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| **Subject : Geography** |  **CHPT.5. Minerals and Energy Resources** |  **Notes : 10-10-2018** |
| **Resource Person: Mr. S.Gopalakrishnan** |  **Date : \_\_\_\_\_\_\_\_\_\_\_\_\_**  |
| **Name of the Student :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | **Class & Division : X \_\_\_\_** | **Roll Number : \_\_\_\_** |

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| **Sl.No.** | **Questions** | **Marks** |
| 1. |  What are rocks? | **1** |
|  2. |  What are minerals? | 1 |
| 3. | Where are minerals usually found? | 1 |
| 4. | Define the term ‘ore’. | 1 |
| 5. | Which mineral is mined from the Panchpatmali deposits of Koraput district, Orissa? | 1 |
| 6. | Mention any two uses of Manganese. | 1 |
| 7. | How do geologists to classify minerals? | 1 |
| 8. | Name the mineral being mined from the bed of the Indian Ocean  | 1 |
| 9. | Which compound gives whiteness to the toothpaste? | 1 |
| 10. | Name the mineral from which the sparkle of the toothpaste come from? | 1 |
| 11. | How do geographers study minerals? | 1 |
| 12. | Name two States having major petroleum deposits. | 1 |
| 13. | Where do metals come from? | 1 |
| 14. | Give examples of any two minerals which are found in veins and lodes. | 1 |
| 15. | Name the mineral from which fluoride used in toothpastes is obtained? | 1 |
| 16. | Name two ferrous metals. | 1 |
| 17. | Name the leading producer of copper in India. | 1 |
| 18. | Which is the State producing the largest quantity of iron ore in India. | 1 |
| 19. | Name the type of rock in which coal is found. | 1 |
| 20. | The State in which Bailadila range of hills which contains heamatite is located. | 1 |
| 21. | Where is India’s Bauxite deposits found? | 1 |
| 22. | Why is copper used in electrical cables and electronic industries? | 1 |
| 23. | Name the two States in which Durg-Bastar-Chandrapur, iron ore belt is located. | 1 |
| 24. | How are bauxite deposits formed? | 1 |
| 25. | Name the rock in which limestone is found. | 1 |
| 26. | What are the uses of aluminium? | 1 |
| 27. | M Name the State in which Mayurbhanj and Kendujhar, the important iron ore mines are located. | 1 |
| 28. | Name the mineral composed of a series of plates or leaves. | 1 |
| 29. | Name the mineral which is mainly used in the manufacturing of steel and ferro-manganese alloy? | 1 |
| 30. | What are the characteristics of mica which makes it one of the indispensable mineral in electric and electronic industries? | 1 |
| 31. | How can we prevent mining from becoming a “killer industry”? | 1 |
| 32. | The mineral which is mined from the Balaghat mines in Madhya Pradesh. | 1 |
| 33. | What are the uses of Natural gas? | 1 |
| 34. | What are the impacts of mining on the health of the miners? | 1 |
| 35. | Name the major lignite mine in South India?  | 1 |
| 36. | Why is natural gas considered as an environment friendly source of energy? | 1 |
| 37. | Name the largest bauxite producing State in India. | 1 |
| 38. | In which State is the Khetri mine located? | 1 |
| 39. | Mention the different colors in which mica can be found? | 1 |
| 40. | What are the demerits of continuous extraction of ores? | 1 |
| 41. | How does mining affect the the health of the environment? | 1 |
| 42. | For which industry, petroleum refineries acts as a Nodal industry? | 1 |
| 43. | Name the metal derived from Bauxite? | 1 |
| 44. | What is geothermal energy? | 1 |
| 45. | Which gas has replaced liquid fuels for vehicles? | 1 |
| 46. | Name the location of two experimental projects located in India to harness Geothermal energy. | 1 |
| 47. | Name two places well known for efficient use of wind energy in the country. | 1 |
| 48. | What is limestone used for? | 1 |
| 49. | Name the raw materials used in the production of biogas for domestic consumption in rural areas. | 1 |
| 50. | At which levels are biogas plants setup? | 1 |
| 51. | Where is the largest wind farm cluster located? | 1 |
| 52. | Which type of coal is most popular in commercial use? | 1 |
| 53. | How is peat formed? | 1 |
| 54. | Which technology helps to convert sunlight directly into electricity. | 1 |
| 55. | How is coal formed?  | 1 |
| 56. | Where is the largest Solar plant of India located? | 1 |
| 57. | What are ‘Gobar gas plants’? | 1 |
| 58. | How is the solar energy generated at Madhopur being used? | 1 |
| 59. | What twin benefits does a farmer get from Gobar gas plants? | 1 |
| 60. | What are the twin planks of sustainable energy development and use? | 1 |
| 61. | **Give a brief account of copper, bauxite, mica & limestone deposits of India.** |  |
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| **MINERAL** | **AREA** | **USES** |
| **COPPER****(Non-Ferrous)** | * Balaghat mines in M.P. ( 52%- India’s copper)
* Singhbhum-Jharkhand
* Khetri- Rajasthan
 | Electric cables, electronic & chemical industries.Reason: It is Malleable, ductile & a good conductor of electricity. |
| **BAUXITE****(Non- Ferrous)****Aluminium -metal** | * Amarkantak plateau, Maikal hills & plateau region of Bilaspur- Katni.
* Orissa- largest producer (45%), Panchpatmali deposits in Koraput- most important
 | Important metal because it combines the strength of metals such as ironwith extreme lightness,  good conductivity and great malleability. |
| **MICA****(Non- metal)** | * Northern edge of Chota Nagpur plateau
* Koderma Gaya- Hazaribagh belt of Jharkhand (leading producer)
* Ajmer-Rajasthan
* Nellore- Andhra Pradesh
 | Electric & electronic industry |
| **LIMESTONE****(Rock)** | Main producing states:* Andrra Pradesh- 16%
* Madhya Pradesh-15%
* Rajasthan-15%
* Gujarat-12%
* Tamil Nadu-9%
 | * + Basic raw material for Cement

