

CP-8471

Sub. Code

11

DIPLOMA EXAMINATION, NOVEMBER 2017

Fire and Industrial Safety Engineering

COMMUNICATIVE ENGLISH

(Upto 2015 batch)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. What is Enquiry letter?
2. Write any two steps for making appointments.
3. Write a few words about group communication.
4. Does Punctuation play a vital role in mechanics of writing? How?
5. Write a brief note on Case interview.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) What is Inquiry Letter? Give one example.

Or

- (b) What is the format of Circular Letters? Elucidate with some examples.

7. (a) Attempt an essay on Confidential Papers.

Or

(b) Write an essay on Letter of Appointment and reply letter confirming the receipt of the same and confirming the date of joining.

8. (a) Write an essay on effective communication.

Or

(b) What are the limitations of Upward Communication?

9. (a) What are the requirements for a good presentation? Explain.

Or

(b) Write a note on the use of question mark as a punctuation mark.

10. (a) What are the different types of interview? Explain Behavioural interview and Screening interview in a detailed manner.

Or

(b) What are the important do's and don'ts to be followed while facing an interview?

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DIPLOMA EXAMINATION, NOVEMBER 2017

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. What is the role of safety committee?
2. Write the principles of accident prevention.
3. Differentiate FR and SR.
4. Give the importance of safety training.
5. Define safety audit.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain the salient features of Incident Recall Technique (IRT).

Or

- (b) Explain the following :
 - (i) Safety policy
 - (ii) Safety budget.

7. (a) Explain the basic principles of accident prevention.

Or

(b) Explain : cost of accidents.

8. (a) Explain : FSI and STS.

Or

(b) Explain the following :

(i) Frequency rate

(ii) Severity rate.

9. (a) Explain about the importance of safety training.

Or

(b) Write about the awards and celebrations of safety training.

10. (a) Discuss the objectives, advantages and scope of safety audit elaborately.

Or

(b) What are the identifications of unsafe acts of workers and unsafe conditions? Explain them.

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DIPLOMA EXAMINATION, NOVEMBER 2017

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 PPE.
2. Define ELCB.
3. What are the reasons for fire?
4. What is BA, SCBA and SCUBA?
5. Define fall protection.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Describe in detail about all types of PPE with examples.

Or

- (b) Describe in detail about selection criteria of all types of PPE.

7. (a) Describe in detail about circuit protection devices.

Or

(b) Describe in detail about hazards and risks associated with lifting activities.

8. (a) Describe in detail about fire extinguishers.

Or

(b) Describe in detail about fire hydrants.

9. (a) Describe in detail about respiratory PPE.

Or

(b) Describe in detail about non respiratory PPE.

10. (a) Describe in detail about personal fall arrest system.

Or

(b) Describe in detail about safety measures to be followed while working at height.

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DIPLOMA EXAMINATION, NOVEMBER 2017

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. Write about the effects of air pollutants.
2. Explain the classification of water pollutants.
3. Differentiate recycling and reuse.
4. Explain about gas chromatograph, with neat sketch.
5. What do you mean by eco-friendly energy?

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain the hazards of air pollution and automobile pollution.

Or

- (b) Briefly explain the following :
 - (i) Ultra violet radiation
 - (ii) Infra red radiation.

7. (a) Explain the terms sampling and analysis in water pollution. Describe the types of it.

Or

- (b) What are the quality standards must follow in chemical industries, tannery and textile industries?

8. (a) How will you collect and dispose the solid waste? Explain the steps to be followed.

Or

- (b) Explain the following terms :

(i) Incineration

(ii) Virtification.

9. (a) Explain with neat diagram, any three pollution monitoring devices.

Or

- (b) How the pollution control board functions? Explain the laws followed for the execution.

10. (a) How the pollution is controlled in petroleum industries and tannery?

Or

- (b) Explain briefly, the methods followed to control pollution in thermal power plants and dying industry.

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DIPLOMA EXAMINATION, NOVEMBER 2017

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. Write any four safety requirements for chemical storage locations.
2. What is ZMS?
3. Define PPE. Write any four PPE.
4. Define Safety Inspection.
5. Define radiography.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) What are the safety requirements to be considered while handling LPG?

Or

- (b) What are the safety requirements to be considered in food processing industry?

7. (a) Explain in detail about machine guarding.

Or

(b) Explain in detail about ZMS.

8. (a) What are the safety requirements to be considered during welding?

Or

(b) What are the safety requirements to be considered during gas cutting?

9. (a) What are the safety requirements to be considered during shot blasting?

Or

(b) What are the safety requirements to be considered during painting?

10. (a) Describe in detail about OHSAS 18001.

Or

(b) Describe in detail about certification procedure and benefits of certification.

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**DIPLOMA IN FIRE AND INDUSTRIAL SAFETY
ENGINEERING EXAMINATION, NOVEMBER 2017**

ELECTRICAL SAFETY

(Upto 2015 Batch)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. What is CPR?
2. Define lock out and work permit systems.
3. Give the voltage classification.
4. Briefly explain about grouping of gases.
5. What is circuit breaker?

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain the working principles of electrical equipment.
Or
(b) Briefly discuss about international standards on electrical safety.
7. (a) Write short notes on lightning arrestors.
Ors
(b) Describe earthing specifications.

