

<b>C-1396</b>
---------------

<b>Sub. Code</b>
------------------

<b>90311</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire and Industrial Safety Engineering**

**COMMUNICATIVE ENGLISH**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is education compared to?
2. What is the single largest repository of Power?
3. What punishment did the teacher give the boy?
4. What did the Duke of Cambridge always keep in his hands?
5. Name the four sections of People in Allahabad.
6. What literature did Margaret Atwood start reading?
7. Write two sentences using Past Perfect Tense.
8. Define Adverbs.

9. Change the following as directed :
- (a) Akbar was one of the wisest kings.  
(Change into Positive degree)
  - (b) America is richer than any other country in the world. (Change into Superlative degree)

10. Write any two sentences using definite article.

**Part B** (5 × 5 = 25)

Answer **all** questions.

11. (a) What is the duty of Society to the artist and the artist to Society?

Or

- (b) What are the different kinds of courage pinpointed by Indira Gandhi?

12. (a) Bring out the humour in the allusion to Steveson and its Modestine.

Or

- (b) What is the usefulness of forming habits?

13. (a) What does Sarojini Naidu say about the vision of Religion or Faith?

Or

- (b) Why did the animal stories and not those of Charles Dickens feel real to Margaret Atwood in her childhood days?

14. (a) What is a clause? Illustrate with examples.

Or

- (b) Illustrate the difference between common and proper noun.

15. (a) Write a short note on Indefinite articles.

Or

- (b) Complete the following sentences using suitable words to fill up the blanks:

- (i) I ask you \_\_\_\_\_ ring me up, whenever you are \_\_\_\_\_ need \_\_\_\_\_ money.
- (ii) There is no more pleasant way \_\_\_\_\_ spending one's holidays \_\_\_\_\_ seeing places of interest.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on “the essentials of education” according Livingstone.

Or

- (b) Write an essay on the conflict between the state and the artist.

17. (a) Show how the little “Crime and Punishment” is a satire on the new-tangled notions of teaching that a teacher has to practice.

Or

- (b) Write an essay on the books that Margaret Atwood enjoyed reading when she was a little girl. What reasons does she give for her preferences?

18. (a) Fill in the blanks with suitable prepositions:
- (i) \_\_\_\_\_ winning the semi-final, the team has qualified \_\_\_\_\_ the final.
  - (ii) We can always rely \_\_\_\_\_ the help \_\_\_\_\_ god.
  - (iii) Preoccupied \_\_\_\_\_ politics, he can't attend \_\_\_\_\_ personal matters.
  - (iv) I am very much obliged \_\_\_\_\_ you \_\_\_\_\_ your timely help.
  - (v) Let me introduce him \_\_\_\_\_ you; be acquainted \_\_\_\_\_ him.

Or

- (b) Write an essay on articles.
- \_\_\_\_\_

<b>C-1397</b>
---------------

<b>Sub. Code</b>
------------------

<b>90312</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire and Industrial Safety Engineering**

**FIRE SAFETY – PREVENTION AND CONTROL**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** the questions.

1. Define Fire.
2. Define First aid.
3. What is the Hazards presence while using LPG cylinder?
4. Give some Safety measures for customer at petrol pump.
5. What are the examples for Temporary occupancies?
6. Define active Fire protection system.
7. What is HAZCHEM code?
8. Write a HAZCHEM code for petrol.
9. What are the common causes of Electrical Fire?
10. List the Hazards in Welding operations.

**Part B** $(5 \times 5 = 25)$ Answer **all** the questions.

11. (a) What are the possible of Fire?  
Or  
(b) Write short notes on “Fire Insurance”.
12. (a) What are the types of Petrol tank farm and explain.  
Or  
(b) Write the properties and Hazards of Natural gas.
13. (a) Write short notes on Fire safety in Educational institutions.  
Or  
(b) How to escape from a High Rise Building in case of Fire?
14. (a) Write about HAZCHEM code for Road transport.  
Or  
(b) What are the common causes of Fire in Motor vehicles?
15. (a) Write short notes on Transformer installation.  
Or  
(b) Write Do’s and Don’ts for Handling of inverter.

**Part C** $(3 \times 10 = 30)$ Answer **all** the questions.

16. (a) Explain in detail about “Smoke Detector”.  
Or  
(b) Explain in detail about Fire safety measures in public places.

17. (a) Explain Factories act in detail.

Or

(b) What is Small scale Industries? and explain in detail about Fire safety procedures.

18. (a) Explain in detail about Transportation of Hazardous goods.

Or

(b) How to handle the Inverter safely and Effectively?

