

EASTERN UNIVERSITY, SRI LANKA

FACULTY OF SCIENCE

First Year Second Semester Examination in Science -2021/2022
(Sep/Oct, 2024)

EN1052 - INTRODUCTION TO COMPUTING - II
(PRACTICAL)

Answer All Questions

Time allowed: 2 hours

INSTRUCTIONS:

- Create a Folder on the Desktop and name it with your *index number* (e.g. PS##### or BS#####). Save all your work files of all the questions into this folder. If the answers were not found in the above-said folder, they will not be marked.
- Make sure that the examiners copy all your work files before leaving the examination centre.
- All questions carry equal marks.

Q1) Create the following worksheet using MS Excel and save it as “Publications.xlsx” into the folder created as per the instructions.

Library Management System

Publication ID	Publisher Name	Category	Published Year	Unit Price	No Of Copies	Total Price	Discount	Net Price
GRH-CM-92-2008				900	10			
ASG-MG-93-2004				1500	6			
PRT-CM-94-2013				750	5			
GRH-MG-95-2010				950	7			
PRT-SC-96-2011				1300	4			
PRT-MG-97-2008				1800	10			
ASG-MG-98-2000				890	8			
ASG-SC-99-2005				985	6			

- a) Fill the column “Publisher Name” using a suitable function according to the following conditions. First three letters of the given Publication ID represent Publisher Name. If the “Publication ID” starts with “GRH”- McGraw Hill, “PRT” – Prentice Hall and “ASG”- Ashgate.
- b) Fill the column “Category” using a suitable function according to the following conditions. Text in between first and second hyphens of the given Publication ID represent category. If the text (two letters) has “CM”- Computing, “MG”- Management and “SC”- Science.

Eg: GRH-CM-92-2008

Category

- c) Fill the column “Published Year” using a suitable function according to the following conditions. The last four digits of the given Publication ID represent the Published Year.
- d) Calculate the Total Price of each Publication by using the following equation.

$$\text{Total Price} = \text{Unit Price} * \text{No of Copies}$$
- e) Use the following criteria to fill the “Discount” column using a suitable function.

Total Price	Discount
Total Price >= 15000	Total Price * 12%
15000 > Total Price >= 10000	Total Price * 9%
10000 > Total Price >= 5000	Total Price * 5%
Total Price < 5000	Total Price * 2%

- f) Calculate the Net Price of each Publication by using the following equation.

$$\text{Net Price} = \text{Total Price} - \text{Discount}$$
- g) Create a Column Chart that shows the Net Price by each Publication ID and insert “Price Details” as the title of the chart.

Q2) Create a blank database using MS Access and save it as “**Library.accdb**” into the folder created as per the instructions.

- a) Create the table **Publishers** with the following fields and data type. Set “PublisherID” as the primary key.

Field Name	Data Type
PublisherID	Short Text
PublisherName	Short Text
Country	Lookup Wizard (United States, United Kingdom)
Email	Short Text

- b) Insert the following records to the table **Publishers**.

PublisherID	PublisherName	Country	Email
PB205	McGraw Hill	United States	mcgrhill@gmail.com
PB206	Prentice Hall	United States	prentice@yahoo.com
PB207	Ashgate	United Kingdom	ashgate32@gmail.com
PB208	Pearson	United Kingdom	pearson@gmail.com

- c) Create the table **Books** with the following fields and data type. Set "ISBN" as the primary key.

Field name	Data Type
ISBN	Number
Title	Short Text
Category	Lookup Wizard (Computing, Management, Science)
PublishedYear	Number
PublisherID	Short Text
NoOfCopies	Number

- d) Insert the following records to the table **Books**.

ISBN	Title	Category	Published Year	Publisher ID	NoOfCopies
7121	Introduction to Computers	Computing	2008	PB205	10
9842	Principles of Management	Management	2004	PB207	6
4731	Introduction to IT	Computing	2013	PB206	5
3472	E-Commerce	Management	2010	PB205	7
4751	Environmental Science	Science	2011	PB206	4
7523	E-Business Management	Management	2008	PB206	10
8765	Business Interactions	Management	2000	PB208	8
6232	Modern Physics	Science	2005	PB207	6

- e) Create Query to get the following results:

- 1) Display PublisherID, Country and Email of Publishers and save it as "Q1".
 - 2) Display ISBN, Title and PublishedYear of Management Books and save it as "Q2".
 - 3) Display PublisherName, ISBN and NoOfCopies of Books which are published in 2008 and save it as "Q3".
 - 4) Display PublisherID, Title and Category of Books which are published by Pearson and have NoOfCopies more than 5 and save it as "Q4".
 - 5) Display Title, Category and PublisherName of the Books which have Title start with "E" and save it as "Q5".
 - 6) Display ISBN, PublisherName and Email of Computing Books which are published in 2013 and save it as "Q6".
- f) Create a Report to display Title, Category, PublisherName and Country and save it as "Book Details".