



EASETRN UNIVERSITY, SRI LANKA

THIRD YEAR SECOND SEMESTER EXAMINATION IN SCIENCE 2020/ 2021

(JULY/ AUGUST 2024)

CH3081 NANOTECHNOLOGY AND ITS APPLICATIONS

Answer all questions

Time: One hour

1.

(a). "Properties of materials change when a material converts into nano level". *Discuss* this statement how different properties changes when a material converts into a nano level.

(30 Marks)

(b). Briefly *describe* the structures of different types of "Carbon Nanotube" and *discuss* its applications in various fields.

(20 Marks)

(c). *Discuss* the Applications of Nanotechnology in the following areas

(i). Healthcare

(ii). Agriculture

(50 Marks)

2.

(a). Sri Lanka's apparel and textile manufacturing industry is the most significant and dynamic contributor to the Sri Lanka's economy. Briefly *discuss* the role of Nanotechnology in the apparel and textile manufacturing industry in the current era.

(35 Marks)

(b). Briefly *discuss* the applications of nanotechnology in 'food packaging' with suitable examples.

(65 Marks)

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