

(ix) The Institution of Engineers (India) can be called

- (a) a Society
- (b) an Association
- (c) a Trust
- (d) none of these

(x) Write the odd one:

- (a) nitrogen
- (b) phosphate
- (c) oxygen
- (d) potash.

W'05 : 2 AN : AN 204/AD 304 (1404)

SOCIETY AND ENVIRONMENT

Time : Three hours

Maximum marks : 100

Answer FIVE questions, taking ANY TWO from Group A, ANY TWO from Group B and ALL from Group C.

All parts of a question (a, b, etc) should be answered at one place.

Answer should be brief and to-the-point and be supplemented with neat sketches. Unnecessary long answers may result in loss of marks.

Any missing data or wrong data may be assumed suitably giving proper justification.

Figures on the right-hand side margin indicate full marks.

Group A

1. (a) What is social stratification ? Explain in brief. 6
- (b) Write a critical note on the origin of caste system in India and the recent changes taking place in caste system. 8
- (c) Give an account of the current trends with respect to occupation. 6
2. (a) What are the consequences of inequality and how can these be reduced ? 8

- (b) What are the major causes of social tensions ? Write in brief. 8
- (c) Write in brief the most effective methods of population control. 4
3. (a) Define Plan Holiday and Rolling Plan. 5
- (b) Explain Green Revolution. 5
- (c) What are the genuine steps required for 'Garibi Hatao' ? 10
4. (a) Describe the technological developments during the 20th century. 12
- (b) List the major criteria for assessment of appropriate technology. 8

Group B

5. (a) What are the six classes of the components of ecosystems ? Describe in brief. 8
- (b) Write a critical note on biosphere cycles and explain the carbon dioxide cycle. 12
6. (a) List the main causes of eco-imbalance. Suggest the remedies to prevent them. 8
- (b) Explain in brief the causes for environmental degradation in India. 8
- (c) Suggest the methods to control the noise pollution. 4
7. (a) How is the ozone layer being destroyed and how to prevent it ? 8

- (b) Describe in brief the sanitary land-filling method for solid waste disposal. 12
8. (a) What do you understand by urban wastes ? How can these be treated ? 8
- (b) What are the salient features of the Brundtland Report, 'Our Common Future' ? 6
- (c) Write a critical note on technology for sustainable energy. 6

Group C

9. Answer the following : 2 × 10
- (i) Define culture.
- (ii) What is social mobility ?
- (iii) Write the Pareto's law mathematically.
- (iv) Define engineering and technology.
- (v) Mention two e-wastes.
- (vi) What is CNG ?
- (vii) As per the white paper of the UK Government, how many indicators are there for a better quality of life.
- (viii) Write the *correct* answer :
Thermal power plants use
- (a) coal
- (b) oil
- (c) uranium
- (d) all of these.