Sub. Code 90311

### **DIPLOMA EXAMINATION, NOVEMBER 2018**

#### First Year

# Fire and Industrial safety Engineering

### **ENGLISH — COMMUNICATIVE ENGLISH**

# (2016 Onwards)

Time: 3 Hours Maximum: 75 Marks

Part A

 $(10 \times 2 = 20)$ 

- 1. What strengths and achievements are pinpointed by Kalam?
- 2. What is Forster's attitude to Mr. Bumble?
- 3. How best can use, according to Nehru, pay Romage to Gandhiji?
- 4. Why does lynd want a referee to be present at debates?
- 5. What books did elders not like their children to read?
- 6. How does sarojini Naidu humbly describe herself?
- 7. Explain Adjective clause.
- 8. Write any four sub-ordinate conjunction.
- 9. What is modals?
- 10. Name the three degrees of comparison.

### Answer all questions.

11. (a) Why does Indira Gandhi disapprove of laying down one's life? What does she ask for, instead?

Or

- (b) What is the duty of society to the artist and the artist to society?
- 12. (a) How did Scott avoid having to search for his hat and cat in the cloak room?

Or

- (b) What, according to Lynd, are the uses of controversy?
- 13. (a) What does sarojini naidu say about the vision of patriotism?

Or

- (b) Write the short comings of new curriculla, according to Margaret Atwood.
- 14. (a) Find out the nouns in the following sentences
  - (i) India has a large population
  - (ii) Freedom is our birthright
  - (iii) Murthy is a teacher
  - (iv) Physics is a useful subject
  - (v) I love Beulah.

Or

(b) Write a short note on adverbs.

CP-9811

 $^{2}$ 

15.	(a)	Fill in the blanks with prepositions:				
		(i) Sheela is good — music				
		(ii) We must attend — our work sincerely				
		(iii) I am quite aware — the result				
		(iv) It is easy to deal ———— him				
		(v) Relax — some exercise				
		$\operatorname{Or}$				
	(b)	Fill in the blanks with suitable models				
		(i) I ——— swim				
		(ii) It ——— rain tomorrow!				
		(iii) — I use your phone please?				
		(iv) I — stop when the traffic lights turn red				
		(v) He — not enter the old castle.				
		<b>Part C</b> $(3 \times 10 = 30)$				
		Part C $(3 \times 10 = 30)$ Answer all questions.				
16.	(a)	,				
16.	(a)	Answer <b>all</b> questions.  Write an essay on the personality of Indira Gandhi				
16.	(a) (b)	Answer all questions.  Write an essay on the personality of Indira Gandhi as revealed in her speeches.				
16. 17.	, ,	Answer all questions.  Write an essay on the personality of Indira Gandhi as revealed in her speeches.  Or  Sum up plato's contradictory views on the artist's				
	(b)	Answer all questions.  Write an essay on the personality of Indira Gandhi as revealed in her speeches.  Or  Sum up plato's contradictory views on the artist's role in society.				
	(b)	Answer all questions.  Write an essay on the personality of Indira Gandhi as revealed in her speeches.  Or  Sum up plato's contradictory views on the artist's role in society.  Write Lynd's views on arguing.				

18. (a) Write the summary of the essay "The conjurer's Revenge".

Or

(b) Discuss the prose style of O'Henry, with special reference to "After Twenty years".

Sub. Code

90312

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### First Year

# Fire and Industrial Safety Engineering

### FIRE SAFETY — PREVENTION AND CONTROL

### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Define Fire escape plan.
- 2. Explain the installations specifications for Fire hydrant system.
- 3. What are the safety at petrol bunk for customer side?
- 4. What are the steps to escape from high raise buildings?
- 5. Define ignition sources.
- 6. Explain Fire load.
- 7. Briefly explain domestic safety.
- 8. What are flammable liquids?
- 9. Explain defensive drinking.
- 10. Explain the safety precautions for invertors.

Ws 4

Part B

 $(5 \times 5 = 25)$ 

### Answer all questions.

11. (a) Explain the Fire Safety in petroleum tank form.

Or

- (b) What are the safety measuring in industrial cylinders?
- 12. (a) Explain BOCW Act in detail.

