Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Computer Science and Tchnology
100 Level 1st Semester Examination –Sept./Oct. 2015
ESD 103-2 Information Technology

Uva Wellassa University

Part B

Instructions to candidates
Duration: **Two (02) hours**
Number of questions: **Three (03) questions**
Answer all questions
Mark allocation: **60 mark**
Create a folder in **Desktop** and rename with your **Index Number**
Create separate files for each questions inside the folder
Download **Resource** folder from CMS
Zip your folder, then upload to the **CMS**
Removable storage devices are stricly prohibited

1.

a. Open a new MS Word file, create the flyer given below and save it as **BeachParty.docx.** (2 Mark)

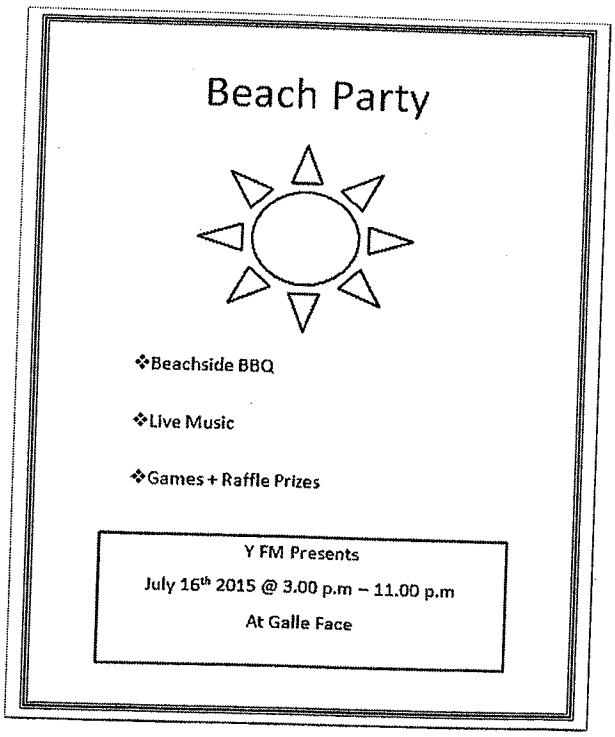

Figure 1

i. Change the page margins as follows. (1 Mark)
>Top: 1.25" >Bottom: 1.25" >Right: 1.25" >Left: 1.25"

ii. Apply a decorative style to the heading of the flyer using Word Art. (1 Mark)

iii. Apply an appropiate colour to the shape which is in the middle of the flyer. (1 Mark)

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b. Open a new MS Word document, type the following text and save it as **Topology.docx.** (2 Mark)

Computer Network Topology

Computer network topology is the way various components of a network (like nodes, links, peripherals, etc) are arranged. Network topologies define the layout, virtual shape or structure of network, not only physically but also logically. The way in which different systems and nodes are connected and communicate with each other is determined by topology of the network. Topology can be physical or logical. Physical Topology is the physical layout of nodes, workstations and cables in the network; while logical topology is the way information flows between different components.

Most Common Network Topologies

Mesh Topology

Star Topology

Bus Topology

Ring Topology

Tree Topology

Figure 2

i. Change the layout of the page as given below. (1 Mark)
   >Page size: A4 (8.27" x 11.69") >Page orientation: Landscape
ii. Format the entire document as given below. (2 Mark)
   >Line spacing: 1.15" >Font: Times New Roman
   >Font size: 14 >Align: Justify
iii. Select the heading "Computer Network Topology" and apply the style Heading 1. (1 Mark)
iv. Make the first letter of the paragraph larger and fall into three lines (Drop cap). (1 Mark)
v. Create a bulleted list for the last 5 lines of text given under "Most Common Network Topologies". (1 Mark)
vi. Insert a footer for this document with the data given in *Figure 3*. (2 Mark)

