



	(c) Describe the proximate analysis method for a given coal sample.	<b>07</b>
<b>Q.4</b>	(a) Define carbonization.	<b>03</b>
	(b) What is Flash and Fire point?	<b>04</b>
	(c) Differentiate between LTC and HTC.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) What is recuperator? Explain in brief.	<b>03</b>
	(b) Explain By-product coke oven high temperature carbonization process.	<b>04</b>
	(c) Describe the construction and working of cupola furnace. Give advantage of its applications.	<b>07</b>
<b>Q.5</b>	(a) What do you mean by furnace?	<b>03</b>
	(b) Give different classification of furnaces.	<b>04</b>
	(c) Explain the construction and working of muffle furnace with figure.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) What is spalling in refractory? Give reasons for spalling.	<b>03</b>
	(b) Discuss pyrometric cone equivalent (PEC) test for refractory.	<b>04</b>
	(c) What is refractoriness under load? Explain the method to determine refractoriness under load.	<b>07</b>

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