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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	Supplementary Summative Assessment Opportunity June 2019

ASSESSMENT DATE	June 2019	SESSION	
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

INFORMATION/INSTRUCTIONS:
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- ☐ 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.
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QUESTION 1   **[15 MARKS]**

1. Discuss the history and evolution of CSS.   (4)
2. What happens when you access a website? (Keywords ISPs, DNS and IP Addresses) (4)
3. What is the driving problem behind CSS?   (3)
4. Early HTML - Override defaults with attributes <table border="2" bordercolor="black">. True or False   (1)
5. Define the three ways in which CSS can be defined in an HTML document.   (3)

QUESTION 2   **[10 MARKS]**
1. Compare and contrast between JavaScript and Java.   (2)
2. What functionality does PHP bring to HTML that HTML cannot achieve on its own? Is there any language that can perform the same functions?   (4)
3. JavaScript is defined as a light-weight programming language. Explain why the case is. (2)
4. Compare and contrast between JavaScript and PhP.   (2)

QUESTION 3   **[24 MARKS]**
1. Which PHP function do you use to format date information?   (3)
2. Which PHP function could you use to check the validity of a date?   (3)
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   **[12 MARKS]**

1. Comment the first paragraph of the following HTML document.   (3)

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>JS Bin</title>
</head>
<body>
<p>HTML Tutorial</p>
<p>Python Tutorial</p>
<p>PHP Tutorial</p>
</body>
</html>
```

2. Embed audio in the following HTML document.   (5)

```
<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>Audio</title>
</head>
<body>
</body>
</html>
```

3. Define a clickable button on the following HTML document.   (4)

```
<!DOCTYPE html>
<html>
```

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```
<head>
<meta charset="utf-8">
<title>Button</title>
</head>
<body>
</body>
</html>
```

QUESTION 4 [19 MARKS]

Refer to the Table below to answer the question 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 a list of employees and the projects they are working on ordered by department and, within each department, ordered alphabetically by last name, then first name. (10)

2. 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)

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