

THIRD SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2011

(CCSS)

English—Common Course

A 06—HISTORY AND PHILOSOPHY OF SCIENCE

(Common Course for B.Sc. Alternate Pattern)

Time : Three Hours

Maximum Weight : 30

1. Answer all the questions as directed .Weight '4 each.

A. Choose the correct answer :

1. The most famous early. Chinese astronomer was _____
(a) Confucius. (b) Lao Ts u.
(c) Shih Shen. (d) Liu Peng.
 - 2 Who explained the dim illumination over the dark part of the Moon ?
(a) Galileo. (b) 1.46onardo da Vinci.
(c) Roger Bacon. (d) Tycho Brahe.
 - 3 It is said that the 21st century will be that of _____
(a) Physics. (b) Mathematics.
(c) Biology. (d) Statistics.
- Praxis is concerned with
- (a) Knowing. (b) Doing.
(c) Making. (d) Thinking.

B. Fill in the blanks :

One particular practice of Chinese medicine that deserves special mention is

- 6 The greatest number of commentaries on *Aryabhatiyam* have been recovered from _____
_____ came up with a brilliant suggestion for a scientific classification of all living beings.
_____ is the English physicist and novelist who talked about 'the two cultures'.

C. Answer in a word *or* phrase :

- 9 Which great Arab poet was also a renowned mathematician ?
- 10 In which area of science was Paracelsus mainly interested ?
- 11 Name the Indian scientist who pioneered the study of cosmic radiation.
- 12 Who is the historian of science who highlighted the social context in which scientific discoveries take place ?

(1) x $\frac{1}{4}$ = 3)**Turn over**

II. Answer all the questions in a sentence or two : Weight 1 each.

- 13 What were the two important rules that the Arabs played in the history of science ? ^{fut}
- 14 What was the contribution of Alhazen (Abu Ali Hasan Ibn al Haitham) to physics ?
- 15 Why was Bruno burnt alive ?
- 16 What was the contribution of Sin Isaac Newton to Mathematics ?
- 17 Briefly describe Gregor Mendel's work.
- 18 Who coined the term nanotechnology, and how did he define it ?
- 19 Explain what is meant by the plasticity of a theory.
- 20 Why, according to some feminists is science sexist ?
- 21 Why, according to Paul Feyerabend, is science a dangerous activity ?

(9 x 1 =

III. Write short notes on any five in a paragraph each. Weight 2 each.

- 22 Two bronze age achievements that helped male domination.
- 23 The reactionary influence of Plato and Aristotle in Astronomy.
- 24 The work of Kepler.
- 25 Determinism in science.
- 26 The Human Genome Project.
- 27 Technologism.
- 28 Science and religion.

(5 x 2 =

IV. Write an essay on two of the following. Weight 4 each.

- 29 The civilization of the Nile Valley.
- 30 The growth of science in the 17th century.
31. Scientific theories and models.

(2 x 8)