Or

- (b) Explain the explosives act and detail.
- 13. (a) What are the Fire safety measures retailed to occupancies?

Or

- (b) Explain the Fire safety in Transportations.
- 14. (a) What are the steps to escape from high rise building?

Or

- (b) Explain the fire safety in electrical system.
- 15. (a) Explain the fire safety measures in transformers.

Or

2

- (b) What are the safety measures to be taken in
  - (i) ELCB
  - (ii) 2CCB
  - (iii) MCCB.

**CP-9812** 

Ws 4

Part C

 $(3 \times 10 = 30)$ 

### Answer all questions.

16. (a) Explain the roles and responsibilities of safety personal in public safety.

Or

- (b) What are the safety measures and specific requirements of high raise building?
- 17. (a) Explain the classes of Fire and its extinguishing methods.

Or

- (b) Explain the safety measures in
  - (i) Shopping mall (ii) Airport (iii) Stadium.
- 18. (a) Explain the methods of chemical transportation in detail.

Or

(b) Give a case study of Fire accident and rescue operation son your own.

Sub. Code 90313

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### First Year

# Fire and Industrial Safety Engineering

# LIFTING EQUIPMENTS AND TRANSPORT SAFETY

### (2016 Onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Define Term Card.
- 2. What is emergency information planer?
- 3. Define Eye nuts.
- 4. What is safe work load?
- 5. Define two second rule.
- 6. Explain the causes of high fuel consumption.
- 7. Briefly explain defensive driving.
- 8. What is the unsafe habit in material handling?
- 9. What is fork lift safety?
- 10. What is De-contaminations?

Answer all questions.

11. (a) What are the ways of selecting lifting tackles and its procedures?

Or

- (b) What are the functions of slings, wedge, sockets and hooks?
- 12. (a) Explain the roles of driver in road safety in detail.

Or

- (b) Write a short note on defects in wire rope sling.
- 13. (a) Explain Rule 137 and its merits.

Or

- (b) Explain Rule 129 in detail with the benefits.
- 14. (a) What are split second decisions and its action plans?

Or

- (b) Explain the common defects with slings and control measures.
- 15. (a) Explain the safe handling and storage methods of materials.

Or

2

(b) Describe the safety precautions and storage of gas cylinders in detail.

**CP-9813** 

Sp 1

**Part C**  $(3 \times 10 = 30)$ 

### Answer all questions.

16. (a) Explain provisions in central motor vehicles rules, 1989 in detail.

Or

- (b) Explain Rule 135 and 129 A in detail.
- 17. (a) Explain the types and functions of hand signaling on "Crane and Rigging".

Or

- (b) Describe the road safety management plan's for transporters in detail.
- 18. (a) Explain the Six positions of Two vehicle collisions in detail.

Or

(b) Explain the safety precautions in EOT crane / Goliath crane / JIB crane in detail.

\_\_\_\_

Sub. Code 90314

### **DIPLOMA EXAMINATION, NOVEMBER 2018**

#### First Year

# Fire and Industrial Safety Engineering

# OCCUPATIONAL, HEALTH SAFETY MANAGEMENT

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Write about Boilers and pressure vessels.
- 2. What is House Keeping?
- 3. What are the objectives of OHS?
- 4. What should be included in rest periods and breaks?
- 5. Write about the Acute and Chronic conditions.
- 6. Explain briefly about Atmospheric pollutants.
- 7. Why is adequate lighting important?
- 8. Define Exposure Limit.
- 9. What is Ergonomics?
- 10. What are the three main causes of accidents?

Answer all questions.

11. (a) Briefly explain about Machine safety requirements.

Or

- (b) Write a short note on Lifting equipment safety.
- 12. (a) Discuss in detail about Liquids and Vapours.

Or

- (b) Explain in detail about personal protective equipments.
- 13. (a) Briefly explain Body heat Balance and give protection against Heat.

Or

- (b) Write about atmospheric pollution.
- 14. (a) Explain in detail about Signal displays and Panels.

Or

- (b) Discuss in detail about Hand Tool selection.
- 15. (a) Write short notes on Health services.

Or

(b) Briefly explain overtime work and excessive hours of work.

