

17558

11718

3 Hours / 100 Marks

Seat No.

--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. (A) Answer any **THREE** of the following : 12
- (a) State the importance of plant maintenance.
 - (b) State causes of accident in industry.
 - (c) Give classification of fire and fire extinguishers.
 - (d) List the equipments used for breathing and respiratory protection.
- (B) Answer any **ONE** of the following : 6
- (a) List the sources of radioactive hazards with one example each.
 - (b) Describe the procedure for safety audit.
2. Answer any **FOUR** of the following : 16
- (a) List the harmful effects of ammonia on human being.
 - (b) What are the factors considered for selection of proper personal protective equipment ?
 - (c) Enlist the causes of fire.
 - (d) Explain bin storage with neat sketch.
 - (e) Explain on-line maintenance with suitable example.

- 3. Answer any FOUR of the following : 16**
- (a) State the objectives of safety audit.
 - (b) Explain predictive maintenance in detail.
 - (c) Draw a neat sketch of any four personal protective equipments.
 - (d) Give the precautions to be taken against electrical hazard.
 - (e) Draw a neat sketch of dry chemical powder fire extinguisher.
 - (f) State the precautions to be taken while transporting flammable liquid.
- 4. (A) Answer any THREE of the following : 12**
- (a) Explain preventive maintenance in detail.
 - (b) State the principles of material handling.
 - (c) Explain fire triangle and principle of fire extinguishing.
 - (d) Give the classification of explosives.
- (B) Answer any ONE of the following : 6**
- (a) State functions and responsibilities of maintenance department.
 - (b) Draw a neat sketch of positive and negative pressure pneumatic conveyors.
- 5. Answer any TWO of the following : 16**
- (a) Explain construction and working of soda acid type fire extinguisher with neat sketch.
 - (b) Describe the procedure for plant startup and shutdown.
 - (c) Explain the procedure for shutdown maintenance.
- 6. Answer any TWO of the following : 16**
- (a) Explain construction and working of bucket elevator with neat sketch.
 - (b) Explain supplied air type and self contained breathing apparatus in detail.
 - (c) (i) Describe scheduled maintenance in detail.
(ii) Write sources and protection of noise hazard.
-