

FST-01

ASSIGNMENT BOOKLET

**Foundation Course
in
Science and Technology
Bachelor's Degree Programme
(BDP)
(Valid from July 01, 2011 to March 31, 2012)**

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



**School of Sciences
Indira Gandhi National Open University
New Delhi**

(For July 2011 Cycle)

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 : **DATE:**

(NAME AND CODE)

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 July 01, 2011 to March 31, 2012.
 - (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/2011-12
Maximum Marks: 100

Answer all questions.

1. a) Compare the life styles and the level of scientific and technical know how of sixteenth century Europe and sixteenth century India. What are the reasons that keep India lagging behind the western countries in almost all areas related to development? (5)
b) Describe the features of the Indian state and the social organization that helped the growth of science and technology in the Maurya and Gupta period. (5)
2. a) Describe two major ways of exploring the universe. Discuss two kinds of information that each of them has provided about the universe. (5)
b) i) Name two incidents that have created a great deal of interest in the planets Mars and Jupiter, respectively.
ii) Explain two differences between astronomy and astrology. Discuss why astrology cannot be considered to be a science. (2+3)
3. a) Discuss the impact of freedom movement on the development of science and technology in pre-independent India. (5)
b) Explain briefly the theory of chemical evolution and its scientific basis. (5)
4. a) Describe as to how the age of fossils of plant and animals etc. is determined. (5)
b) Describe the types of natural resources available on our earth. (5)
5. a) What are the consequences of deforestations? Suggest three conservation measures to counter deforestation. (5)
b) Differentiate between primary and secondary pollutants. (5)
6. a) Discuss briefly the major problems area of agriculture in modern India. (5)
b) Explain why pure drinking water, clean food, hygienic habits and environmental sanitation are necessary for the prevention of infection diseases? (5)
7. a) Compare the way of learning through stimulus and response with that by reward and punishment method. (5)
b) Explain with the help of an example how communication can change the political scenario. (5)
8. a) Discuss with the help of examples, how small scale industry can benefit by the use of technology. (5)
b) What are the problems a country may encounter when it decides to improve the technology developed in other nations? (5)
9. a) Describe major achievements of the Indian nuclear programme of using nuclear energy for peaceful purposes. (5)
b) Describe ways in which the use of computers has benefited users. (5)
10. a) How can scientific temper help faster self-reliance? (5)
b) Select one of the modern technologies discussed in Units 29 and 30. Analyse its impact on our society. (5)