2

**CP-9814** 

sp3

**Part C**  $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain in detail about Shift work.

Or

- (b) Write short notes on Work place climate.
- 17. (a) Discuss in detail about method of noise control.

Or

- (b) Write short notes on work place inspection.
- 18. (a) Briefly explain about Sitting and Standing Positions.

Or

(b) Briefly explain about Lifting.

Sub. Code 90315

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### First Year

# Fire and Industrial Safety Engineering

### SAFETY ON ELECTRICAL AND CHEMICAL HAZARDS

### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Write about Electrical Safety for children.
- 2. Define fuse.
- 3. Write about the management responsibility for Electrical Installation.
- 4. What is exposure limit?
- 5. Define risk.
- 6. Explain briefly about Safety Audit reports.
- 7. What do you mean by offsite ERP?
- 8. Write about temporary and permanent Electrical installations.
- 9. Define Conductivity.
- 10. What is HIRA?

Answer all questions.

11. (a) Briefly explain about Electrical Hazards.

Or

- (b) Write a short note on ELCB.
- 12. (a) Discuss in detail about Electro static charging.

Or

- (b) Explain in detail about Earthing and bonding.
- 13. (a) Briefly explain about occupational skin disease by chemicals.

Or

- (b) Write about Air contaminants.
- 14. (a) Explain Indian Electricity Act 1910.

Or

- (b) Discuss in detail about Electrical installations.
- 15. (a) Write short notes on Safety in handling and storage of hazardous chemicals.

Or

(b) Briefly explain about occupational safety and Health Act (OSHA) 1970 of USA.

**CP-9815** 

sp6

**Part C**  $(3 \times 10 = 30)$ 

### Answer all questions.

16. (a) Explain in detail about The Petroleum Act 1934 and The Petroleum Rules 1976.

Or

- (b) Write short notes on Static Electricity.
- 17. (a) Discuss in detail about ELCB.

Or

- (b) Write short notes on Precautions for Chemical hazards.
- 18. (a) Briefly explain about IS: 5572.

Or

(b) Write short notes on principles of HIRA, risk assessment requirement and risk assessment Performa.

CP-9815

Sub. Code

90321

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### **Second Year**

# Fire and Industrial Safety Engineering

# ENGLISH — COMMUNICATIVE ENGLISH — ADVANCE

# (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Define verbal communication.
- 2. What is Telephone Etiquettes?
- 3. Explain Infinitives.
- 4. Write a note on question-tags.
- 5. Write any two kinds of adverbs.
- 6. List out the types of nouns.
- 7. Define Intonation.
- 8. Write any two characteristics of good handwriting.
- 9. What is scanning?
- 10. Write the important aspects of note-making.

Answer all questions.

11. (a) Write an essay on the barriers of communication.

Or

- (b) Distinguish verbal and non-verbal communication.
- 12. (a) Write a paragraph on relative clauses.

Or

- (b) Write a note on transformation of sentences.
- 13. (a) Write the effects of wrong positions of adverbs.

Or

- (b) Discuss the adjectives that are often confused.
- 14. (a) Explain consonants with illustration.

Or

- (b) Write the role of body language in presentation.
- 15. (a) Differentiate loud and silent reading.

Or

(b) Trace the different types of greetings.

**Part C**  $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Write an essay on communication.

Or

(b) Explain phrasal verbs with examples.

**CP-9816** 

17. (a) Discuss different kinds of composition.

Or

- (b) Write an essay on misplaced words.
- 18. (a) Explain stress with its kinds.

Or

(b) Write an essay on report writing.

Sub. Code

90322

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### **Second Year**

# Fire and Industrial Safety Engineering

# GENERAL SAFETY MANAGEMENT (PRINCIPLES AND POLICIES)

### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. What is Frequency rate?
- 2. Define Reportable Accident.
- 3. What is BBS training?
- 4. Briefly explain about Safety displays.
- 5. Write about home Safety.
- 6. Explain briefly about care and maintenance of respiratory PPE's.
- 7. What is House Keeping?
- 8. Write about the Stages of Brainstorming.
- 9. Give the PPE for Gas Welding and Electrical Welding.
- 10. Explain briefly about the Safety instructions for Kids.

Answer all questions.

11. (a) Briefly explain about the tips for factory and Office employees for Safety working.