---

<b>C-1398</b>
---------------

<b>Sub. Code</b>
------------------

<b>90313</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire And Industrial Safety Engineering**

**LIFTING EQUIPMENTS AND TRANSPORT SAFETY**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are the types of Forklift?
2. Define Eye bolt.
3. What do you mean by Chain Pulley block?
4. What do you mean by Blind spot?
5. What is CNG and LNG?
6. Define Inspection.
7. List out the Types of Slings.
8. What is Factor of Safety?
9. What do you mean by Stacking?
10. What is the Angle between Two legs of a Sling?



**Part B****(5 × 5 = 25)**Answer **all** the questions.

11. (a) Write the Advantages and Disadvantages of a Diesel Forklift.

Or

- (b) What are the Controls to be checked in Forklift?

12. (a) Explain the Working Environment.

Or

- (b) Write the Fuel Saving Tips for Two wheelers.

13. (a) Expand the following Terms.

(i) HAZMAT

(ii) HAZCOM

(iii) EIP

(iv) SMPV

(v) CMVR

Or

- (b) Explain the Maintenance of a Vehicles.

14. (a) List out the parts of EOT crane

Or

- (b) What are the Elements of Defensive Driving?

15. (a) What are the Important points to Remember in Lifting?

Or

- (b) What are the Defects in Web Sling?

**Part C****(3 × 10 = 30)**Answer **all** the questions.

16. (a) Explain the Storage of Compressed Gas Cylinders.

Or

- (b) Explain Inspection and Maintenance of Forklift.

17. (a) Write the Safety Measures to be followed in Chain pulley block.

Or

- (b) Explain the Safety Precautions in the storage of Hydrocarbons.

18. (a) Explain in detail about Manual handling.

Or

- (b) Explain the Safe Lifting Techniques.
-

<b>C-1399</b>
---------------

<b>Sub. Code</b>
------------------

<b>90314</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire and Industrial Safety Engineering**

**OCCUPATIONAL, HEALTH AND SAFETY  
MANAGEMENT**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What is meant by “NIP” points?
2. How to avoid Eye-injuries due to working in machine?
3. What is meant by an Anemometer?
4. How to operator protected from the heat?
5. What is meant by Dust?
6. What are the types of Gases?
7. What is meant by “STATIC LOAD”?
8. What are the disadvantages of shift work?
9. What is the aim of check list?
10. What is the importance of safety and hygiene practices?

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) What are the safety requirements should meet in the motorized vehicles?

Or

- (b) Explain “safety requirements for machinery”.

12. (a) Explain any five points to keep the workplace cooler.

Or

- (b) Explain the term

(i) Heat exhaustion

(ii) Heat stroke.

13. (a) Explain Fumes and Smoke.

Or

- (b) Explain the ventilation on Chemical sites

14. (a) Explain proper foot wear.

Or

- (b) How to reduce the discomfort when working in sitting work?

15. (a) Briefly explain the objective of safety and health.

Or

- (b) Explain the work place Inspection record.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain electricity and its risks.

Or

- (b) Explain different types of tools and what are injuries occurs to the tool use.?

17. (a) Explain the methods of noise controls.

Or

- (b) Explain the PPE used in chemical site.

18. (a) Explain the following terms

- (i) Signal display and panels
- (ii) Location of signal and display.

Or

- (b) Explain the terms :

- (i) Canteen service
- (ii) Welfare facilities to improve living condition.

---

**C-1400**

**Sub. Code**

**90315**

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire and Industrial Safety Engineering**

**SAFETY ON ELECTRICAL AND CHEMICAL HAZARDS**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define — Electric shock.
2. Write a first aid procedure to electrical burns.
3. List out any four electro static hazards.
4. What is current?
5. Define — MSDS.
6. Define — acid and base.
7. What is genetic effect?
8. List out any four chapters of the factories act 1948.
9. Define — MSIHC.
10. Different between temporary and permanent installation.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the instruction to avoid electrical injuries.

Or

- (b) Explain in detail about:
- (i) ELCB
  - (ii) RCCB.

12. (a) Explain any two electrical safety program.

Or

- (b) Explain charge generating mechanism.

13. (a) Explain the way to chemical entering into our body.

Or

- (b) Explain air contaminants.

14. (a) Briefly explain the international standards.

Or

- (b) Explain the general duties of occupier.

15. (a) Explain the safety audit and safety report.

Or

- (b) Explain the classification of inflammable liquids and control measures.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the import of hazardous chemical.

Or

- (b) Explain the ON SITE and OFF SITE emergency plan.

17. (a) Briefly explain about personal protective equipment.

Or

- (b) Methods of controlling the static electricity.

18. (a) Explain in detail about:

- (i) MCB
- (ii) GFCI
- (iii) ELCB
- (iv) IDLH
- (v) PSDS

Or

- (b) Explain about the petroleum act 1934.

