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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year II Semester Supplementary Examinations February-2022

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 hours

Max. Marks: 60

PART-A

(Answer all the Questions 5 x 2 = 10 Marks)

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| 1 | a | Discuss different kinds of weathering. | 2M |
| | b | Write a note on Rock forming minerals. | 2M |
| | c | Define petrology. | 2M |
| | d | Define structural geology | 2M |
| | e | What are seismic waves? How are they generated. | 2M |

PART-B

(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

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| 2 | Explain the process of weathering of common rock like Granite. | 10M |
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OR

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| 3 | What is weathering? Enumerate the various mechanisms of rock weathering. Describe chemical Weathering in detail. | 10M |
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UNIT-II

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| 4 | Explain the important physical properties of minerals that are commonly studied for their identification. | 10M |
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| 5 | What is a rock forming mineral? Discuss process of formation of minerals in nature | 10M |
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UNIT-III

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| 6 | Define term "rock" Describe the classification of rocks & their characteristics. | 10M |
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| 7 | Describe the columnar, flow and sheet structures of igneous rocks. | 10M |
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UNIT-IV

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| 8 | a | Classify and describe the different types of faults? Give the various minor structures found in the fault Zones. | 6M |
| | b | Discuss the effects of faulting on various engineering projects. | 4M |

OR

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| 9 | a | Define ground water? Write an essay on origin and distribution of ground water. | 5M |
| | b | Explain briefly about Electrical Resistivity method | 5M |

UNIT-V

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| 10 | Explain the geological factors influencing water tightness and life of reservoirs. | 10M |
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OR

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| 11 | a | Describe the various effects of an earthquake. How do we locate the epicenter of an earth quake. | 5M |
| | b | What are surface waves? Explain Rayleigh and love waves? | 5M |

END