

PSA

THE UNITED REPUBLIC OF TANZANIA  
NATIONAL EXAMINATIONS COUNCIL  
DIPLOMA IN SECONDARY EDUCATION EXAMINATION

738 INFORMATION AND COMMUNICATION TECHNOLOGY -

Time: 3 Hours

Friday, 09<sup>th</sup> May 2014 p.m.

Instructions

1. This paper consists of sections A, B and C.
2. Answer **all** questions in section A and any two questions from each of the sections B and C.
3. Read each question carefully before you start answering it.
4. Calculators are **not** allowed in the examination room.
5. Cellular phones are **not** allowed in the examination room.
6. Write your Examination Number on every page of your answer booklet(s).



## SECTION A (30 Marks)

Answer all questions from this section.

1. Describe the evolution of the first three generation of programming languages.
2. By using flow chart symbols, develop a program that will output number from 1 to 12.
3. Describe three practices in computer handling which potentially lead to spread of computer virus from one computer to another.
4. Differentiate between program design and program coding as used in programming.
5. Differentiate the following concepts as used by web-based email users.  
(a) Phishing                                      (b) Pharming                                      (c) Spam
6. (a) What are computer peripherals?  
(b) Describe the functions of any two common computer peripherals.
7. Differentiate between primary key and foreign key as used in database management systems.
8. Explain how the following features are useful in developing a good presentation.  
(a) Animation schemes                                      (b) Graphics and charts                                      (c) Importing images
9. Elaborate the following terms with reference to the impact of ICT in the society.  
(a) Job displacement                                      (b) Job replacement                                      (c) Job creation
10. Give three reasons why an electronic database is a more preferable way of keeping data.

## SECTION B (30 Marks)

Answer two (2) questions from this section.

11. Elaborate the main stages of system development which a programmer must consider during software development.
12. Explain the guidelines which can be used to evaluate the authenticity of a source of information before downloading materials from the internet for classroom use.
13. By giving examples, examine five practical factors which determine the choice of a network topology in a computer laboratory.
14. Analyse five limitations of using radio broadcast as a teaching resource.

### SECTION C (40 Marks)

Answer **two (2)** questions from this section.

15. Identify six methods of assessment in ICS and elaborate how each can be used in the process of teaching and learning ICS.
16. Give detailed explanation on six benefits of ICT in supporting pedagogical processes.
17. Account for six factors which a teacher should consider when improvising teaching and learning resources.
18. Evaluate six practical factors that influence the choice of instructional media for distant e-learners.