---



<b>C-1401</b>
---------------

<b>Sub. Code</b>
------------------

<b>90321</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**COMMUNICATIVE ENGLISH — ADVANCE**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are the different types of communication?
2. Mention any two telephone etiquettes.
3. What is homonyms?
4. What is meant by controlled composition?
5. Give two examples for avoiding unnecessary articles.
6. Define Adverb.
7. What is falling intonation? Give example.
8. What is skimming?
9. Why is posture more important for non-verbal communication?
10. Define Note-making.

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) How do you avoid barriers of communication?

Or

- (b) What are the basic qualities for facing an interview?

12. (a) Fill in the following questions. Choosing from the brackets :

- (i) After the party, we all said “\_\_\_\_\_”  
(bye, buy).
- (ii) Vegetarians do not eat \_\_\_\_\_. (meat, meet)
- (iii) I gave her a \_\_\_\_\_ to say sorry. (flour, flower)
- (iv) The wind \_\_\_\_\_ very hard. It made the evening feel colder. (blue, blew)
- (v) I went to the shop to \_\_\_\_\_ some bread for breakfast. (bye, buy)

Or

- (b) Write the correct question tags :

- (i) She is collecting stickers.
- (ii) We often watch TV in the afternoon.
- (iii) John and Max don't like maths.
- (iv) He could have bought a new car.
- (v) I'm Clever.

13. (a) When not to use definite article?

Or

(b) Complete the following sentences using an appropriate adjective :

- (i) At a \_\_\_\_\_ date, he became the CEO of the company. (later, latter)
- (ii) I prefer the \_\_\_\_\_ proposition to the former. (later, latter)
- (iii) Broach is \_\_\_\_\_ from Bombay than Surat. (farther, further)
- (iv) The time \_\_\_\_\_ I saw him he was in high spirits. (last, latest)
- (v) The \_\_\_\_\_ hospital is \_\_\_\_\_ miles from here. (nearest, next)

14. (a) Write a short notes on Posture and Gesture.

Or

(b) Illustrate on primary and secondary stress.

15. (a) Differentiate loud reading and silent reading.

Or

(b) Draft a telegram to your friend about your sister's marriage.

**Part C** (3 × 10 = 30)

Answer **all** questions.

16. (a) Write an essay on types of communication.

Or

(b) Explain on relative clauses and conditional clauses.

17. (a) Discuss verbs and adverbs often confused.

Or

(b) Write an essay on parts of speech.

18. (a) Illustrate the uses of visual aids.

Or

(b) Write an essay on different types of reading.

---

<b>C-1402</b>
---------------

<b>Sub. Code</b>
------------------

<b>90322</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**GENERAL SAFETY MANAGEMENT  
(Principles and Policies)**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define – severity rate.
2. What is the SORT in housekeeping?
3. Define – Home safety.
4. Write down any two reasons for slip, trip and fall.
5. Mention the permissible noise levels of industrial area.
6. What is the occupational diseases?
7. What are the classification of respiratory PPE?
8. Define – “NON RESPIRATORY” PPE.
9. What are the different between Education and Training?
10. Define – IN-SITU TRAINING.

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) What is housekeeping? Explain 5's concept?

Or

- (b) Supervisory and responsibility for workplace safety briefly explain.

12. (a) What are the safety aspects of piped natural gas supply?

Or

- (b) Explain the DO's and DON'Ts of domestic electrical appliances.

13. (a) Write about noise pollution rules 2000.

Or

- (b) Briefly explain Indian standards for EHS?

14. (a) Write a short note on the restrictions on the use of respiratory PPE?

Or

- (b) Write a short note for below PPE's

- (i) Head protection  
(ii) Body protection.

15. (a) Write in detail about tool box talk and induction training.

Or

- (b) Write a don'ts at a brain storming sessions.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain the checklist for controlling occupational noise.

Or

- (b) Define – accident? What are the types of accidents? Discuss in details about accident reporting.

17. (a) Explain in detail housekeeping and safety cleaning procedures in industries.

Or

- (b) Explain different types of accident prevention tag.

18. (a) Discuss in detail about hand, foot and fall protection.

Or

- (b) Write in detail about hazards present at home and also mention suitable control measures.

---

<b>C-1403</b>
---------------

<b>Sub. Code</b>
------------------

<b>90323</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire And Industrial Safety Engineering**

**HEALTH ASPECTS, FOOD HYGIENCE AND  
SAFETY(HACCP)**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are all the health effects will come for stressful workers?
2. What is occupational stress management?
3. Define — Diabetes mellitus.
4. Define — food microbiology.
5. Give some conditions that could lead to food spoilage.
6. What are toxic metals in food?
7. What are food additives?
8. Define borne illness.
9. Define air borne, vector borne and water borne diseases.
10. What is HACCP?



