

## Daffodil International University

## Department of Computer Science and Engineering

Faculty of Science and Information Technology

Final Examination FALL 2019

Course Code: CSE214

Course Title: Object Oriented Programming

Level: 2 Term: 1

Section: ALL

Instructor: ALL

Time: 2hrs

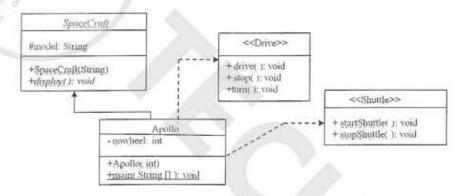
Full Marks: 40

03+07

Question 1:

(a) Write the use of "interface" in OOP using Java. Give example.

(b) Consider the following UML digram:



- (i) Describe different component used in the above UML diagram. (05)
- (ii) How "interface" is different from "class". (02)

Question 2:

03+07

- (a) Explain the use of two interfaces Drive and Shuttle in the above UML model.
- (b) Implement the UML model using Java.

Ouestion 3:

05+05

- (a) Create a new UML model extending the above model for Voyezar along with Apollo.
- (b) Explain the new UML model from the perspective of inheritance and polymorphism.

Question 4:

10

Create a UML model for the following scenario:

Patient attend Hospital. Patient has patientID, name, dateofbirth and cell. Hospital has hospital name and address and cell. Sqaure is a Hospital and it has Diagonstic Center. HeartPatieint is a Patient and it has blood pressure and status. Patient uses Pathology service which has check and report as service. Hospital uses Admission Service which has getAdmission and release service.

