RAJARATA UNIVERSITY OF SRI LANKA

FACULTY OF APPLIED SCIENCES

B.Sc. Degree in Information and Communication Technology

Fourth Year Semester I Examination, May 2015

ICT 4201 – ICT FOR EDUCATION
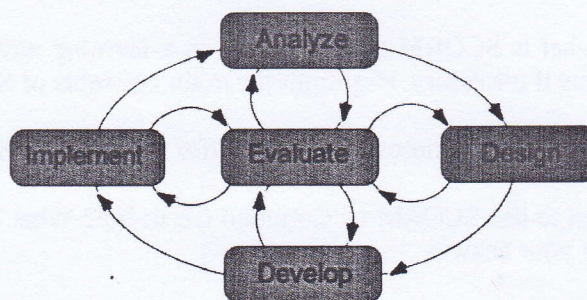
Time allowed: 2 hours

INSTRUCTIONS TO CANDIDATES

- This paper consists of ~~five~~ four (05) questions on 4 pages including this page.

- Answer **ALL** questions.

- This examination accounts for 60% of the module assessment. The total maximum mark attainable is 100. The marks assigned for each question and section thereof are indicated in square brackets.

- This is a **closed book** examination.

- Mobile phones or any other communication devices are not permitted.

- Clearly state the assumptions you make. If you have any doubts regarding the interpretation of the wording of a question, make your own decision, but clearly state it on the script.

1. (a) Compare and contrast a learning management system (LMS) and a content management system (CMS) used for general web hosting purposes. Consider technical and functional aspects of LMS and CMS. [6 marks]

   (b) It is stated that the role of "facilitator" is crucial for the successful deployment and use of an LMS in an educational institute. Explain why, considering the types of roles a facilitator should play. [8 marks]

   (c) In what way should the attitudes of students and lecturers change in order to get the maximum benefit of e-learning based courses? Briefly explain using two (02) suitable examples. [5 marks]

   (d) In what way should the courses facilitated through e-learning systems differ from the traditional courses? Briefly explain using three (03) suitable examples. [6 marks]

2. (a) What are the Web 2.0 technologies that can be facilitated within e-learning systems? Outline them. [3 marks]

   (b) In what way can the Web 2.0 technologies can be used to enhance the learning experiences? Explain using four (04) examples. [8 marks]

   (c) What are the drawbacks and/or issues that the learners may face due to the use of Web 2.0 technologies? Outline four (04) of them. [4 marks]

   (d) Why is it important to consider pedagogy in a course design? Explain using an example. [4 marks]

   (e) It was stated that "due to e-learning based course design, human resource requirement will become less". Do you agree with this statement? Justify your answer. [6 marks]
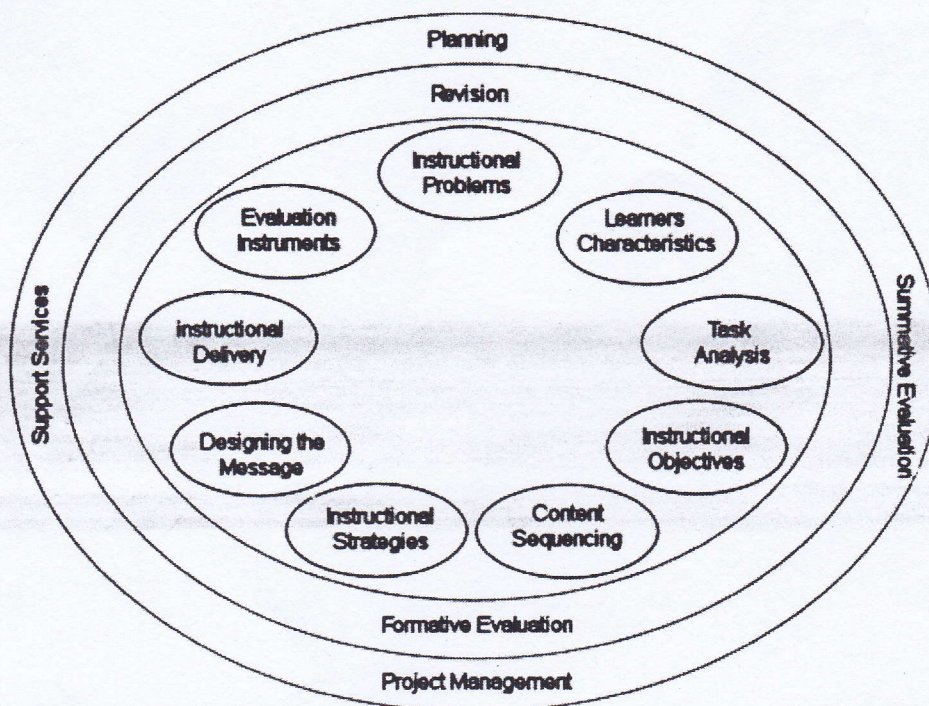
3. (a) The following diagram illustrates one representation of the ADDIE model.

In what way can ADDIE model be useful in an instructional design process? Explain. [8 marks]

(b) Consider the Kemp's Instructional Design Model given below:

Compare the Kemp's model with ADDIE model with respect to:
(i) comprehensiveness, (ii) simplicity, (iii) feasibility, and (iv) suitability to Sri Lankan university environment. [12 marks]

(c) How would you use Bloom's taxonomy together with any of the above instructional design models? [5 marks]

Note: Bloom's taxonomy considers knowledge, comprehension, application, analysis, synthesis, evaluation and creation. You are not required to elaborate on Bloom's taxonomy.

4. **(a)** Explain what is SCORM and its use in an e-learning environment. Use examples or diagrams if necessary. Highlight the main concepts of SCORM. [12 marks]

(b) In what way does Common Cartridge differ from SCORM? Explain. [5 marks]

(c) Is it a must to use SCORM or Common Cartridge? What is your opinion? Provide reasons to your answer. [8 marks]

Hint: consider how popular LMSs such as Moodle, Blackboard, etc., are implemented.