**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) Early symptoms of cancer.

Or

(b) Benefits of physical exercise?

12. (a) What are the HACCP 7 principles?

Or

(b) Define:

(i) Heat stroke

(ii) Heat stress

(iii) Heat fatigue

13. (a) Short note on micro nutrient.

Or

(b) Toxic metals and chemicals in food?

14. (a) Explain heat stress effect and control measures.

Or

(b) Write any five tips for healthy diet.

15. (a) Define:

(i) Listeriosis

(ii) viral infections

(iii) Parasitic infections

Or

(b) Explain food allergies and control of food borne illness.

**Part C****(3 × 10 = 30)**Answer **all** questions.

16. (a) Explain occupational stress management.

Or

(b) Explain dengue fever and prevention.

17. (a) Write down a Control of food borne illness.

Or

(b) Explain in detail about food additives.

18. (a) Explain in detail about hygiene food handling.

Or

(b) Describe a ISO 22000 food safety management system.

---

<b>C-1404</b>
---------------

<b>Sub. Code</b>
------------------

<b>90324</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**EHS LAWS – INTERNATIONAL STANDARDS AND  
REGULATIONS**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define – OHS policy.
2. Define – LOTO.
3. Write about training at the workplace.
4. List out 5's concept.
5. Mention any four types of machine guarding.
6. Define training and its types.
7. List out any three types of ladder.
8. Define – manual handling.
9. What is industrial hygiene?
10. Define – ISO 14001.

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) What are the management responsibilities of EHS committee?

Or

- (b) Write down the objectives of national environmental policy and mention its principles.

12. (a) Explain in detail about housekeeping.

Or

- (b) Write the management responsibilities of work permit system.

13. (a) What are the requirements to be met in lifting machinery and gears?

Or

- (b) Write the provisions in section 38 in fire protection and prevention.

14. (a) Write a short note on hoist and lift.

Or

- (b) What are the management responsibilities of emergency preparedness and planning?

15. (a) Write short note on management responsibilities of electrical installation.

Or

- (b) Write about cleanliness.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Write the salient features of waste disposal management.

Or

- (b) Write about safety of building machinery and management responsibility in safety of building.

17. (a) Write the provisions of the statues of EHS committee.

Or

- (b) Write the types of machine guard and its salient features.

18. (a) Explain safety in handling and storage of hazardous material.

Or

- (b) Describe housekeeping with 5's concept.
-

<b>C-1405</b>
---------------

<b>Sub. Code</b>
------------------

<b>90325</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**ENVIRONMENT SAFETY AND HAZARDOUS WASTE  
MANAGEMENT**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are the objectives of Environmental policy?
2. What do you mean by Clean Technologies?
3. What are the types of Environmental Standards?
4. Give some notification on environmental clearance.
5. What are the Responsibilities of environmental protection?
6. Name some GOI Scheme.
7. List out the Hazardous Wastages.
8. Define the term 3'R process.
9. Give some Manifest system of Hazardous Waste Management.
10. What do you meant by Vehicular Emissions?

**Part B**

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain the Strategies and actions of National Environmental policy.

Or

- (b) Explain about the Environmental impact Assessment.

12. (a) Explain Hazardous waste management Rules 2008.

Or

- (b) Give in detail about waste water Generation Standards.

13. (a) What are the Packaging materials of Soaps and Detergents?

Or

- (b) What are the Reason for international Development in Ecolabelling?

14. (a) Explain about the Packaging, Storage and transport of Hazardous waste.

Or

- (b) Explain the composition and Contaminants of Electronic Waste.

15. (a) Explain Transportation of hazardous waste management Rule.

Or

- (b) Explain Environmental Management Standards of ISO 14000.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about Enhancing and concerning Environmental Resources.

Or

- (b) Explain in brief about Biomedical waste management and Handling Rules 1998.

17. (a) What are the responsibilities for Environmental Protection Ecolabels.

Or

- (b) Explain the Storage, Transportation and processing about Municipal Solid waste.

18. (a) Explain about Manifest system of Handling Records.

Or

- (b) Explain about the implementation and Certification of ISI 18001.
-



<b>C-1406</b>
---------------

<b>Sub. Code</b>
------------------

<b>90331</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Third Year**

**Fire and Industrial Safety Engineering**

**DISASTER MANAGEMENT**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. List out the provisions of Disaster management.
2. What is meant by national crisis management committee?
3. What are the Duties of factories in disaster management?
4. Mention the crisis management plan at the hospital.
5. What is meant by Cyclone?
6. What are the general structural safety in natural hazards?
7. What are the aspects of Emergency Drills?
8. What is the need of conducting Emergency Mock drill?
9. List out the major natural disaster in India
10. What is meant by Disaster management web resources?

