16172 3 Hours / 100 Marks

Seat No.							
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Instructions	:
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- (1) All Questions are *compulsory*.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data, if necessary.
- (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. (A) Attempt any THREE of the following:

12

- (i) List the basic facilities in the plant. Explain any one in brief.
- (ii) Write the procedure of preventive maintenance.
- (iii) Define wear. State its types and causes.
- (iv) What are the features of TPM?

(B) Attempt any ONE of the following:

6

- (i) Explain electric supply system with neat sketch.
- (ii) Explain industrial ventilation with neat sketch. State its importance.

2. Attempt any FOUR of the following:

16

- (a) Explain accessibility for maintenance.
- (b) What are the advantages of preventive maintenance over breakdown maintenance?
- (c) List the different maintenance stages in industry.
- (d) With the help of suitable example explain the machine history chart.
- (e) Define TPM. State its features.

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3.	Atte	mnt a	ny FOUR of the following:	16			
••	(a)	Explain the Pillars of TPM in brief.					
	(b)	•	pare adhesive wear and abrasive wear.				
	(c)		t are the different lubrication systems? Explain any one in detail.				
	(d)		cribe basic systems of TPM.				
	(e)		t are the benefits of lubrication ?				
4. (A)		Attempt any THREE of the following:					
		(i)	What are the different types of maintenance ? State importance of maintenance.				
		(ii)	Explain over-load relays.				
		(iii)	Explain the prevention of fire due to electricity.				
		(iv)	Define accident. What are its effects?				
		(v)	Explain in detail how TPM beneficial for plant.				
	(B)	Atte	mpt any ONE of the following:	6			
		(i)	Explain corrosive creation wear in detail.				
		(ii)	What is earthing? Explain any one method of earthing. State its advantages.				
5.	Atte	mpt a	ny FOUR of the following:	16			
	(a)	With	the help of suitable example explain fool proofing device.				
	(b)	List	the personal protective equipment with its application.				
	(c)	Expl	ain the causes of accident.				
	(d)	Explain pitting wear.					
	(e)	List	the instruments needed for electrical maintenance with its application.				

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6. Attempt any TWO of the following:

16

- (a) What are the impurities present in the water? Explain necessity of purification of water and list the different methods of water purification.
- (b) Explain the following:
 - (i) Repair Cycle
 - (ii) Scheduled maintenance
- (c) Explain in detail
 - (i) Safety Policies
 - (ii) House Keeping

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