C-1602

Sub. Code 90312

## **DIPLOMA EXAMINATION, NOVEMBER 2019**

#### First Semester

## Fire and Industrial Safety

#### FIRE PREVENTION AND PROTECTION

#### (2019 onwards)

Time: 3 Hours Maximum: 75 Marks

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

Answer all questions.

- 1. What is Fire?
- 2. What is Combustion?
- 3. What is Public fire alarm system?
- 4. What are Notification devices in fire alarm system?
- 5. What is PASS method?
- 6. List out types of sprinkler heads.
- 7. What is respiratory PPE?
- 8. Define: UEL and LEL.
- 9. What is ventilation?
- 10. What is hot work process?

**Part B**  $(5 \times 5 = 25)$ 

Answer all questions.

11. (a) Explain about fire protection system and its types.

Or

- (b) Explain in details about fire fighting methods with examples.
- 12. (a) Explain NFPA 72 classification for fire alarm system.

Or

- (b) Explain about Audible and visible initiating devices.
- 13. (a) Explain parts of fire extinguisher with diagram.

Or

- (b) Explain about water based sprinkler system.
- 14. (a) Explain in details about National electrical code.

Or

- (b) Explain about transfer of flammable and combustible liquids.
- 15. (a) Explain about ventilation and its types.

Or

(b) Explain about handling and storage of flammable and combustible liquids.

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

# Answer all questions.

16. (a) Explain in details about Fire extinguisher.

Or

- (b) Explain about Hazardous materials.
- 17. (a) Explain about fire alarm system.

Or

- (b) Explain about fire hydrant system.
- 18. (a) Explain about Electrostatic spray operation.

Or

(b) Define hot work area and its fire fighting equipments.

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Sub. Code

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## **DIPLOMA EXAMINATION, NOVEMBER 2019**

#### First Semester

## Fire and Industrial Safety

## PERSONAL PROTECTIVE EQUIPMENTS

(2019 onwards)

Time: 3 Hours Maximum: 75 Marks

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

Answer all questions.

- 1. What is hazard and its types?
- 2. What is PPE and its types?
- 3. What is IR / UV radiation?
- 4. What is Noise?
- 5. What is housekeeping?
- 6. What is confined space?
- 7. What is respiratory PPE?
- 8. Define first aid.
- 9. What is WAH?
- 10. Expands: SCUBA, APR, SAR, SCBA.

**Part B**  $(5 \times 5 = 25)$ 

Answer all questions.

11. (a) Explain about head protection.

Or

- (b) Define ear protection.
- 12. (a) Illustrate Leg protection.

Or

- (b) Define Hand protection.
- 13. (a) Explain about skin protection.

Or

- (b) Explain about machine guarding with its types.
- 14. (a) Illustrate SCBA.

Or

- (b) Explain about SCUBA.
- 15. (a) Explain about HASAWA act 1974.

Or

(b) Explain about Fall Protection Systems.

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

Answer all questions.

16. (a) Explain in details about safety helmets parts, Types, Colour code, Care and maintenance.

Or

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(b) Briefly explain about Ear and Eye protections equipments.

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17. (a) Explain: respiratory protection PPE with types.

Or

- (b) Create PPE check list for construction work activities.
- 18. (a) Explain: foot and leg protective equipments.

Or

(b) Explain about WAH and Fall Protection system.

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Sub. Code 90314

## **DIPLOMA EXAMINATION, NOVEMBER 2019**

#### First Semester

## Fire and Industrial Safety

#### **ELECTRICAL SAFETY**

# (2019 onwards)

Time: 3 Hours Maximum: 75 Marks

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

Answer all questions.

- 1. What is Voltage?
- 2. What is capacitor?
- 3. What is excess energy?
- 4. What is ionization?
- 5. Define: fuse.
- 6. Expand: ELCB, GFCI.
- 7. What is PTW?
- 8. Define: LOTO.
- 9. List out some portable electrical tools.
- 10. What is Hazardous zone?

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

11. (a) Define Ohm's law.

Or

(b) Explain in details about CPR.

12. (a) Explain about Lightning arrestor.

Or

- (b) Explain about over current and short current.
- 13. (a) Briefly explain about Electrical guarding.

Or

- (b) Illustrate circuit breaker and overload relay.
- 14. (a) Explain in details about role of environmental in selection of electrical equipments.

Or

- (b) Write short notes on preventive maintenance plan with format.
- 15. (a) List out classification of hazardous zones.

Or

(b) Explain about Equipment certifying agencies and list out some agencies name.

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

Answer all questions.

16. (a) Explain in details about Indian electricity rules.

Or

(b) Explain about first aid treatment for electrical injury.

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17.	(a)	Explain about	Earthing	& Earth	pit maintenance.
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Or

- (b) Illustrate ELCB & GFCI.
- 18. (a) (i) Explain about PTW.
  - (ii) Explain about LOTO.

Or

(b) Write any ten international standards on electrical safety.