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) Explain about the salient features of disaster management.

Or

- (b) Explain about the Duties of citizens in disaster management.

12. (a) Explain about the plans for Evacuation.

Or

- (b) Explain about the creation of Decontamination facilities.

13. (a) Explain the general structural safety for cyclone.

Or

- (b) Give the criteria for Earthquake Resistance Design structure.

14. (a) Give the general information about site and environment.

Or

- (b) Explain about Reporting causality and legal obligations.

15. (a) Explain the major natural disaster in India.

Or

- (b) List out Tsunamis that affected in India.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) What are the Entities and duties of voluntary Agencies about disaster management?

Or

- (b) Explain the components to be considered for medical rehabilitation flip chart message for awareness.

17. (a) Explain the protection of Landslide hazard.

Or

- (b) Explain in brief about general information about site and environment in disaster.

18. (a) Explain in conducting Mock drill exercise and post exercise.

Or

- (b) Give in brief about Flood and Cyclone.

---

<b>C-1407</b>
---------------

<b>Sub. Code</b>
------------------

<b>90332</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Third Year**

**Fire and Industrial Safety Engineering**

**CONSTRUCTION SAFETY MANAGEMENT**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. What are the main objectives of BOCW Act 1996.
2. What is Roof Work?
3. Define Fragile Roof.
4. What is Work Site Clean-up?
5. What are the chemical Hazards in Construction sites?
6. Write about the uses of all ladder.
7. What do you mean by Earth Quake Resistance Structure?
8. Write about BIS Standards.
9. Write about Personal Fall Arrest System.
10. What are the classification of scaffolding?

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) Explain about Crane and Lifting Appliances.

Or

- (b) Write about Guidelines and Supervision during Construction Work.

12. (a) Explain about Chemical Hazards and Health Effects.

Or

- (b) Explain Under Mining Nearby Structures.

13. (a) Briefly explain about Hot Work.

Or

- (b) Write down the additional provisions for excavation or tunnelling work.

14. (a) Explain in detail about NBC 2005.

Or

- (b) Describe Code of practice about Earth Quake resistance design and construction of building as per BIS.

15. (a) What are the Requirements for Safe work platform?

Or

- (b) Briefly about the types of Scaffolding.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain briefly about the Awareness through the safety Promotional Activities.

Or

- (b) Explain in Detail about the Precautions and Controlling of Exposures Fire.

17. (a) Write down the important safety features of Elevators by Bombay Lift Act.

Or

- (b) Write down the general features in Ladder Selection and safe use Procedures.

18. (a) Explain briefly about the use of scaffolding inspections and maintenance.

Or

- (b) Explain in detail about the important features of NBC 2005.
-

C-1408
--------

Sub. Code
-----------

90333
-------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Third Year**

**Fire And Industrial Safety Engineering**

**INDUSTRIAL HYGIENE AND SAFETY AUDITING**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Define Industrial Hygiene.
2. What are the types of Audit?
3. What do you mean by Facility Walk through?
4. What does Occupational Health Compliance audit include?
5. Define management system Audit.
6. What do you mean by on-site Audit Activities?
7. Define Audit reports.
8. Write about reporting system in Auditing?
9. Define Auditor Verification.
10. What is Local Exhaust Ventilation?

**Part B** $(5 \times 5 = 25)$ Answer **all** questions.

11. (a) Explain the Objectives of safety Auditing.
- Or
- (b) Explain about Auditor competency.
12. (a) Explain about detailed facility Assessment.
- Or
- (b) Explain Confidentiality of Auditor Report.
13. (a) Explain Audit program and elements.
- Or
- (b) What are the importance of management system audit?
14. (a) Write about Reporting system.
- Or
- (b) Explain about Corrective Action.
15. (a) Explain about Eye Protective Equipment.
- Or
- (b) Explain about Hazardous Noise.

**Part C** $(3 \times 10 = 30)$ Answer **all** questions.

16. (a) Explain in detail about Effectiveness of management system and Risk assessment.
- Or
- (b) Explain in detail about Key Occupational Health programs.



17. (a) Explain about on-site Audit activities preparation.

Or

(b) Explain about Audit Process Critiques.

18. (a) Explain in detail about Chemical Hazards and Communication.

Or

(b) Explain in detail about Regulatory References of Chemical Hazards.

---

<b>C-1409</b>
---------------

<b>Sub. Code</b>
------------------

<b>90334</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Third Year**

**Fire and Industrial Safety Engineering**

**SAFETY AT OIL, GAS AND NUCLEAR PROJECTS**

**(2016 onwards)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(10 × 2 = 20)

Answer **all** questions.