Or

- (b) List out the ILO conventions and recommendations on OHS.
- 12. (a) Discuss in detail about the LPG Hazards and Safety practice.

Or

- (b) Explain Safety on domestic Electrical appliances.
- 13. (a) Briefly explain about Air purifying type respirators.

Or

- (b) Write about the PPE for Arm protection.
- 14. (a) Explain in detail about Employee compensations Act 1923.

Or

- (b) Give the check list for controlling occupational noise.
- 15. (a) Write short notes on man made hazards.

Or

(b) Briefly explain about EHS training.

**CP-9817** 

**Part C**  $(3 \times 10 = 30)$ 

### Answer all questions.

16. (a) Explain in detail about Micro, Small, Medium Enterprises development Act 2006.

Or

- (b) Write short notes on Brainstorming.
- 17. (a) Discuss in detail about the safety aspects of piped gas supply for domestic use.

Or

- (b) Write short notes on the Accident prevent tags at Electrical, Mechanical and construction sites.
- 18. (a) Briefly explain about supplied Air type respirators.

Oı

(b) Write Short notes Noise pollutions (regulations and controls) Rules 2000.

CP-9817

Sub. Code

90323

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### **Second Year**

# Fire and Industrial Safety Engineering

# HEALTH ASPECTS, FOOD HYGIENE AND SAFETY (HACCP)

### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Write the Early Symptoms of Cancer.
- 2. What are parasitic infections?
- 3. What are the Benefits of HACCP?
- 4. Briefly explain about Healthy diet.
- 5. Write about the Criteria for judging water quality.
- 6. Explain briefly about mobile food units.
- 7. Write the procedures to minimize the microbial load.
- 8. Briefly explain about micro organisms.
- 9. Write the classification of food on the basis of shelf life.
- 10. What are the types of pest control?

Answer all questions.

11. (a) Briefly explain about Heat Stress effects and control measures.

Or

- (b) Write a short note on HIV / AIDS awareness and prevention.
- 12. (a) Discuss in detail about natural toxins.

Or

- (b) Explain in detail about control of food borne illnesses.
- 13. (a) Briefly explain the sanitary procedures when preparing, holding, serving and displaying food.

Or

- (b) Explain in detail about outdoor catering.
- 14. (a) Explain in detail about Storage and disposal of waste.

Or

- (b) Discuss in detail about personal Hygiene.
- 15. (a) Write short notes on genetically modified food.

Or

(b) What are the various steps in HACCP? Explain.

**CP-9818** 

Ws9

**Part C**  $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain in detail about Food Allergies.

Or

- (b) Write short notes on location, layout and construction of premises.
- 17. (a) Discuss in detail about water and Sanitation related disease.

Or

- (b) Write short notes on refrigerated store and Freezer store.
- 18. (a) Briefly explain about Food borne diseases.

Or

(b) Briefly explain HACCP in detail.

Sub. Code

90324

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### **Second Year**

# Fire and Industrial Safety Engineering

# EHS LAWS (INTERNATIONAL STANDARDS AND REGULATIONS)

# (2016 onwards)

Time: 3 Hours

Maximum: 75 Marks

Part A

 $(10 \times 2 = 20)$ 

- 1. Write about Ventilation
- 2. What is OHS Policy?
- 3. What do you mean by safe operating practices & procedures?
- 4. What is Noise?
- 5. Write about Ladder Safety
- 6. Explain briefly about SMPV rules?
- 7. What do you mean by ERP?
- 8. Define Industrial Hygiene
- 9. What is First Aid?
- 10. What are the types of Guards?

Answer all questions.

11. (a) Briefly explain about Gas Cylinder Rules.

Or

- (b) Write a short note on TamilNadu Safety Officer Rules.
- 12. (a) Discuss in detail about Lighting and Ventilation

Or

- (b) Explain in detail about PTW.
- 13. (a) Briefly explain about Guarding of machineries.

Or

- (b) Write about Fire Protection and Prevention.
- 14. (a) Explain in detail about manual handling

Or

- (b) Discuss in detail about emergency planning and preparedness.
- 15. (a) Write short notes on Electrical installations.

Or

(b) Briefly explain about ISO 14001.

