



**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF SOCIAL SCIENCE**



Subject : Geography

**CHPT.5. Minerals and  
Energy Resources**

Date: 19-11-2017

Resource Person: Mr.S.Gopalakrishnan

Name of the Student : \_\_\_\_\_

Class & Division : X \_\_\_\_\_

Roll Number : \_\_\_\_\_

Sl. No.	Questions and Answers	Marks
1.	Where is the largest wind farm located in India? Tamil Nadu.	1
2.	Name four States producing manganese ore in India? (i) Maharashtra (ii) Orissa (iii) Madhya Pradesh (iv) Karnataka	1
3.	Name three most important coal producing States of India. (i) Jharkhand (ii) West Bengal (iii) Orissa.	1
4.	Write two merits of hydro-electric power? 1. It is pollution free 2. It is a renewable source of energy.	1
5.	Name four important iron ore producing states of India? (i) Chhattisgarh (ii) Orissa (iii) Jharkhand (iv) Goa.	1
6.	Write briefly two merits Thermal power? (i) Can be produced where energy is in demand (Near large cities, industries etc. (ii) No transmission loss when compared to Hydro electric power.	1
7.	Name three States which are known for the production of mica.? (i) Jharkhand (ii) Bihar (iii) Andhra Pradesh.	1
8.	Mention three areas where petroleum is found in India. (i) Assam (ii) Gujarat (iii) Mumbai High.	1
9.	What are commercial sources of energy?  The commercial sources of energy are: coal, petroleum, natural gas, hydroelectricity and nuclear energy.	1



**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF SOCIAL SCIENCE**



10.	Name four bauxite producing states.  (i) Jharkhand (ii) Gujarat (iii) Maharashtra (iv) Orissa.	1
11.	Name any four conventional sources of energy.  Wood, coal, petroleum, hydroelectricity and natural gas. (write any four)	1
12.	State the name of minerals in which India is self - sufficient and in which we are deficient.  <b>Self -sufficient in</b> – Iron and mica.  <b>Deficient in</b> – Copper, gold, lead and zinc.	1
13.	State uses of limestone and the State having largest production of lime stone? 1. About 75% of limestone is used in the cement industry. 2. It is also used for smelting of iron and in chemical industries. 3. Leading producer of limestone is Madhya Pradesh	3
14.	State any three successful uses of solar energy in our life?  Three successful uses of solar energy:- 1. Cooking 2. Heating water 3. Lighting	3
15.	Give three examples of metallic and three examples of non-metallic minerals?  <b>Metallic minerals:-</b> (i) Copper (ii) Silver (iii) Gold (iv) Iron (v) Manganese (vi) Tin. <b>Non-metallic minerals:-</b> (i) Limestone (ii) Mica (iii) Coal (iv) Potash (v) Nitrate (vi) Dolomite (vii) Gypsum (viii) Petroleum	3
16.	“Hydel power is a more important source of energy than thermal power”. Discuss this facts with four examples?  ✓ Hydel power is a renewable source as it is produced from water moving with a great speed. ✓ On the other hand coal, petroleum and natural gas are non-renewable and finite resources. Takes millions of years to form. ✓ Hydel power is neat and clean and pollution free with less maintenance cost. Electricity can be easily transported and distributed through cables and wires.	3
17.	What are the two main qualities of iron ore deposits of India? Name the two types of iron ore mainly found in the country. Which are the two states known for the production of iron ore? 1. Iron ore deposits are found in the close proximity to coal. 2. The two major types of iron ore found in India are Magnetite and	3