1. Mention the types of PPE.
2. Define personal pre check.
3. List out types of barricades.
4. Define LOTO.
5. What are the types of scaffolding?
6. Define MSDS.
7. Mention few hand tools.
8. Write a short notes on manual material handling.
9. Define Accident.
10. Define office safety.

**Part B****(5 × 5 = 25)**Answer **all** questions.

11. (a) Briefly explain about safety officers roles and responsibilities.

Or

- (b) Explain about non respiratory PPE.

12. (a) Write a short note on LOTO.

Or

- (b) Write a short notes on

(i) Signal

(ii) Display

13. (a) Explain in detail about emergency at chemical safety.

Or

- (b) Explain about safety at crane operation.

14. (a) Write short description about electrical safety.

Or

- (b) Write short notes on falling hazard and its safety.

15. (a) Explain in detail about the Environmental care.

Or

- (b) Briefly explain about elementary first aid.

**Part C**

(3 × 10 = 30)

Answer **all** questions.

16. (a) Explain safety procedure for abrasive blasting.

Or

(b) Explain in detail about respiratory protection.

17. (a) Explain in detail about safety trainings.

Or

(b) Explain in detail about emergency response plan.

18. (a) Explain in detail about the following

(i) Eye protection

(ii) Ear protection

(iii) Head protection

Or

(b) Explain about MSDS sections in detail.

---

C-1410

Sub. Code

90311

## DIPLOMA EXAMINATION, NOVEMBER 2019

First Year

Fire and Industrial Safety Management

COMMUNICATIVE ENGLISH

(Upto – 2015 batch)

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **All** questions.

1. Write the structure of a Enquiry letter.
2. How do you make appointments?
3. What is called group communication?
4. What are the requirements needed for a good presentation?
5. Explain the contents of a resume.

**Part B**

(5 × 12 = 60)

Answer **all** questions.

6. (a) Write short note on the following:
  - (i) Form Letters
  - (ii) Enquiry Letter
  - (iii) Business Letter

Or

- (b) Write a letter to the company for enquiring about their quality matters.

7. (a) What are the basic formats for keeping a record of Visitors? Explain.

Or

- (b) Write an essay on Check list.

8. (a) Discuss Personal and interpersonal communication.

Or

- (b) Differentiate group and functional communication.

9. (a) What is the role of voice modulation and body language in a good presentation. Explain.

Or

- (b) Explain the Tips and techniques for a great presentation.

10. (a) Prepare a resume of your own for applying a job.

Or

- (b) What is the role of interviewer and interviewee? Explain the tips for attending interview.
-

<b>C-1411</b>
---------------

<b>Sub. Code</b>
------------------

<b>90312</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire and Industrial Safety Engineering**

**BASICS OF SAFETY MANAGEMENT**

**(Upto 2015 Batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** questions.

1. Define safety survey.
2. Define IRT.
3. What are the types of cost of accident?
4. Define severity rate.
5. Define safety audit.

**Part B**

(5 × 12 = 60)

Answer **all** the questions

6. (a) Explain in detail about
    - (i) Safety budgeting
    - (ii) Safety survey
- Or
- (b) Explain detail about
    - (i) Safety policy
    - (ii) Safety inspection

7. (a) Explain in detail about principle of accident prevention.

Or

- (b) Explain in detail about reportable and non reportable accidents.

8. (a) How to calculate accident indices and accident rate?

Or

- (b) How to calculate safe – T-score.

9. (a) Define safety training. Explain in detail about types of safety training.

Or

- (b) Discuss in detail about the ways to motivate and educate safety to workers.

10. (a) Explain in detail about safety audit.

Or

- (b) Explain the detail about safety inspection.
-



C-1412
--------

Sub. Code
-----------

90313
-------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**First Year**

**Fire and Industrial Safety Engineering**

**SAFETY EQUIPMENTS AND PROCEDURES**

**(Upto 2015 batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** questions.

1. Define Safety Equipment.
2. Define ELCB.
3. What are the types of Detector?
4. Expand BA, SCBA, SCUBA, and SAR.
5. List out the parts of PFAS.

**Part B**

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain in details about PPT and Safety Equipment.

Or

- (b) Write short notes on :
  - (i) Storage conditions of PPE
  - (ii) Maintenance of PPE and Safety Equipment.

7. (a) Explain ELCB in detail.

Or

(b) Write Short Notes on :

- (i) Emergency shower and Eye washer.
- (ii) Winch Tripod.
- (iii) Ventilator & Survey Meter.

8. (a) Explain Hydrant & Monitor.

