WH' type word _____

5) _____ is father of computer

6) The 2nd hard disk of P.C. is called _____

7) I have _____ car

8) RAM stands for _____

9) Computers can only understand _____ language

10) The tool bar contains _____ related to the _____

11) _____ key is also used to select spelling command

12) _____ is the first computer programmer

13) Who is the father of computer _____

14) Shortcut key for paste is _____

15) That is _____ Parrot.

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

1) Define formation of noun words?
2) CPU
3) Key board
4) Define software?
5) What is input and output unit
6) Backup
7) Write short notes on 'macro'
8) Noun phrase
9) Computer
10) Prefixes
11) Noun phrase
12) Define Verb
13) Define Mouse
14) Define Subject
15) What is an Interjection?

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

1) Define usage of interjection?
2) Explain few sentences using "behind, beneath"?
3) Define what is meant by omission of article?
4) Write a letter to the inspector of police about the theft of your bicycle
5) Formal menu
6) Briefly explain the table menu in MS Excel
7) Hybrid computer
8) Edit

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

1) Write a letter to your father asking permission join the N.C.C?
2) What are the advantages of using computer in the Modern Field.
3) Functions of Word Processing?
4) Explain about MS Excel application
5) Draw the block diagram of basic computer organisation and explain?

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FSS001-BSS DIPLOMA IN FIRE & SAFETY METHODS

ONE YEAR EXAMINATION NOVEMBER-2025

FSS001-02 PHYSICS AND 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) _____ is a chemical change brought about by heat

2) Class A fire _____

3) BTU stands for _____

4) SO2 means _____

5) If a substance has a vapor density of 1.5, it is _____ times as heavy as air

6) _____ is the discharge of electrical charge on one cloud to an opposite charge on another cloud or on the ground.

7) _____ is an electrical charge that accumulates on the surfaces of two materials that have been brought together and then separated.

8) _____ is the science of the compositions of the substance their properties and reaction

9) Molecules are composed of even smaller particle, which are known as _____

10) _____ are the foundation of all substances

11) The number of protons found in the nucleus is known as _____

12) The term bond describes the _____ that holds the molecule together

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

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

15) _____ cannot be split chemically into anything smaller.

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

1) Fire fighters are transported to the place of fire through which vehicle?
2) What is combustion?
3) What represents each sides of triangle?
4) What is fire point?
5) What are the major fire fighting appliances?
6) What are the minor fire fighting appliances?
7) Explain halon extinguisher?
8) What are the three specification of Fire protective clothing?
9) Man made ropes are manufactured by what?
10) What is matter?
11) What is fire tetrahedroon?
12) Explain Wrenchers?
13) What is Breechings?
14) What is Class B fire consist of?
15) What are the elements of fire?

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

1) Explain the classifications of the fire?
2) Explain about any two extinguishing agents?
3) What are the advantages of dry chemical extinguisher?
4) Explain about the advantages of centinfugal pumps?
5) what are the advantages and disadvantage of Inline Inductors?
6) Write a short note on Double acting force pump?
7) What are the main categories of foam making equipments based?
8) Explain about the fire protective clothing?

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

1) Explain about any four types of extinguishers?
2) Define the lifecycle of fire?
3) What are the precautions to be taken while recharging?
4) Explain - centrifugal pump?
5) Explain the types of breechings?

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FSS001-BSS DIPLOMA IN FIRE & SAFETY METHODS

ONE YEAR EXAMINATION NOVEMBER-2025

FSS001-03 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) _____ is an unplanned or unexpected event which causes or is likely to cause injury to a person, damage to property or environment.
2) The _____ covers the body like a shield from the external environment
3) _____ ventilation depends on the wind speed and wind direction
4) _____ is defined as harmful condition sustained but the body as the result of an accident.
5) If an employee cannot join back for job within 48 hours it is considered as a _____
6) WIC stands for _____
7) Take _____ permit from authorized persons.
8) What are the 3 groups of small gears
9) If a worker finds a controlled product with a torn or illegible label, or if it has no label, he or she must _____
10) Which of the following are the three main elements of WHMIS?
11) Which of the following best describes the storage requirements for propane?
12) The worker is responsible for attaching supplier labels to controlled products _____
13) When transporting compressed gases, you must _____
14) Example for non-verbal communication is _____
15) _____ is more important in leadership

