

EXAMINATION QUESTION PAPER**e-DAC, May 2021****EXAM Type : Main****Module Name : OOP with Java****SET: A****DATE: 11 /7/2021****Duration: 3hrs****Max. Marks: 40****INSTRUCTIONS:**

- All Questions are compulsory.
- Create one folder on your machine rename it with your PRN (Pls use complete PRN)
- Copy all the solution files of all questions in the above created folder
- After copying all the files right click on main folder select option "Add to Achieve" and click on radio button in front of zip option.
- It will create zip folder of your PRN. This will be your final folder to upload.
- **Submissions : Only Code and screen shots of output**
- Please note before uploading zip folder make sure you have copied all your relevant files in the respective folders. Once you upload the final folder you will not be able to re upload it.
- Kindly ensure before creating zip file, make sure all the required files should be closed to avoid any corruption of the zip file.
- Zip File should be renamed with FULL PRN No. of the candidate. (For example: 210540181001.zip)

Marks distribution:

- Core class & custom exception class : 6 marks
- Collection Utils & IOUtils : 4 marks
- Initialization part of tester : 4 marks
- Correct working of Options 1,2,3 : 12 marks
- Correct working of Option 4 : 5 marks
- Centralized exception handling : 5 marks
- Comments & coding style : 4 marks

Q. Create a java application for a bookshop using suitable data structures.

1. Core class

Book

Details : title(Primary Key),author,price,category(enum),publishDate(java.util.Date or LocalDate)

2. Create Custom exception class in a separate package

BookHandlingException

3. Create separate classes(layers) for CollectionUtils & IOUtils

4. Create a tester -- BookShop in package -- tester

4.1 Create suitable data structure to store available book details .

4.2 Add at least 5 books (hardcoded using sample data) in the shop

Create User's empty cart initially.

Supply following options

1. Display all books from the shop.

NOTE : Individual book details should be displayed on separate lines.

2. Add Book to The Cart

I/P : Book Title

O/P : Message book added to the cart or throw custom exception , if book title is not available in the shop.

3. Show User Cart Contents

Display user cart contents.

NOTE : Individual book details should be displayed on separate lines.

4. Check out (Exit)

Should display Total cart value & titles of the books purchased by the user(on different lines) .

Before terminating ,save the cart contents in a binary file , using serialization.