Or

(b) Write Short Notes on :

- (i) Fire Alarm.
- (ii) Fire Balls,
- (iii) Nozzles.
- (iv) Sprinklers.

9. (a) Explain in detail about Eye & Ear Protection.

Or

(b) Explain Air purifier type PPE.

10. (a) Explain safety Harness with a neat sketch.

Or

(b) Explain Active and passive fire Protection.

**C-1413**

**Sub. Code**

**90314**

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Fire and industrial Safety Engineering**

**ENVIRONMENTAL STUDIES**

**(Upto 2015 Batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

**(5 × 3 = 15)**

Answer **all** questions.

1. Define ozone layer depletion.
2. Name any four industry categories which pollute water.
3. Mention the collection methods of solid wastes.
4. Define gas chromatograph.
5. Define eco friendly.

**Part B**

**(5 × 12 = 60)**

Answer **all** the questions.

6. (a) Describe in detail about clean coal combustion technology.

Or

- (b) Describe in detail about chemical factory stack emissions.

7. (a) Describe in detail about industrial effluents and their method of treatment and disposal.

Or

- (b) Describe in detail about advanced waste water treatment.

8. (a) Describe in detail about collection, treatment and disposal of hazardous waste.

Or

- (b) Describe in detail about incineration, vitrification, reduce, reuse and recycle.

9. (a) Discuss in detail about cyclone separators, electrostatic separators and bag filters.

Or

- (b) Describe in detail about control of emission by absorption, adsorption and combustion.

10. (a) Describe in detail about pollution control in paper industries.

Or

- (b) Describe in detail about pollution control in power plants.

---

<b>C-1414</b>
---------------

<b>Sub. Code</b>
------------------

<b>90321</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**INDUSTRIAL SAFETY MANAGEMENT**

**(Upto 2015 Batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** questions.

1. List out the types of Guarding.
2. Define Electroplating.
3. Define Radiation Hazards.
4. Define Benefits of Certification.
5. Define action plan.

**Part B**

(5 × 12 = 60)

Answer **all** questions.

6. (a) Describe in details about the selection of plant location for waste treatment.

Or

- (b) Describe in details about the safe layout for Nuclear Power Station.

7. (a) Describe in details about the benefits of good guarding system.

Or

- (b) Explain about the hazards of guarding.

8. (a) Explain about the pipeline safety.

Or

- (b) Explain about the safety precautions in gas welding and oxygen cutting.

9. (a) Explain about safety in Radiography.

Or

- (b) Describe in details about Radiation hazards.

10. (a) Describe in details about the developing OH and S Policy.

Or

- (b) Describe in details about the structure and features of OSHAS 18001.
-

<b>C-1415</b>
---------------

<b>Sub. Code</b>
------------------

<b>90322</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**ELECTRICAL SAFETY**

**(Upto 2015 batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** the questions.

1. What is meant by CPR?
2. Explain the classification of voltage.
3. What is meant by fuse and circuit breaker?
4. What is meant by GFCI?
5. What is meant by self diagnostic features?

**Part B**

(5 × 12 = 60)

Answer **all** the questions.

6. (a) Explain the following terms.
  - (i) Electronics
  - (ii) Electrical inspectorate

Or

- (b) Explain the IE RULE.

7. (a) Explain about earthing.

Or

(b) Explain the following terms

(i) Classes of insulation

(ii) Lightning arrestor

8. (a) Explain the safety in handling of hand held electrical appliances tools.

Or

(b) How to protect the electrical equipment from over voltage and under voltage?

9. (a) Explain about protection and interlock.

Or

(b) Explain the some preventive maintenance.

10. (a) Explain the classification of hazardous zones.

Or

(b) Explain the uses of barriers and isolators.

\_\_\_\_\_



<b>C-1416</b>
---------------

<b>Sub. Code</b>
------------------

<b>90323</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**ERGONOMICS**

**(Upto 2015 Batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** questions.

1. Define policy on Working hours.
2. Define Rest time.
3. Write short note on Material handling.
4. List out the causes of chain defects.
5. Define daily reporting.

**Part B**

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain the following :
  - (i) Signals
  - (ii) Panels and controls.

Or

- (b) Explain in detail about Job stress and it's effect.

7. (a) Define Noise, What are the effects of Noise and how will you measure it.

Or

- (b) Write short note on lighting requirement.

8. (a) Write about Transport Facilities.

Or

- (b) Define Fatigue and Write effects of fatigue.

9. (a) Explain shift arrangements in detail.

Or

- (b) Explain the daily reporting and disadvantages of night shift.

10. (a) Explain the factors influencing selection of Handling Materials.

Or

- (b) Explain slings and slinging practices.