## INDIAN SCHOOL DARSAIT DEPARTMENT OF SOCIAL SCIENCE



	Haematite. 3. Major iron ore producing states in India are Jharkhand and Chhatisgarh. Iron ore deposits are mainly found in Chotanagpur Plateau.																	
18.	Describe the distribution of coal in India? (i) Anthracite is found in Jammu and Kashmir (ii) Bituminous is found in Jharkhand, Orissa, West Bengal, Chhatisgarh and Madhya Pradesh (iii) Lignite is found in Neyveli in Tamil Nadu and in Rajasthan.	3																
19.	State varieties of iron ores and their percentage of ore content. (i) Magnetite – 72% of iron (ii) Hematite – 60% to 70% of iron (iii) Limonite – 40% to 60% of iron (iv) Siderite – 40% to 50% of iron.	5																
20.	State any two facts regarding the importance of bauxite. Name the four major States which are known for its production?  Bauxite is an ore of aluminium which are used for manufacturing of aircrafts, utensils and other household goods. Major States producing Bauxite are:- (i) Orissa (ii) Maharashtra (iii) Gujarat (iv) Madhya Pradesh.	5																
21.	State two main uses of Copper. Also, mention four major Copper producing districts of India? (i) <b>Uses</b> – It is used for making electric wires, utensils and alloys. (ii) <b>Major Copper producing districts</b> – Khetri in Rajasthan, Nellore in Andhra Pradesh, and in Madhya Pradesh as well as Karnataka.	3																
22.	State the facts about iron-ore found in India with reference to the following: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;"><b>1.</b></td> <td style="width: 45%;">Any two types of iron ores</td> <td style="width: 5%; text-align: center;"><b>1.</b></td> <td style="width: 45%;">Magnetite and Haematite</td> </tr> <tr> <td style="text-align: center;"><b>2.</b></td> <td>Leading states in their deposits,</td> <td style="text-align: center;"><b>2.</b></td> <td>Jharkhand and Chhatisgarh</td> </tr> <tr> <td style="text-align: center;"><b>3.</b></td> <td>Two ports exporting iron ore.</td> <td style="text-align: center;"><b>3.</b></td> <td>Marmagao in Goa and Vishakhapatnam in Andhra Pradesh</td> </tr> <tr> <td style="text-align: center;"><b>4.</b></td> <td>Major destination of the exports.</td> <td style="text-align: center;"><b>4.</b></td> <td>Japan and Korea.</td> </tr> </table>	<b>1.</b>	Any two types of iron ores	<b>1.</b>	Magnetite and Haematite	<b>2.</b>	Leading states in their deposits,	<b>2.</b>	Jharkhand and Chhatisgarh	<b>3.</b>	Two ports exporting iron ore.	<b>3.</b>	Marmagao in Goa and Vishakhapatnam in Andhra Pradesh	<b>4.</b>	Major destination of the exports.	<b>4.</b>	Japan and Korea.	5
<b>1.</b>	Any two types of iron ores	<b>1.</b>	Magnetite and Haematite															
<b>2.</b>	Leading states in their deposits,	<b>2.</b>	Jharkhand and Chhatisgarh															
<b>3.</b>	Two ports exporting iron ore.	<b>3.</b>	Marmagao in Goa and Vishakhapatnam in Andhra Pradesh															
<b>4.</b>	Major destination of the exports.	<b>4.</b>	Japan and Korea.															
23.	Why do you think that solar energy has a bright future in India?	5																