Your Register Number	Page Number	Current Date

Figure 3

2. Create a Microsoft Excel workbook as given below and save it as **Mark.xlsx** (5 Mark)

	A	B	C	D	E	F	G	H	I
1	**Information Technology Mark**								
2	**Student ID**	**Student Name**	**Gender**	**Quiz01 (20)**	**Assignment (10)**	**Quiz02 (20)**	**Mid Exam (50)**	**End Exam (40)**	
3		H.C. Perera	F	14	6	17	30	34	
4		A.P. Peiris	F	13	7	13	24	27	
5		K.L. Gunawardhana	M	17	8	10	35	27	
6		H.I.Ayesha	M	18	8	17	38	19	
7		S.K.Rajapaksha	F	20	9	19	42	35	
8		H.K.Kumara	M	8	5	7	10	21	
9		J.B. Alwis	M	16	6	15	37	28	
10		E.S.Pathirana	F	11	7	13	30	29	
11		K.S.Kaushalya	F	15	6	16	38	31	
12									
13									

Figure 4

a. Rename your worksheet as "IT (Mark)". (1 Mark)
b. Fill the column "Student ID" with numbers. (It should start from 1) (2 Mark)
c. Insert a new column between G and H to calculate the continuous mark with the title "Cont_Mark". (1 Mark)
d. Create a formula to calculate the continuous mark to newly inserted column "Cont_Mark". Continuous mark will be **60%** of the summation of Quiz01, Assignment, Quiz02 and Mid Exam. (3 Mark)
e. Create a new column "Total" and fill the column using the following equation. Total =Cont_Mark + End Exam (3 Mark)
f. Sort the table "Information Technology Mark" using Student Name in alphabetic order. (2 Mark)
g. Filter the students who earned less than **40** as Total mark. The list of the student should be placed in a cell range, starts from cell **A15**. (3 Mark)

3. ABC International School needs a database to maintain their Grade 8 students' details and exam results. You are requested to create the database **SchoolDB.accdb** and create the following three (03) tables. (6 Mark)

Table Name: **Student_Info**

Field name	**Data type**	**Field Size/Format**
Student_ID	Text	20
Fname	Text	15
Lname	Text	20
Class	Text	5
DOB	Date/Time	Short Date
Contact_No	Number	Long Integer
Foreigner	Yes/No	Yes/No

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Table Name: **Subject**

Field name	Data type	Field Size/Format
Subject_ID	Text	20
Subject_Name	Text	15

Table Name: **Grade**

Field name	Data type	Field Size/Format
Student_ID	Text	10
Subject_ID	Text	10
Grade	Text	10

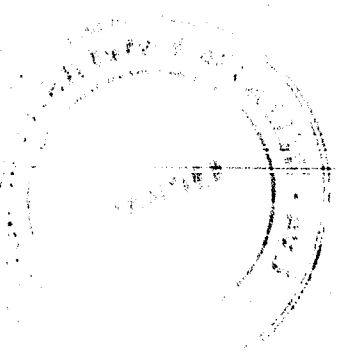
a. Set the primary key Student_ID to the table **Student_Info** and Subject_ID to table **Subject**. (1 Mark)

b. Add the following records to the table **Student_Info**. (2 Mark)

Student_ID	Fname	Lname	Class	DOB	Contact_ number	Foreigner
s1	Lahiru	Perera	A	6/3/1996	362254678	NO
s2	Damien	Dias	A	4/14/1995	452234546	NO
s3	John	Herbal	B	2/10/2000	774537859	YES
s4	Meera	Balaji	B	8/12/1999	777742525	YES
s5	Sanjana	Hewage	A	7/14/1998	543882588	NO

c. Add the following records to the table **Subject**. (1 Mark)

Subject_ID	Subject_name
sub1	Mathematics
sub2	Science
sub3	Language
sub4	History
sub5	Aesthetic



d. Add the following records to the table **Grade**. (2 Mark)

Student_ID	Course_ID	Grade
s1	sub1	A
s2	sub1	B
s1	sub2	A
s2	sub2	B
s3	sub3	C
s4	sub3	B
s5	sub4	D

e. Create the relationship between above three (03) tables in order to maintain referential integrity. (2 Mark)

f. Generate a **query** to display Student_ID, Fname, Lname, Subject_name, Subject_ID and Grade. Name it as "students 'results". (2 Mark)

g. Sort Lname in descending order. (1 Mark)

h. Display the details of students who obtained A for Mathematics or Science. (3 Mark)

i. Create **forms** to add, delete and update the records in each table. (2 Mark)

j. Create a **report** to display student_ID, Lname,Subject_ID,Subject name along with Grade. Name it as "Final report" and do necessary formattings (resizing text box, adding theme and topic, etc.). (3 Mark)

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