industry* + Smelting iron ore in the blast

furnace. |

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| 62. | **Describe the major iron ore belts of India in the regions given below:*** Orissa- Jharkhand belt
* Durg – Bastar – Chandrapur belt
* Bellary – Chitradurga- Chikmaglur – Tumkur belt
* Maharashtra- Goa belt
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| Orissa- Jharkhand belt | Durg – Bastar – Chandrapur belt | Bellary – Chitradurga- Chikmaglur – Tumkur belt | Maharashtra- Goa belt |
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| Hematite ore is found * **Orissa** – Badampahar mines in Mayurbhanj & Kendujhar district
* **Jharkhand** – Singhbhum district, mined in Gua & Noamandi.
 | States: Chhattisgarh & Maharashtra* High grade haematites are found in Bailadila range of hills in Bastar district.
* 14 deposits of super grade ores are used for steel making, exported to Japan & Korea via Vishakhapatnam port.
 | * Karnataka- large reserves
* Kudremukh mines in Western Ghats (Karnataka) – 100% export unit- one of the largest in the world.
* Ore is transported as slurry through a pipeline to a port near Mangalore.
 | * Goa, Ratnagiri district of Maharashtra.
* Exported through Marmagao port.
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|  | **Answer the following questions in your Note Book.** |
|  | **ASSIGNMENT – 1** |
| 1. | Describe the main types of formations in which minerals occur. |
| 2. | How do geographers and geologists take up the study of minerals? |
| 3. | Describe the distribution of minerals in India. OR Why are minerals found unevenly distributed in India. |
| 4. | Why is mining activity said to be a ‘Killer industry’? ORWhat are the hazards of mining for the health of man and the environment? |
| 5. | What is the principal source of commercial energy in India? |
| 6. | State how minerals can be conserved for future generation.  |
| 7. | Write about the geological periods in which coal occur and its occurrence. |
|  | **ASSIGNMENT – 2** |
| 8. | What are the uses of manganese? |
| 9. | Describe the three copper producing regions of India. |
| 10. | What are the characteristics and uses of aluminium? |
| 11. | Explain the different types of coal. |
| 12. | Explain petroleum under the following headings:1. Importance b) Occurrence c) Distribution
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| 13. | How is nuclear energy is obtained? Name the minerals used in generating nuclear energy and where are they found in India? |
| 14. | How is tidal energy generated? In India which area provides ideal conditions for utilizing tidalenergy? |

 OUTLINE MAP OF INDIA (for practice)