## INDIAN SCHOOL DARSAIT DEPARTMENT OF SOCIAL SCIENCE



	<ol style="list-style-type: none"> <li>1. India lies in the tropical zone and thus has enough scope for the production and utilization of solar energy throughout the year.</li> <li>2. Solar energy is a non-conventional sources which is abundant, renewable, eco-friendly and pollution free.</li> <li>3. Becoming increasingly popular in every parts of the country and can be used for cooking, lighting, pumping, heating water and cooling.</li> <li>4. Being used in large scale for hotels and industries.</li> <li>5. Renewable resources are finishing up fast due to excessive use.</li> </ol>											
24.	<p>Why is coal called the most important source of energy even today? Explain any four reasons.</p> <ol style="list-style-type: none"> <li>1. It is most important for the Iron and Steel Industry for use in the blast furnace.</li> <li>2. Major raw materials for chemical industries.</li> <li>3. Used in major metallurgical industries as fuel. (High grade bituminous coal)</li> <li>4. Over two-third of the coal in India is used to produce electricity in thermal power plants.</li> </ol>	5										
25.	<p>State the facts about coal found in India with reference to the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">1. Their total reserves</td> <td style="width: 50%;">1. About 214,000 million tones.</td> </tr> <tr> <td>2. Annual production</td> <td>2. Annual production = 330 million tones</td> </tr> <tr> <td>3. Two important coal fields</td> <td>3. Raniganj in West Bengal and Bokaro in Jharkhand.</td> </tr> <tr> <td>4. Two major uses</td> <td>4. Generation of electricity and for making iron and steel.</td> </tr> <tr> <td>5. Age of formation</td> <td>5. Gondwana and Tertiary</td> </tr> </table>	1. Their total reserves	1. About 214,000 million tones.	2. Annual production	2. Annual production = 330 million tones	3. Two important coal fields	3. Raniganj in West Bengal and Bokaro in Jharkhand.	4. Two major uses	4. Generation of electricity and for making iron and steel.	5. Age of formation	5. Gondwana and Tertiary	5
1. Their total reserves	1. About 214,000 million tones.											
2. Annual production	2. Annual production = 330 million tones											
3. Two important coal fields	3. Raniganj in West Bengal and Bokaro in Jharkhand.											
4. Two major uses	4. Generation of electricity and for making iron and steel.											
5. Age of formation	5. Gondwana and Tertiary											
26.	<p>What are the uses of petroleum in India?</p> <p>Petroleum is the second major energy source in India after coal.</p> <ol style="list-style-type: none"> <li>i. It provides fuel for heat and lighting,</li> <li>ii. It is used as lubricants for machinery</li> <li>iii. It is raw materials for a number of manufacturing industries.</li> <li>iv. Petroleum refineries act as a “nodal industry” for synthetic textile, fertilizer and numerous chemical industries.</li> </ol>	5										
27.	<p>Name the important oil fields of India.</p> <p>. Mineral oil is produced from:</p> <ol style="list-style-type: none"> <li>i. About 63 per cent of India’s petroleum production is from <b>Mumbai High</b>,</li> <li>ii. 18 per cent comes from Gujarat and <b>Ankeleshwar</b> is the most important field of Gujarat.</li> <li>iii. 16 per cent from <b>Assam</b>. Digboi, Naharkatiya and Moran-Hugrijan are the important oil fields in the state.</li> </ol>	5										
28.	<p>Where is the largest solar farm located? State some uses of solar energy?</p>	5										



