

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

P.G. DEGREE EXAMINATION – COMMON PAPER

THIRD SEMESTER – NOVEMBER 2007

CH 3925 - SCIENCE AND SOCIETY

AD 23

Date : 03/11/2007
Time : 9:00 - 12:00

Dept. No.

Max. : 100 Marks

PART A

Answer the following:

10 × 2 = 20 marks

1. How are scientists useful to the society?
2. What are the differences between technology and science?
3. What is photosynthesis? What is its significance?
4. What are the precautions to be taken before publishing scientific results?
5. What is meant by cost-effective research?
6. What is a search engine? Mention one advantage and disadvantage of using this for research.
7. Examine the use of solar energy for cooking.
8. What is meant by genetic engineering?
9. What is entropy? What is its significance?
10. What are fossil fuels? How are they formed in nature?

PART B

Answer any EIGHT of the following: [300 words]

8 × 5 = 40 marks

11. What is meant by transfer of technology and transformation of technology? Explain with examples.
12. Why should a researcher have social concern?
13. Write a note on history of atom bomb and its deployment to end World War II.
14. What are the tests to be carried out on a new drug, before introducing it for human use?
15. Analyze the pros and cons of an entertainment which is popular among the students.
16. 'Divine guidance and support is needed for a scientist' - comment on this statement
17. What is 'green-house effect'? Mention its significance and consequences.
18. What are the successes and threats of information technology?
19. What is the significance of energy sharing?
20. Explain recent changes/ advances in teaching methods due to scientific developments.
21. How is scientific development useful in eliminating starvation?
22. Explain some cultural changes taken place due to the development of science and technology.

PART C

Answer any FOUR of the following: [600 words]

4 × 10 = 40 marks

23. Discuss the qualities to be found (i) in a good research problem (ii) in a good researcher.
24. Explain three methods of generating electricity, analyzing advantages/ disadvantages of each method.
25. How has the improvement of transport system changed the society?
26. Discuss successes, promises and threats of Biotechnology.
27. Discuss the pros and cons of using chemicals in cosmetics.
28. 'Faith in God is unnecessary in this scientific world' – examine this statement using examples and case studies.

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