



THE OPEN UNIVERSITY OF SRI LANKA
BACHELOR OF / DIPLOMA IN ENGINEERING TECHNOLOGY
FINAL EXAMINATION – 2009/10
MPJ4131 – HISTORY OF TECHNOLOGY
LEVEL 04

224

DURATION: THREE (03) HOURS (ESSAY TYPE/ OPEN BOOK EXAMINATION)

Date: 12th March 2010

Time: 1400hr. – 1700hr.

Answer **four (04)** questions only.

- 1) a) Sustainable agriculture requires the careful use of water. What lessons can we learn from the ancient irrigation systems, their patterns and usage?
b) Compare the ancient canal “Yoda Ela” constructed by King Dhatusena and the canal “Jaya Ganga” constructed under the Accelerated Mahaweli project.
- 2) a) Give a brief description about the ancient iron smelting technologies used in Sri Lanka.
b) What are the unique features of the iron smelting furnace used in Samanalawewa area?
c) Do you think that the ancient iron smelting technologies could be used at present to supplement the iron and steel requirements? Justify your answer.
- 3) a) Name the ancient Chinese contributions to Science and Technology that you consider to be important.
b) What factors do you think that motivated the ancient Chinese to develop printing? Give a brief description.
c) What are the plants used for making paper in ancient China?

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- 4) a) Briefly discuss the contribution of two (02) Islamic mathematicians towards the development of Mathematics.
- b) What are the types of dams used by Arabs? Give a brief description on one of them.
- 5) Write short notes on any three (3) of the following topics.
- i) The Abacus.
 - ii) Fine technologies of Arabs.
 - iii) Shipbuilding technologies in ancient Sri Lanka.
 - iv) Leibnitz's contribution to Calculus.
 - v) Euro-centric account of the time line of the History of Science.
- 6) a) In your opinion why do you think the study of the History of Technology is important?
- b) How could it help you in your later professional life?