



FACULTY/COLLEGE	College of Business and Economics
SCHOOL	School of Consumer Intelligence and Information Systems
DEPARTMENT	Applied Information Systems
CAMPUS(ES)	APB
MODULE NAME	Development Software 2A
MODULE CODE	DSW02A1
SEMESTER	First
ASSESSMENT OPPORTUNITY, MONTH AND YEAR	Final Summative Assessment Opportunity May 2019

ASSESSMENT DATE	25 May 2019	SESSION	08:30 – 11:30
ASSESSOR(S)	Dr Mpho Raborife		
MODERATOR(S)	Mr. Koena Mabokela		
DURATION	3 hours (180 min)	TOTAL MARKS	80

NUMBER OF PAGES OF QUESTION PAPER (Including cover page)	3
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INFORMATION/INSTRUCTIONS:

- ☐ This is a closed-book assessment.
- ☐ There are 4 questions.
- ☐ Answer each question in a separate book.
- ☐ Read the questions carefully and answer only what is required.
- ☐ Number your answers clearly and correctly as per the question paper.
- ☐ Write neatly and legibly on both sides of the paper in the answer book, starting on the first page.

QUESTION 1**[18 MARKS]**

1. True or False. HTML is a programming language. Explain your answer. (3)
2. What is the difference between a scripting language vs. programming language vs. markup language? (3)
3. Define the following concepts: (2)
 - a. JavaScript function
 - b. Weakly-typed programming language
4. Discuss in two sentence the primary purpose of CSS3. (2)
5. What are various DDL commands in SQL? Give brief description of their purposes. (6)
6. From the example below. Which one is the opening tag? Which one is the closing tag? (2)

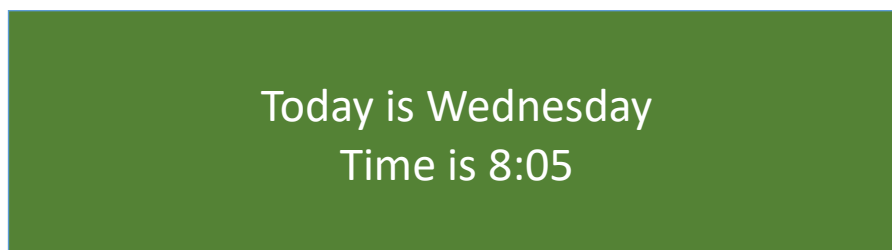
```
<?php  
DSE1  
?>
```

QUESTION 2**[19 MARKS]**

1. How do we know which technology is best for which business (factors to take into consideration, size, budget, etc.)? (4)
2. How impactful is technology in business strategy? Should there be an alignment? (5)
3. Discuss the implications of a technology becoming the business itself (for example, Facebook)? (6)
4. Compare and contrast between mobile application and websites. (4)

QUESTION 3**[22 MARKS]**

Consider a webpage with the following content – Using only HTML.



1. What gets displayed when you access this webpage on a Friday at 14:00? (2)
2. How does a web browser process an HTML file? (2)
3. How does a web browser process a PHP file? (2)
4. Write a PHP script to get the client IP address. (13)
5. Provide three reasons PHP is needed? (3)

QUESTION 4**[21 MARKS]**

Refer to the Table below to answer the questions that follows

EMPLOYEE

Fname	Minit	Lname	Ssn	Bdate	Address	Sex	Salary	Super_ssn	Dno
John	B	Smith	123456789	1965-01-09	731 Fondren, Houston, TX	M	30000	333445555	5
Franklin	T	Wong	333445555	1955-12-08	638 Voss, Houston, TX	M	40000	888665555	5
Alicia	J	Zelaya	999887777	1968-01-19	3321 Castle, Spring, TX	F	25000	987654321	4
Jennifer	S	Wallace	987654321	1941-06-20	291 Berry, Bellaire, TX	F	43000	888665555	4
Ramesh	K	Narayan	666884444	1962-09-15	975 Fire Oak, Humble, TX	M	38000	333445555	5
Joyce	A	English	453453453	1972-07-31	5631 Rice, Houston, TX	F	25000	333445555	5
Ahmad	V	Jabbar	987987987	1969-03-29	980 Dallas, Houston, TX	M	25000	987654321	4
James	E	Borg	888665555	1937-11-10	450 Stone, Houston, TX	M	55000	NULL	1

DEPARTMENT

Dname	Dnumber	Mgr_ssn	Mgr_start_date
Research	5	333445555	1988-05-22
Administration	4	987654321	1995-01-01
Headquarters	1	888665555	1981-06-19

DEPT_LOCATIONS

Dnumber	Dlocation
1	Houston
4	Stafford
5	Bellaire
5	Sugarland
5	Houston

WORKS_ON

Essn	Pno	Hours
123456789	1	32.5
123456789	2	7.5
666884444	3	40.0
453453453	1	20.0
453453453	2	20.0
333445555	2	10.0
333445555	3	10.0
333445555	10	10.0
333445555	20	10.0
999887777	30	30.0
999887777	10	10.0
987987987	10	35.0
987987987	30	5.0
987654321	30	20.0
987654321	20	15.0
888665555	20	NULL

PROJECT

Pname	Pnumber	Plocation	Dnum
ProductX	1	Bellaire	5
ProductY	2	Sugarland	5
ProductZ	3	Houston	5
Computerization	10	Stafford	4
Reorganization	20	Houston	1
Newbenefits	30	Stafford	4

DEPENDENT

Essn	Dependent_name	Sex	Bdate	Relationship
333445555	Alice	F	1986-04-05	Daughter
333445555	Theodore	M	1983-10-25	Son
333445555	Joy	F	1958-05-03	Spouse
987654321	Abner	M	1942-02-28	Spouse
123456789	Michael	M	1988-01-04	Son
123456789	Alice	F	1988-12-30	Daughter
123456789	Elizabeth	F	1967-05-05	Spouse

1. Retrieve the Salary and address of the employee(s) whose name is 'John B. Smith'. (5)
2. Retrieve the name and address of all employees who work for the 'Administration' department. (7)
3. Make a list of all project numbers for projects that involve an employee whose last name is "Smith", either as a worker or as a manager of the department, that controls the project. (9)