## INDIAN SCHOOL DARSAIT DEPARTMENT OF SOCIAL SCIENCE



	<p>Madhopur near Bhuj, where it is used to sterilize milk can.</p> <p>Some uses of solar energy:-</p> <ol style="list-style-type: none"> <li>1. Domestic and Street lighting</li> <li>2. For solar cookers</li> <li>3. Water heating</li> <li>4. Room heating.</li> </ol>													
32.	<p>How will you use and conserve energy efficiently?</p> <p>To conserve energy we should:-</p> <ol style="list-style-type: none"> <li>1. Make use public transport system.</li> <li>2. Switch off electricity if not required.</li> <li>3. Use power saving devices.</li> <li>4. Regularly check our power equipment.</li> <li>5. Turn to use of conventional sources of energy.</li> </ol>	5												
29.	<p>Differentiate between metallic and non-metallic minerals?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Metallic Minerals</th> <th style="text-align: center;">Non-Metallic Minerals</th> </tr> </thead> <tbody> <tr> <td>1. These occur in igneous rocks.</td> <td>1. These are found in sedimentary rocks.</td> </tr> <tr> <td>2. The rocks have crystalline structure.</td> <td>2. The rocks are stratified.</td> </tr> <tr> <td>3. These are found in impure form, ores.</td> <td>3. These are found in pure form.</td> </tr> <tr> <td>4. These are malleable and ductile.</td> <td>4. These are brittle.</td> </tr> <tr> <td>5. These shine, e.g. iron, copper, silver, etc.</td> <td>5. These are dull, e.g. coal, salt, etc.</td> </tr> </tbody> </table>	Metallic Minerals	Non-Metallic Minerals	1. These occur in igneous rocks.	1. These are found in sedimentary rocks.	2. The rocks have crystalline structure.	2. The rocks are stratified.	3. These are found in impure form, ores.	3. These are found in pure form.	4. These are malleable and ductile.	4. These are brittle.	5. These shine, e.g. iron, copper, silver, etc.	5. These are dull, e.g. coal, salt, etc.	5
Metallic Minerals	Non-Metallic Minerals													
1. These occur in igneous rocks.	1. These are found in sedimentary rocks.													
2. The rocks have crystalline structure.	2. The rocks are stratified.													
3. These are found in impure form, ores.	3. These are found in pure form.													
4. These are malleable and ductile.	4. These are brittle.													
5. These shine, e.g. iron, copper, silver, etc.	5. These are dull, e.g. coal, salt, etc.													
30.	<p>Differentiate between conventional sources of energy and Non-conventional sources of energy?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Conventional sources of energy.</th> <th style="text-align: center;">Non-conventional sources of energy.</th> </tr> </thead> <tbody> <tr> <td>1. These have been used for some time.</td> <td>1. These have been recently developed.</td> </tr> <tr> <td>2. These are expensive in the long run.</td> <td>2. These are cheaper in the long run.</td> </tr> <tr> <td>3. These are used extensively.</td> <td>3. These are used locally.</td> </tr> <tr> <td>4. Coal, petroleum, natural gas and hydroelectricity.</td> <td>4. Solar, wind, tidal, geothermal, atomic energy and Biogas.</td> </tr> </tbody> </table>	Conventional sources of energy.	Non-conventional sources of energy.	1. These have been used for some time.	1. These have been recently developed.	2. These are expensive in the long run.	2. These are cheaper in the long run.	3. These are used extensively.	3. These are used locally.	4. Coal, petroleum, natural gas and hydroelectricity.	4. Solar, wind, tidal, geothermal, atomic energy and Biogas.	5		
Conventional sources of energy.	Non-conventional sources of energy.													
1. These have been used for some time.	1. These have been recently developed.													
2. These are expensive in the long run.	2. These are cheaper in the long run.													
3. These are used extensively.	3. These are used locally.													
4. Coal, petroleum, natural gas and hydroelectricity.	4. Solar, wind, tidal, geothermal, atomic energy and Biogas.													



