



17203

21718

2 Hours / 50 Marks

Seat No.

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- 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. Attempt any nine of the following :	18
a) Name the products of blast furnace obtained during smelting of iron ore.	2
b) Define heat treatment of steel.	2
c) Give any two applications of wrought iron.	2
d) Write the composition of magnetic steel.	2
e) State and explain any two factors affecting immersed corrosion.	2
f) "Tinned containers are preferred over galvanised containers for storing food stuff". Give reason.	2
g) Define atmospheric corrosion.	2
h) Name the different types of oxide film formed during atmospheric corrosion.	2
i) Define the term fuel and Give its classification.	2
j) State any two properties of bio diesel.	2
k) Define calorific value and ignition temperature.	2
l) Define the term flash and fire point.	2
2. Attempt any four of the following :	16
a) Write chemical reaction taking place in zone of reduction of blast furnace.	4
b) Differentiate between annealing and normalising.	4

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	Marks
c) State composition properties and uses of heat resisting steels.	4
d) State four characteristics of good fuels.	4
e) State composition and properties of CNG.	4
f) Explain the process of determining percentage of moisture and volatile matter in coal sample by proximate analysis.	4
3. Attempt any four of the following :	16
a) Explain the mechanism of immersed corrosion by Hydrogen evolution.	4
b) Distinguish between Galvanising and Tinning.	4
c) Name and explain the method used for making Alclad sheets.	4
d) Give any one application of the following lubricants.	4
i) Graphite	
ii) Silicone oil	
iii) Water	
iv) Grease.	
e) Explain the mechanism of fluid film lubrication in process with labelled diagram.	4
f) State any four functions of lubricants.	4