**Part C**  $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain in detail about House Keeping.

Or

(b) Write short notes on ISO 9001.

**CP-9819** 

17. (a) Discuss in detail about Scaffolding Safety.

Or

- (b) Write short notes on disposal of wastes.
- 18. (a) Briefly explain about Accident Reporting and Investigating.

Or

(b) Briefly explain about radiation Hazards.

Sub. Code

90325

### **DIPLOMA EXAMINATION, NOVEMBER 2018**

### **Second Year**

# Fire and Industrial Safety Engineering

# ENVIRONMENTAL SAFETY AND HAZARDOUS WASTE MANAGEMENT

### (2016 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. Write about Public liability insurance Act.
- 2. What is Pollution Abatement?
- 3. Write about Environmental impact assessment.
- 4. Write about Environmental pollutants.
- 5. What are eco labels?
- 6. Explain briefly about storage of hazardous waste.
- 7. What is PVC test?
- 8. Define eco labeling.
- 9. Write about Bio-Medical waste.
- 10. Write about Environmental effects of vehicular emissions.

Answer all questions.

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

Or

- (b) Write a short note on Environmental Standards and Management systems.
- 12. (a) Discuss in detail about waste water generation standards.

Or

- (b) Explain in detail about Hazardous waste (Management, Handling and trans boundary movements) Rules: 2008.
- 13. (a) What are the packaging materials of soaps and detergents?

Or

- (b) Write about ISO Standards.
- 14. (a) Explain in detail storage and transportation of Bio-Medical waste.

Or

- (b) Discuss in detail about storage, transportation and disposal of Municipal Solid waste.
- 15. (a) Write short notes on vehicular emissions control.

Or

(b) Briefly explain about Atmospheric pollution.

**CP-9820** 

Ws2

**Part C**  $(3 \times 10 = 30)$ 

Answer all questions.

16. (a) Explain in detail about Rain water harvesting and ground water recharging.

Or

- (b) Write short notes on corporate responsibility environmental protection.
- 17. (a) Discuss in detail about Environmental Categorization.

Or

- (b) Write short notes on:
  - (i) Activities requiring environmental clearance
  - (ii) Procedure for Environmental clearance.
- 18. (a) Briefly explain eco labeling and developments in eco labeling.

Or

(b) Briefly explain about Bio medical waste (management and handling) Rule — 1998.

\_\_\_\_

Sub. Code 90311

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

### First Year

# Fire and Industrial Safety Engineering

#### COMMUNICATIVE ENGLISH

### (Upto 2015 Batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Write the structure of the Business Letter.
- 2. How will you impress your audience while presenting a short speech?
- 3. Explain Interpersonal Communication.
- 4. Write a note on the various methods of presentation.
- 5. Write any five tips for writing resume.

**Part B**  $(5 \times 12 = 60)$ 

Answer all questions.

6. (a) Write an essay on Written Communication.

Or

- (b) Write a short note on:
  - (i) Enquiry letters
  - (ii) Complaint letters
  - (iii) Adjustment letters.

7. (a) Write an essay on Check List.

Or

- (b) How will you keep records of visitors?
- 8. (a) Discuss different communication categories.

Or

- (b) Differentiate group and functional communication.
- 9. (a) Write the various techniques used for effective presentation.

Or

- (b) Discuss the role of voice in presentation.
- 10. (a) Write a resume for the post of an Assistance Professor in a reputed institution.

Or

(b) Write an essay on the problems connected with being interviewed.

CP-9821

Sub. Code 90312

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

# First Year

# Fire and Industrial Safety Engineering

### BASICS OF SAFETY MANAGEMENT

# (Upto 2015 batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Define safety policy.
- 2. Define reportable accidents.
- 3. Define frequency rate.
- 4. Define motivation.
- 5. List some unsafe act and unsafe condition.

**Part B** 
$$(5 \times 12 = 60)$$

Answer all questions.

6. (a) Describe in detail about the incident recall technique.

Or

(b) Describe in detail about the safety programme.

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

Or

- (b) Describe in detail about the accident investigation and analysis.
- 8. (a) Explain about the safety 't' scare.

Or

- (b) Describe in detail about the motivation.
- 9. (a) Write in detail about safety induct on training tool box talk and on the job safety training.

