C.U.SHAH UNIVERSITY Winter Examination-2018

Subject Name: Environmental Engineering & Management

| Subject Code: 4TE01EEM2 | | Branch: B.Tech. (All) | |
|-------------------------|------------------|-----------------------------|------------------|
| Semester: 1 | Date: 07/12/2018 | Time: 02:30 To 05:30 | Marks: 70 |

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

| Q-1 | | Attempt the following questions: | (14) |
|-------|------------|--|------|
| | a) | Enlist various components of environment. | 01 |
| | b) | What is environmental science? | 01 |
| | c) | What is the range of temperature variations in troposphere? | 01 |
| | d) | What is photosynthesis? | 01 |
| | e) | What is biomagnifications? | 01 |
| | f) | What are heterotrophs? | 01 |
| | g) | What is ecology? | 01 |
| | h) | What are fossil fuels and why they are non-renewable? | 01 |
| | i) | State the environment effects of extracting and using mineral resources. | 01 |
| | j) | What is sound pressure level? | 01 |
| | k) | What is land degradation? | 01 |
| | l) | What is nuclear pollution? | 01 |
| | m) | Define productive use of biodiversity. | 01 |
| | n) | What is ex-situ conservation? | 01 |
| Atten | npt ar | ny four questions from Q-2 to Q-8 | |
| Q-2 | | Attempt all questions | (14) |
| | (a) | Explain the impact of "technology and development on environment". | 07 |
| | (b) | Differentiate renewable and non-renewable energy resources and discuss | 07 |
| | | the effect of overpopulation on energy problems. | |
| Q-3 | | Attempt all questions | (14) |
| | (a) | Explain the need for public awareness about the environment and its | 05 |
| | | degradation. | |
| | (b) | Draw the carbon cycle and explain its functioning. | 05 |
| | (c) | Differentiate between biotic and abiotic components. | 04 |
| Q-4 | | Attempt all questions | (14) |
| | (a) | Define air pollution and describe effects of air pollution on human. | 05 |
| | (b) | Write short note on ozone layer depletion. | 05 |
| | (c) | Differentiate between food chain and food web. | 04 |
| Q-5 | | Attempt all questions | (14) |
| | (a) | Explain in detail pyramid of numbers and pyramid of biomass. | 07 |
| | (b) | What is global warming? What are the impacts of global warming? Which | 07 |
| | | are the measures to reduce global warming? | |

Page 1 || 2



| Q-6 | | Attempt all questions | (14) |
|-------------|------------|--|------|
| - | (a) | Define acid rain. How does it form and what are its ill effects? | 07 |
| (b) | | What are the minerals? Enlist principal minerals of India and what are the effects on environment due to extraction of mineral resources? | 07 |
| Q-7 | | Attempt all questions | (14) |
| | (a) | What is biogeochemical cycle? Explain Nitrogen cycle with neat sketch. | 07 |
| | (b) | Define ecological succession and its causes. Also explain primary succession and secondary succession | 07 |
| Q-8 | | Attempt all questions | (14) |
| C | (a) | What do you understand by 'Hot Spots of Biodiversity'? Enlist and briefly describe the two hotspots of biodiversity that extend into India. | 07 |
| | (b) | Suggest suitable steps for conservation of biodiversity also enlist various factors affecting biodiversity. Give advantages of conservation of biodiversity. | 07 |

Page 2 || 2