\_\_\_\_\_

C-1417

Sub. Code

90324

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Second Year**

**Fire and Industrial Safety Engineering**

**ENVIRONMENT HEALTH AND SAFETY LAWS**

**(Upto 2015 batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** questions.

1. List out the types of pollution.
2. Define biomedical waste.
3. Explain the term ANSI and SMPV.
4. What is audit?
5. What are the duties of authorities?

**Part B**

(5 × 12 = 60)

Answer **all** questions.

6. (a) List out the chapters of factories act 1948.

Or

- (b) Explain detail noise pollution rules, 2000.

7. (a) Explain about hazardous waste act, 1952.

Or

(b) Explain about explosive act, 1983.

8. (a) Explain in detail about the notification of major accidents.

Or

(b) Explain the preparation of onsite emergency plan.

9. (a) Explain detail batteries management and handling rules, 2001.

Or

(b) Explain the mines act, 1952.

10. (a) Explain in detail about audit.

Or

(b) Explain about water act, 1974.

---

C-1418

Sub. Code

90331

DIPLOMA EXAMINATION, NOVEMBER 2019

Third Year

Fire and Industrial Safety Engineering

PRINCIPLES OF SAFETY MANAGEMENT

(Upto 2015 batch)

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** the questions.

1. Define safety policy.
2. What are the elements of safety audit?
3. What is unsafe act and unsafe condition and give some example?
4. Define safe T score.
5. What is the role of government agencies in safety training?

**Part B**

(5 × 12 = 60)

Answer **all** questions.

6. (a) Write about roles and responsibilities of safety supervisor.

Or

- (b) Explain detail about incident recall technique.

7. (a) Explain about methodology of audit and its types of audit.

Or

- (b) Explain about accident investigation and reporting.

8. (a) Explain detail about safety performance and monitoring.

Or

- (b) Explain the following

- (i) Frequency rate
- (ii) Severity rate
- (iii) Frequency severity incidence
- (iv) Incident rate.

9. (a) Explain detail about safety education and training.

Or

- (b) Explain the role of government agencies private consulting agencies in safety training.

10. (a) Explain the evaluation of modern safety concept.

Or

- (b) Explain about identification of unsafe acts of workers and unsafe conditions in the shop floor.

---

<b>C-1419</b>
---------------

<b>Sub. Code</b>
------------------

<b>90332</b>
--------------

**DIPLOMA EXAMINATION, NOVEMBER 2019**

**Third Year**

**Fire and Industrial Safety Engineering**

**SAFETY INSPECTION AND AUDIT**

**(Upto 2015 batch)**

Time : 3 Hours

Maximum : 75 Marks

**Part A**

(5 × 3 = 15)

Answer **all** questions.

1. What do you mean by unsafe act?
2. Write the purpose of checklist.
3. Define safety policy.
4. Explain the training needs.
5. Define NCR.

**Part B**

(5 × 12 = 60)

Answer **all** the questions.

6. (a) Briefly explain the audit.

Or

- (b) Explain the unsafe act and unsafe condition.

7. (a) Explain ISO 14001

Or

(b) Explain the accidents reports, process and procedures.

8. (a) Explain the OHSAS 18001.

Or

(b) Explain the general principles of environmental audit, steps in audit and audit plan.

9. (a) Explain the following enter (i) Active monitoring (ii) Reactive monitoring (iii) Performance measurement (iv) Inspection.

Or

(b) Explain OH and S policy-general principle, strategy and planning.

10. (a) Explain the difference between OHSAS 18001, ISO 14001 and ISO 9001.

Or

(b) Explain the Inspection team and obligations.



C-1420

Sub. Code

90333

DIPLOMA EXAMINATION, NOVEMBER 2019

Third year

Fire and Industrial Safety Engineering

CONSTRUCTIONAL SAFETY

(Upto – 2015 batch)

Time : 3 Hours

Maximum : 75 Marks

**Part A** (5 × 3 = 15)Answer **all** questions.

1. Write some constructional based accident.
2. What is meant by confined space?
3. What is meant by PTAS?
4. Explain about manual handling.
5. What are the hazards related in the demolition work?

**Part B** (5 × 12 = 60)Answer **all** questions.

6. (a) Explain about causes of accidents  
Or  
(b) Explain about recording of accidents
7. (a) Explain about excavation and its hazards  
Or  
(b) Explain about confined space and its hazards

8. (a) Explain about fragile roofs.  
Or  
(b) Explain about any construction related case studies
9. (a) How to inspect the welding machines in construction site?  
Or  
(b) What are the safety followed in the some earth moving equipment
10. (a) Explain the Indian standard for demolition work  
Or  
(b) Explain the types of demolition.
-