**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF SOCIAL SCIENCE**



31.	Differentiate between Anthracite and Bituminous coal?		5												
	<table border="1"><thead><tr><th><b>Anthracite coal</b></th><th><b>Bituminous coal</b></th></tr></thead><tbody><tr><td>1. It has more than 80% carbon.</td><td>1. It has 60% to 80% carbon.</td></tr><tr><td>2. It is black, hard and compact.</td><td>2. It is less black, hard and compact.</td></tr><tr><td>3. It is the best quality of coal.</td><td>3. It is medium quality of coal.</td></tr><tr><td>4. It is scarcely available.</td><td>4. It is widely available.</td></tr><tr><td>5. Found only in Jammu and Kashmir.</td><td>5. Found in Chhatisgarh, Jharkhand, West Bengal, Orissa.</td></tr></tbody></table>	<b>Anthracite coal</b>	<b>Bituminous coal</b>	1. It has more than 80% carbon.	1. It has 60% to 80% carbon.	2. It is black, hard and compact.	2. It is less black, hard and compact.	3. It is the best quality of coal.	3. It is medium quality of coal.	4. It is scarcely available.	4. It is widely available.	5. Found only in Jammu and Kashmir.	5. Found in Chhatisgarh, Jharkhand, West Bengal, Orissa.		
<b>Anthracite coal</b>	<b>Bituminous coal</b>														
1. It has more than 80% carbon.	1. It has 60% to 80% carbon.														
2. It is black, hard and compact.	2. It is less black, hard and compact.														
3. It is the best quality of coal.	3. It is medium quality of coal.														
4. It is scarcely available.	4. It is widely available.														
5. Found only in Jammu and Kashmir.	5. Found in Chhatisgarh, Jharkhand, West Bengal, Orissa.														
32.	Differentiate between Commercial and Non-Commercial energy?		5												
	<table border="1"><thead><tr><th><b>Commercial Energy</b></th><th><b>Non-Commercial Energy</b></th></tr></thead><tbody><tr><td>1. These are coal, petroleum, natural gas, hydroelectricity and nuclear energy.</td><td>1. These are firewood, charcoal, cowdung and agricultural wastes.</td></tr><tr><td>2. It is used on a large scale.</td><td>2. It is used on a small scale.</td></tr><tr><td>3. All are exhaustible resources and cause pollution except hydroelectricity.</td><td>3. These are inexhaustible resources of energy and do not cause any pollution.</td></tr></tbody></table>	<b>Commercial Energy</b>	<b>Non-Commercial Energy</b>	1. These are coal, petroleum, natural gas, hydroelectricity and nuclear energy.	1. These are firewood, charcoal, cowdung and agricultural wastes.	2. It is used on a large scale.	2. It is used on a small scale.	3. All are exhaustible resources and cause pollution except hydroelectricity.	3. These are inexhaustible resources of energy and do not cause any pollution.						
<b>Commercial Energy</b>	<b>Non-Commercial Energy</b>														
1. These are coal, petroleum, natural gas, hydroelectricity and nuclear energy.	1. These are firewood, charcoal, cowdung and agricultural wastes.														
2. It is used on a large scale.	2. It is used on a small scale.														
3. All are exhaustible resources and cause pollution except hydroelectricity.	3. These are inexhaustible resources of energy and do not cause any pollution.														
33.	Differentiate between Natural gas and Biogas?		5												
	<table border="1"><thead><tr><th><b>Natural gas</b></th><th><b>Biogas</b></th></tr></thead><tbody><tr><td>1. It is associated with or without petroleum.</td><td>1. It is obtained by the decomposition of organic matter.</td></tr><tr><td>2. Used in urban areas.</td><td>2. Used in rural areas.</td></tr><tr><td>3. Exhaustible.</td><td>3. Inexhaustible.</td></tr><tr><td>4. Not replenishable.</td><td>4. Replenishable.</td></tr><tr><td>5. Used for domestic and industrial purposes.</td><td>5. Used for domestic purposes only.</td></tr></tbody></table>	<b>Natural gas</b>	<b>Biogas</b>	1. It is associated with or without petroleum.	1. It is obtained by the decomposition of organic matter.	2. Used in urban areas.	2. Used in rural areas.	3. Exhaustible.	3. Inexhaustible.	4. Not replenishable.	4. Replenishable.	5. Used for domestic and industrial purposes.	5. Used for domestic purposes only.		
<b>Natural gas</b>	<b>Biogas</b>														
1. It is associated with or without petroleum.	1. It is obtained by the decomposition of organic matter.														
2. Used in urban areas.	2. Used in rural areas.														
3. Exhaustible.	3. Inexhaustible.														
4. Not replenishable.	4. Replenishable.														
5. Used for domestic and industrial purposes.	5. Used for domestic purposes only.														



**INDIAN SCHOOL DARSAIT**  
**DEPARTMENT OF SOCIAL SCIENCE**



	6. Gives less thermal energy.	6. Gives higher thermal energy.	
34.	Describe the distribution of iron ore in India?  (i) Magnetite and haematite are found in Jharkhand, Chhatisgarh, Andhra Pradesh, Goa, Orissa, Karnataka, Tamil Nadu, Maharastra and Rajasthan. (ii) Most of them comes from Jharkhand, Chhatisgarh, Orissa, Goa and Karnataka. (iii) Some major mines are:- (a) Singhbhum in Jharkhand (b) Durg and Dantewara in Chhatisgarh (c) Keonjhar and Mayurbhanj in Orissa (d) North Goa (e) Bellary in Karnataka.		5