8. (a) Discuss the protection measures against over and under voltage.

Or

- (b) Explain briefly about electrical guards.

9. (a) Write short notes on safety in cabling and cable joints.

Or

- (b) Explain about self diagnostic features.

10. (a) Briefly discuss about intrinsically safe and explosion proof electrical apparatus.

Or

- (b) Explain the classifications of hazardous zones.
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DIPLOMA EXAMINATION, NOVEMBER 2017

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 misleading expression.
2. Define work place temperature.
3. Define working period and rest time.
4. Write a short note on ventilation.
5. Write a short note on material handling.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain hand tools and other factors.

Or

- (b) Explain the sitting, standing and visual conditions.

7. (a) Explain the heat stress and cold stress.

Or

- (b) Write briefly about lighting and noise.

8. (a) Explain the Organization structures.

Or

(b) Explain rest time, holidays and shift arrangement.

9. (a) Explain drinking water and labor colony management.

Or

(b) Explain about washroom facilities and transport facilities.

10. (a) Explain fatigue and its control measures.

Or

(b) Explain storage and material handling.

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**DIPLOMA IN FIRE AND INDUSTRIAL SAFETY
ENGINEERING EXAMINATION, NOVEMBER 2017**

ENVIRONMENT, HEALTH AND SAFETY LAWS

(Upto – 2015 Batch)

Time : 3 Hours

Maximum : 75 Marks

Part A

(5 × 3 = 15)

Answer **all** questions.

1. What is Safety Data Sheet?
2. Write any three disposal methods of Bio-Medical waste.
3. Briefly explain about SMPV rules.
4. Write about employment of young persons as per TNFSR 1950.
5. Discuss William Steiger Act of 1970.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain about welfare and working hours as per The Factories Act 1948.

Or

- (b) Briefly discuss about the Penalties and procedures as per The Factories Act 1948.

7. (a) Write short notes on No Objection Certificate from statutory authorities.

Or

- (b) Explain briefly about the batteries (Management and Handling) Rules 2001.

8. (a) Discuss Safety reports in detail.

Or

- (b) Write about manufacture, storage and import of hazardous chemical rules 1989.

9. (a) Write short notes on Indian Boiler Act 1923.

Or

- (b) Explain workman compensation act.

10. (a) Explain HASAWA 1974, UK.

Or

- (b) Discuss ANSI in detail.
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DIPLOMA EXAMINATION, NOVEMBER 2017

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** questions.

1. What is safety sampling?
2. Define NCR.
3. What do you mean by Accident Rate?
4. Define Non-Reportable Accident.
5. Write About Safety incentive scheme.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain IRT.

Or

- (b) Briefly discuss about the Job Safety Analysis.

7. (a) Write short notes on
 - (i) Departmental accident reports
 - (ii) Documentation of accidents.

Or

- (b) Explain Accident investigation and Analysis.

8. (a) Discuss Safety Audit in detail.

Or

(b) Write about identification of UA of workers and UC in the Shop floor.

9. (a) Write short notes on :

(i) Safety Activity rate

(ii) Safe — T — Score.

Or

(b) Explain FR and FSI in detail.

10. (a) What is role of Government and Private Consulting Agencies in Safety Training? Explain.

Or

(b) Explain Domestic Safety Training.

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DIPLOMA EXAMINATION, NOVEMBER 2017

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. Explain the duties of inspection team.
2. Write short notes on the different types of NCR.
3. Explain the principle of OH & S policy.
4. Explain – Environmental aspect and Environmental impact with examples.
5. Explain the accident report.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Explain in detail about the general inspection procedures.

Or

- (b) What are the various steps involved in developing an “Inspection Report”? Make a sample report.

7. (a) Describe the audit checklists and reports.

Or

- (b) Explain the implementation of audit indications.

8. (a) Explain the structure and features of OHSAS 18001:2007.

Or

- (b) Distinguish between ISO 14001:1996 and ISO 9001:1994.

9. (a) State the three levels of documentation for an ISO 14000 based EMS.

Or

- (b) Describe the auditing ISO 14000.

10. (a) Discuss the process and procedure of reporting accidents.

Or

- (b) (i) Write short notes on “records management”.
(ii) Explain the measurement techniques and equipments.

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DIPLOMA EXAMINATION, NOVEMBER 2017

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. What are the human factors associated with accidents?
2. Define fall prevention and fall protection
3. What are the benefits of chain fully blocks?
4. Explain the “Safe use of ladders”
5. Define controlled accident zones.

Part B

(5 × 12 = 60)

Answer **all** questions.

6. (a) Discuss the hazards of WAH and its precautions in detail.

Or

- (b) Explain the completing process of demolition and its safety.

7. (a) What are the types of permits to work, explain in detail?

Or

- (b) List out the components of scaffolding in detail.

8. (a) Define the OSHA 3146 guidelines in details.

Or

- (b) What are the various man made mistakes in construction, justify your assures with examples?

9. (a) Explain the entire process of high rise building.

Or

- (b) Explain the functions of crane along with its types.

10. (a) Explain the entire process of the tunneling and its safety precautions.

Or

- (b) What are the earth moving equipments? Explain with the types.