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

1) What is hot work permit?
2) What do you mean by unsafe conditions?
3) What are the hazards for electric welding work?
4) Name any Three Precautions for using Ladder out of Fire?
5) Define Injury?
6) What is rehabilitation?
7) What is an assembly point?
8) What is supervisor's accident report?
9) What are the two distinct tsunami warning systems?
10) Define warning?
11) What do you mean by disaster occurrence?
12) What will you do for an emergency communication?
13) What is a MSDS?
14) How do we know if we need to measure the levels of chemicals in air at my workplace?
15) What are characteristics of a Fire Pump?

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

1) What are the steps involved in Fault Tree Analysis?
2) What are the sequences of an accident?
3) Explain on-site emergency planning?
4) Explain safety committee meeting?
5) Differentiate Natural Disasters and Man made Disasters with examples.
6) What is the cause for Earthquakes? How they are measured? Which parts of India are more vulnerable for frequent earthquakes?
7) What are the difficulties faced by the Management when there is a group clash between the workers? How such a situation could be managed?
8) What precautionary measures have to be taken to avoid accidents to labourers in the Industry in a workshop / during handling of dangerous Chemicals / during construction of buildings / during the building maintenance works.

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

1) Explain in detail about Machine Guarding?
2) What are the accident prevention methods followed in the industries?
3) Describe the various biological hazards?
4) Describe the multiple causation theory and explain it with suitable examples?
5) Different between Education and Training?

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FSS001-BSS DIPLOMA IN FIRE & SAFETY METHODS

ONE YEAR EXAMINATION NOVEMBER-2025

FSS001-04 OCCUPATIONAL HEALTH AND 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) _____ is an example of communicable disease

2) _____ is one of the important aspects of safety in factory, office, as well as house.

3) _____ is a disease among sheep, goats, cattle, etc.

4) _____ is one of the important aspects of safety in factory, office, as well as house

5) There is _____ type of pollutant in OH.

6) Entry of airborne substance through the lung is called _____

7) The Asbestos dust can cause _____ diseases.

8) Ecosystem usually has _____ as source of energy

9) _____ is a common cause of musculoskeltetal Injuries and diseases.

10) What is meant by halons

11) A man may collapse at core Temperature of _____

12) Noise level below _____ decibel is considered to be safe for human

13) The unit of illumination is _____

14) _____ is a type of storm that precipitates chunks of ice

15) TLC stands for _____

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

1) What are the types of injury?
2) What are the methods of chemicals entry route in to human body?
3) Define Acid rain?
4) Explain about ESP?
5) What is the causes of main water pollutions?
6) What do you mean by effective dosage?
7) Expand HBLV?
8) What are the two types of dermatisis agents?
9) What are the basic considerations for good lighting?
10) Define corrected effective temperature?
11) Define house keeping?
12) What are the aims of ergonomics?
13) What is prime mover?
14) Define wave action?
15) What is the heat balance equation?

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

1) Briefly about the prevention of occupational health problems?
2) Explain the combination of gaseous and particulate contaminants?
3) Explain fire tetrahedron in detail
4) Explain the types of Lighting?
5) Describe the various material handling equipments?
6) What are the general need and advantages of good lighting?
7) What are the factors affecting heat-balance of the body?
8) Draw and explain fault tree analysis?

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

1) Describe ILO and WHO guidelines on Industrial Hygiene.
2) What are the safety measures in using of L.P.G in home?
3) Mention the hazards of an abstract of risk assessment study in an industry?
4) Explain c. Types of light d. Sources e. Fittings
5) Explain the types of landslides?