

ASSIGNMENT BOOKLET

**Foundation Course
in
Science and Technology
Bachelor's Degree Programme
(BDP)**

(Valid from 1st July, 2012 to 31st March, 2013)

It is compulsory to submit the assignment before filling in the exam form



**School of Sciences
Indira Gandhi National Open University
New Delhi
(2012-13)**

Dear Student,

We hope, you are familiar with the system of evaluation to be followed for the Bachelor's Degree Programme. At this stage you may probably like to re-read the section on assignments in the Programme Guide that was sent to you after your enrolment. A weightage of 30 percent, as you are aware, has been earmarked for continuous evaluation, which would consist of one tutor-marked assignment for this course. This assignment is based on all Blocks of this course i.e. Block 1-8.

Instructions for Formatting Your Assignments

Before attempting the assignments, please read the following instructions carefully.

- 1 On top of the first page of your answer sheet, please write the details exactly in the following format:

	ENROLMENT NO:
	NAME:
	ADDRESS:

COURSE CODE	:
COURSE TITLE	:
ASSIGNMENT NO	:
STUDY CENTRE	:
(NAME AND CODE)	DATE:

PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

- 2 Use only foolscap size writing paper (but not of very thin variety) for writing your answers.
- 3 Leave 4 cm margin on the left, top and bottom of your answer sheet.
- 4 Your answers should be precise.
- 5 While writing answers, clearly indicate the Question No. and part of the question being solved.
- 6 Please note that:
 - (i) This assignment is valid from 1st July, 2012 to 31st March, 2013.
 - (ii) However, the response to this assignment is to be submitted to the Study Centre Coordinator within eight weeks of the receipt of this booklet in order to get the feedback and comments on the evaluated assignment, and
 - (iii) However, in any case, you have to submit the assignment response before appearing in the term end examination.
- 7 **We strongly suggest that you should retain a copy of your assignment responses.**

Wishing you all good luck.

TUTOR MARKED ASSIGNMENT

Course Code: FST-01
Assignment Code: FST-01/TMA-01/2012-13
Maximum Marks: 100

Answer all questions.

1. a) “Science Knowledge grows on the basis of either human curiosity or human need”. Explain this statement with the help of two examples. Answer should not be in more than 250 words. (5)
b) What are the factors that led to the decline of the Bronze-age civilization? (5)
2. a) What is revolutionary about the Copernican Revolution? Describe in around 100 words our current understanding of the physical structure of the universe. (5)
b) Describe two major ways of exploring the universe. List two kinds of information that each of them has provided about the universe. (5)
3. a) Explain the method of radio-carbon dating to determine the age of plant and animal fossils. (5)
b) Construct a food web with a minimum of 25 links, man being one of them. (5)
4. a) Discuss briefly the use of remote sensing methods for exploration of any two kinds of natural resources. (5)
b) Explain the concept of recycling in the conservation of resources. (5)
5. a) Describe the reasons that make livestock necessary to a society. (5)
b) List infectious and no-infectious diseases which have been prevalent for the last one year in your area. Suggest measures that could have been taken by public and government to prevent them (you may inquire from doctors). (5)
6. a) Explain the difference between cognitive learning and conditioned learning (stimulus and response learning) using examples from your own experiences. (5)
b) What are hormones? How are they vital for the proper functioning of the body? (5)
7. a) Discuss in about 200 words, how communication can bring about advancement in any society. (5)
b) Name any two advanced technologies in the field of communication and discuss one major contribution of each of them. (5)
8. a) Discuss the merits and demerits of India’s nuclear energy programme. (5)
b) Select any two of the modern technologies you have studied in Units 29 and 30. State at least 2 potential (or actual) applications of these technologies in your local surrounding. (5)
9. a) What are the problems a country may encounter when it decides to import the technology developed in the other nation? (5)
b) “Science and technology can be more directly influenced by the general policies and social structure of a society”. Elaborate this statement with suitable examples. (5)
10. Write short notes on the following:
i) Lead time
ii) Artificial intelligence
iii) Aging
iv) Neutron stars (2½ ×4)