I- Reading Comprehension (18pts)

The extract is taken from a book written sixty years ago by a British scientist in which he considers the relationship between science and society.

The pioneers of the teaching of science imagined that its introduction into education would remove the conventionality, artificiality, and backward-lookingness which were characteristic of classical studies, but they were gravely disappointed. So, too, in their time had the humanists thought that the study of the classical authors in the original would banish at once the dull pedantry and superstition of mediæval scholasticism. The professional schoolmaster was a match for both of them, and has almost managed to make the understanding of chemical reactions as dull and as dogmatic an affair as the reading of Virgil's Aeneid.

The chief claim for the use of science in education is that it teaches a child something about the actual universe in which he is living, in making him acquainted with the results of scientific discovery, and at the same time teaches him how to think logically and inductively by studying scientific method. A certain limited success has been reached in the first of these aims, but practically none at all in the second. Those privileged members of the community who have been through a secondary or public school education may be expected to know something about the elementary physics and chemistry of a hundred years ago, but they probably know hardly more than any bright boy can pick up from an interest in wireless or scientific hobbies out of school hours. As to the learning of scientific method, the whole thing is palpably a farce. Actually, for the convenience of teachers and the requirements of the examination system, it is necessary that the pupils not only do not learn scientific method but learn precisely the reverse, that is, to believe exactly what they are told and to reproduce it when asked, whether it seems nonsense to them or not. The way in which educated people respond to such quackeries as spiritualism or astrology, not to say more dangerous ones such as racial theories or currency myths, shows that fifty years of education in the method of science in Britain or Germany has produced no visible effect whatever. The only way of learning the
35 method of science is the long and bitter way of personal experience, and, until the educational or social systems are altered to make this possible, the best we can expect is the production of a minority of people who are able to acquire some of the techniques of science and a still smaller minority who are able to use and develop them.

Adapted from: The Social Function of Science, John D Bernal (1939)

1. The author implies that the 'professional schoolmaster' (line 7) has

A. no interest in teaching science
B. thwarted attempts to enliven education
C. aided true learning
D. supported the humanists
E. been a pioneer in both science and humanities.

2. The author’s attitude to secondary and public school education in the sciences is

A. ambivalent
B. neutral
C. supportive
D. satirical
E. contemptuous

3. The word ‘palpably’ (line 24) most nearly means

A. empirically
B. obviously
C. tentatively
D. markedly
E. ridiculously

4. The author blames all of the following for the failure to impart scientific method through the education system except

A. poor teaching
B. examination methods
C. lack of direct experience
D. the social and education systems
E. lack of interest on the part of students

5. Astrology (line 31) is mentioned as an example of

A. a science that needs to be better understood
B. a belief which no educated people hold
C. something unsupportable to those who have absorbed the methods of science
D. the gravest danger to society
E. an acknowledged failure of science

6. All of the following can be inferred from the text except
A. at the time of writing, not all children received a secondary school education
B. the author finds chemical reactions interesting
C. science teaching has imparted some knowledge of facts to some children
D. the author believes that many teachers are authoritarian
E. it is relatively easy to learn scientific method.

II Fill in each blank with the appropriate word from the box. In some sentences, you might have to change some of the verb or noun forms. (12pts)

| Belligerent; abysmal; plausible; glib; soothe; whim; confine | halt; haul; heed; shrill; compel |

1- Do they expect you to ___________ the furniture out to the curb on your own?
2- They succeeded in ___________ the fire to a small area.
3- The crossing guard made the cars ________ while we crossed the street.
4- Taking a long vacation from time to time helps one ___________ away the every day stresses of his hectic daily schedule.
5- In Russia, the aristocracy became increasingly ___________ in its complaints to Tsar Alexander, that the continental system was damaging Russian agricultural exports.
6- The salesman was so ___________ that the customers failed to notice the defects in the stereo.
7- Whether he wished or not the ex minister was ___________ to retire from the active ministry in 1896 through ill health.
8- She had a sudden ___________ to take a midnight walk.
9- When you are shopping for groceries, ________ warning labels on bottles and outdated materials or editions.
10- She gave them a ________ pretext to justify interrupting their work.
11- The unheated room with bugs in it was an example of their ________ living conditions.
12. The defiant child spoke in a ___________ tone of voice.

III. Composition (70pts)
Nowadays we are living in the modern developed society where technology is making our life so much simpler and fast replacing human beings with machines in virtually every sector and industry. In your opinion to what extend should we embrace the role of technology in the teaching and learning process, and should student’s textbooks be replaced by notebook computers?
Make sure to structure and organize your essay while giving enough arguments and evidence to support your viewpoint.

NB: The use of any type of dictionary or electronic device during the examination is strictly prohibited.