**Activity: Week 37 lesson no 6**

**Essay question.**

List at least five (5) impacts of humans on biodiversity and the natural environment; describe what fossil tourism is with two (2) examples in South Africa is and how it impacts on the economy.

NB: No answers will be awarded marks in the form of flow charts as diagrams. (20)

 **Marking Guideline**

*The impact of Humans on biodiversity and the natural environment* **(H)**

* Habitat destruction 🗸
* Natural disasters🗸
* Over-exploitation🗸
* Pollution🗸
* Pesticides and fertilizers🗸
* Climate change🗸
* Alien invasive species🗸
* Diseases🗸
* Rapid population growth🗸 (Any 5)

*Fossil tourism* **(F)**

* Fossil tourism is a type of ecotourism🗸, but in fossil tourism the main attraction is its fossils. 🗸 (2)

*Fossil tourism example* **(E)**

* The Cradle of Humankind🗸 is one of the most famous fossils sites🗸
* and is found in Gauteng and North West Province. 🗸
* It includes the Sterkfontein, Swartkrans, Kromdraai regions. 🗸
* It is a World Heritage Site🗸 since 1999.
* It is one of the richest source of fossils of early humans. 🗸
* Nearly half of all human-ancestor fossils have been found here. 🗸
* The West Coast Fossil Park🗸
* is found in the Western Cape Province. 🗸
* Along the west coast, a few kilometers inland of the Lange Baan Lagoon. 🗸
* This was once a phosphate mine. 🗸
* It has the greatest diversity of five million old fossils. 🗸
* It contained the fossils of the first bear ever found south of the Sahara🗸.
* Fossils of the extinct true seal and four extinct species of penguins were found here. 🗸
* Museums🗸
* Important fossils have been moved to museums once they have been discovered. 🗸
* The dinosaur fossil found in the Karoo have been moved to the museum in Graaff- Reinet. 🗸
* The museums become important fossil tourist attractions.
* Kitching Fossil Exploration Centre 🗸
* situated in the heart of the Karoo, in the town of Nieu-Bethedsa, 🗸
* and it tells the story of life in South Africa 253 million years ago during the Permian Period. 🗸
* Life-sized models of prehistoric animals 🗸which once lived in the Karoo and paintings by the artist Gerhard Marx illustrate a time when there were no flowers or grasses, no mammals and no birds. 🗸
* The Centre also has displays on some of the latest and hottest fossil finds like [*Homo naledi*](https://www.wits.ac.za/homonaledi/) and *Australopihecus sediba*. 🗸 (Any 7 marks from 2 examples)

Impact of Fossil Tourism on Economy **(E)**

* Creates jobs. 🗸
* Generates income for people living in these areas. 🗸
* Creates business opportunities for travel agents and tour operators. 🗸 (3)

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| --- | --- | --- |
| Relevance (R) |  Logical (L) |  Comprehensive (C) |
| All information given is relevant to the question | Ideas arranged in a logical/ cause effect sequence | Answered all aspects required by the essay in sufficient detail |
| All information relevant to * Human impact on biodiversity and environment
* Fossil tourism
* Advantages of fossil tourism
 | The information on * Human impact on biodiversity and environment
* Fossil tourism
* Advantages of fossil tourism

Is in a logical sequence  | The following must be included* Human impact on biodiversity and environment 3/5)
* Fossil tourism (7/9)
* Advantages of fossil tourism ( 2/3)
 |
|  1 mark |  1 mark |  1 mark |

 Content (17)

 Synthesis (3)

 (20)