Or

- (b) Explain about the private consulting agencies in safety training.
- 10. (a) Describe in detail about the safety audit.

Or

(b) Describe in detail about the implementation of audit indication.

\_\_\_\_

$CP_{-}$	Q	8	2	3
$\mathbf{L} = \mathbf{L} = $	J	O	4	e

Sub. Code 90313

# DIPLOMA EXAMINATION, NOVEMBER 2018.

### First Year

# Fire and Industrial Safety Engineering

# SAFETY EQUIPMENTS AND PROCEDURES

(Upto 2015 batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. List out the some non-respiratory PPE.
- 2. Define GFCI.
- 3. Define sprinklers.
- 4. What is SAR and IDLH.
- 5. Define safety harness.

**Part B**  $(5 \times 12 = 60)$ 

Answer all questions.

6. (a) Describe in details about the maintenance of PPE.

Or

(b) Explain about the purchase guidelines for PPE.

7.	(a)	Describe in details about the Machine guards.	WS 20
		Or	
	(b)	Describe in details about the lifting tools & tackles.	
8.	(a)	Describe in details about the sprinkler system.	
		Or	
	(b)	Describe in details about the smoke detector.	
9.	(a)	Describe in details about the eye protection.	

Or

- (b) Describe in details about the air purifier type respiratory PPE.
- 10. (a) Describe in details about the active fall protection.

Or

(b) Describe in details about the safety harness.

Sub. Code

90314

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

## First Year

# Fire and Industrial Safety Engineering

## **ENVIRONMENTAL STUDIES**

(Upto 2015 batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Define CFC.
- 2. Define water pollution.
- 3. Define hazardous waste.
- 4. Define scrubber.
- 5. Define ecofriendly energy.

**Part B** 
$$(5 \times 12 = 60)$$

Answer all questions.

6. (a) Describe in details about the effects of air pollutants on human beings and animals.

Or

(b) Describe in details about the deforestation.

7. (a) Describe in details about the advanced wastewater treatment.

Or

- (b) Explain about the classification of water pollutants.
- 8. (a) Explain about the identification, characterization of hazardous waste.

Or

- (b) Describe in details about the methods of collection and disposal of solid wastes.
- 9. (a) Describe in details about the gravitational settling chambers.

Or

- (b) Explain about the gas analyzer and particle size analyzer.
- 10. (a) Explain about the pollution control process in cement industries.

Or

(b) Explain about the pollution control process in thermal power plant.

Sub. Code 90321

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

#### **Second Year**

# Fire and Industrial Safety Engineering

## INDUSTRIAL SAFETY MANAGEMENT

(Upto 2015 batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Define LNG.
- 2. Define CNG.
- 3. Define Hot Work.
- 4. Define Flash back arrestor
- 5. Define Machine Guarding.

**Part B** 
$$(5 \times 12 = 60)$$

# Answer all questions.

6. (a) Describe in details about safe layout for fire works and match works.

Or

(b) Describe in details about safe layout for thermal power stations.

7. (a) Explain the types of Machine guarding.

Or

- (b) Describe in details about Zero Mechanical State and it's policy.
- 8. (a) Explain the storage and handling of gas cylinders.

Or

- (b) Describe in details about distribution and handling of industrial gases.
- 9. (a) Describe in details about the Engineering and Administration controls.

Or

- (b) Describe in details about the safety inspection in pressure vessels.
- 10. (a) Explain about the OH and S Management system element and it's procedure.

Or

(b) Explain about the methodology steps developing action plan.

**CP-9825** 

Sub. Code 90322

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

## **Second Year**

# Fire and Industrial Safety Engineering

#### **ELECTRICAL SAFETY**

# (Upto 2015 batch)

Time: 3 Hours

Maximum: 75 Marks

Part A

 $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Define Over load relays.
- 2. What do you mean by work permit system?
- 3. What are the uses of insulators?
- 4. What is the use of discharging rod?
- 5. Define classification of hazardous zones.

Part B

 $(5 \times 12 = 60)$ 

Answer all questions.

6. (a) Describe the working principles of electrical equipment.

Or

(b) Explain detail about CPR.

7. (a) Explain about the human safety in the use of electricity.

Or

- (b) Explain briefly about static electricity.
- 8. (a) Write about safety in handling hand held electrical appliances tools and medical equipments.

Or

- (b) Write about the protection of over load and short circuit protection and earth fault protection.
- 9. (a) Explain about lock out and work permit system.

Or

- (b) Explain safety in use of portable tools.
- 10. (a) Write the details of equipment certifying agencies.

Or

(b) Explain about intrinsically safe and explosion proof electrical apparatus.

2

Sub. Code 90323

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

## **Second Year**

# Fire and Industrial Safety Engineering

# **ERGONOMICS**

## (Upto 2015 Batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. What is NRR?
- 2. Define Fatigue.
- 3. Give the Ergonomics applications.
- 4. Briefly explain about Night Shift.
- 5. Give the example unsafe work habits.

**Part B** 
$$(5 \times 12 = 60)$$

Answer all questions.

6. (a) Explain about Hand tools.

Or

(b) Briefly discuss about Sitting and Standing positions, Visual Conditions.

			Wk 10
7.	(a)	Write short notes on:	
		(i) Heat stress	
		(ii) Cold stress.	
		$\operatorname{Or}$	
	(b)	Explain about Audiometric in detail.	
8.	(a)	Discuss the policy on working hours.	
		$\operatorname{Or}$	
	(b)	Explain ventilation.	
9.	(a)	Write short notes on organization structure.	

Or

- Explain about Daily reporting. (b)
- Briefly discuss about slings, slinging practices and 10. (a) chain defects.

Or

What are the factors influencing selection of (b) handling materials? Explain.

**CP-9827** 

Sub. Code

90324

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

## **Second Year**

# Fire and Industrial Safety Engineering ENVIRONMENT, HEALTH AND SAFETY LAWS

# (Upto 2015 Batch)

Time: 3 Hours

Maximum: 75 Marks

Part A

 $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Mention the inspecting staff of industries as per factories act 1948.
- 2. What is biomedical waste?
- 3. Write the types of pollution.
- 4. Name the toxic chemicals.
- 5. Write about working hours as per the Factories act 1948.

Part B

 $(5 \times 12 = 60)$ 

Answer all questions.

- 6. (a) Explain:
  - (i) Powers of Inspectors,
  - (ii) Duties of certifying surgeons,
  - (iii) Appointing of Inspecting staff.

Or

- (b) Write about TN Factories rules 1950 under safety and health chapter.
- 7. (a) Describe about Biomedical Waste (Management and handling rules) 1989.

Or

- (b) Explain about the general power of central government.
- 8. (a) Discuss about safety data sheets.

Or

- (b) Describe the preparation of offsite and onsite plans.
- 9. (a) Explain SMPV.

Or

- (b) Write short note on Mines act 1952.
- 10. (a) Explain about ANSI and it's features.

Or

(b) Explain OSHAS 18000.

**Sub. Code 90332** 

# **DIPLOMA EXAMINATION, NOVEMBER 2018**

## Third Year

# Fire and Industrial Safety Engineering

## SAFETY INSPECTION AND AUDIT

(Upto 2015 Batch)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(5 \times 3 = 15)$ 

Answer all questions.

- 1. Define Non-conformity reporting.
- 2. What are the responsibilities of top management?
- 3. What is developing action plan?
- 4. What is safety auditing? What are the benefits of safety auditing?
- 5. Define the procedures of documentations with OSHA guidelines.

**Part B**  $(5 \times 12 = 60)$ 

Answer all questions.

6. (a) Discuss the various types of auditing in detail.

Or

(b) Explain the short term action plan.

7. (a) Explain the training methodology construction and its procedure.

Or

- (b) Define the types of records and methods of records management.
- 8. (a) Explain the structure and importance ISO 14001:2004.

Or

- (b) Explain the guidelines and structure and benefits of ISO 14001: 1994.
- 9. (a) What are the various methods in checking and requiring of Auditing?

Or

- (b) Explain the process of operation and implementation of safety auditing.
- 10. (a) What are the roles and responsibilities of safety auditor?

Or

(b) How to make safety auditing in a proper as well as successful manner? Justify with examples.

2