

# Code: 150-7305

# COMP

THIAGARAJAR POLYTECHNIC COLLEGE, SALEM

Autonomous Examinations, Nov 2021 (Feb 2022)

Reg. No.

DIPLOMA IN COMPUTER ENGINEERING

## Web Programming

Year/Sem: III / V

Date: 04.02.2022

Session: II (01.00 pm to 04.00 pm)

Time: 3 hrs.

Max. Marks : 75

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### PART-A

(5 x 2 = 10 Marks)

**Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.  
(ii) All questions carry equal marks.**

- 1 What is (canvas) elements? Give the use with syntax.
- 2 Define web analytics. What are the importance of web analytics?
- 3 What is the use of break statement? Give syntax.
- 4 Define cookies. List out its components.
- 5 What are the disadvantages of the JSP?
- 6 Compare JSP vs Servlets.
- 7 List out the purpose of AJAX.
- 8 What is the use of the execute update () method? Give example.

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### PART-B

(5 x 3 = 15 Marks)

**Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.  
(ii) All questions carry equal marks.**

- 9 Define META tag. Explain with suitable example.
  - 10 Discuss any THREE semantic elements.
  - 11 Describe the life span of variable.
  - 12 Write short notes on the executing deferred scripts.
  - 13 What are the responsibilities of the client and server?
  - 14 Write a simple programme to find the maximum of the three numbers using JSP.
  - 15 What are the alternative to AJAX?
  - 16 How will you create a table in MySQL? Give example.
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**PART-C**

**(5 x 10 = 50 Marks)**

**Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.**

**(ii) All questions carry equal marks.**

- 17 A Explain the following tag 10  
(a) <SOURCE> (b) <AUDIO> (c) <VIDEO> (d) <SVa> <HR>
- (OR)**
- B (i) Write a jQuery programme for the count the number of milliseconds between the two click events on a paragraph. 5  
(ii) Write short notes on Bootstrap with its packages (any one) 5
- 18 A Define predefines objects. Explain it. 10
- (OR)**
- B (i) Explain the event handless with suitable example. 5  
(ii) Write short notes on computational operations with example. 5
- 19 A What is implicit object? Explain it. 10
- (OR)**
- B (i) Define JSP directives. Explain any one of it. 5  
(ii) Explain with neat diagram of JSP architecture. 5
- 20 A Write a programme to get server data and time from JSP page using AJAX. 10
- (OR)**
- B (i) How will you make a communication with server using AJAX? 5  
(ii) Explain Script.aculo.us. 5
- 21 A Define web services. Explain any three important services. 10
- (OR)**
- B (i) How will you create connection with the MySQL database server? 5  
(ii) Explain the following operation 5  
(a) Insert  
(b) Update  
(c) Delete

**Code: 150-7306**

**COMP**

THIAGARAJAR POLYTECHNIC COLLEGE, SALEM  
Autonomous Examinations, Nov 2021 (Feb 2022)

Reg. No.

DIPLOMA IN COMPUTER ENGINEERING

**Computer Hardware and Servicing**

Year/Sem: III / V

Date: 07.02.2022

Session: II (01.00 pm to 04.00 pm)

Time: 3 hrs.

Max. Marks : 75

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**PART-A**

**(5 x 2 = 10 Marks)**

**Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.**

**(ii) All questions carry equal marks.**

- 1 What is BIOS? List its functions.
- 2 Define the term hyper threading.
- 3 What is a solid state drive?
- 4 List the use of video capture card.
- 5 What is cold and warm booting?
- 6 What is SMD? List the different types of SMD components.
- 7 What is meant by active and passive maintenance?
- 8 Define Mobile routing.

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**PART-B**

**(5 x 3 = 15 Marks)**

**Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.**

**(ii) All questions carry equal marks.**

- 9 Write short notes about processor bus and high speed bus.
- 10 What is key bouncing? How can it be eliminated?
- 11 Explain the operations of disk array controller.
- 12 Write a short note on the SMPS color code.
- 13 What are BIOS interrupts? Explain.
- 14 Differentiate between laptop and desktop.
- 15 Define flashing. What are the steps followed in flashing?
- 16 Give a brief note about the different types of mobile virus.

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Contd..2

**PART-C**

**(5 x 10 = 50 Marks)**

**Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.**

**(ii) All questions carry equal marks.**

- 17 A i) Briefly explain about the features of Turbo boost technology. 5  
ii) Describe briefly about the different types of bus standards. 5  
**(OR)**  
B Explain briefly about North / South bridge chipset architecture with diagram. 10
- 18 A i) Explain the problems faced in Hard Disk Drive and its troubleshooting. 5  
ii) Describe briefly the recording and play back principles of Blu- ray disc. 5  
**(OR)**  
B i) Explain the mechanism and working principle of a Multi-Function Printer. 5  
ii) Explain the working of a Rewritable DVD. 5
- 19 A i) Define Graphics card and give its applications. 5  
ii) Give a brief note about the common failures in SMPS. 5  
**(OR)**  
B i) Briefly explain about the PC BIOS communication. 5  
ii) Explain POST faults related to hardware and software. 5
- 20 A i) Give a brief note about ESD and its precautions. 5  
ii) Describe in brief the steps to upgrade the motherboard. 5  
**(OR)**  
B Explain in brief about the preventive maintenance techniques adopted for laptops. 10
- 21 A i) Briefly explain the names and functions of different IC's in Mobile phones. 5  
ii) Discuss the different precautions to be followed to avoid virus. 5  
**(OR)**  
B Briefly explain about the different types of faults that occur in mobiles. List the solutions to Troubleshoot the faults. 10

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# Code: 150-7307

# COMP

THIAGARAJAR POLYTECHNIC COLLEGE, SALEM

Autonomous Examinations, Nov 2021 (Feb 2022)

Reg. No.

DIPLOMA IN COMPUTER ENGINEERING

**.Net Programming**

Year/Sem: III / V

Date: 09.02.2022

Session: II (01.00 pm to 04.00 pm)

Time: 3 hrs.

Max. Marks : 75

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**PART-A**

**(5 x 2 = 10 Marks)**

**Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.**

**(ii) All questions carry equal marks.**

- 1 What are the two kinds of coding that supports. Net and define any one.
- 2 Define CLS.
- 3 Write C# program structure.
- 4 Write any four events in windows form.
- 5 What is ADO .NET?
- 6 Tabulate any three difference between ExecuteReader() and ExecuteQuery() Method.
- 7 Write the advantage of XML.
- 8 What is Data Island?

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**PART-B**

**(5 x 3 = 15 Marks)**

**Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.**

**(ii) All questions carry equal marks.**

- 9 Write down services of CLR. Explain any two services.
- 10 Write the syntax of if ..else with example.
- 11 What is the use of This and Super Keyword in .Net?
- 12 Explain any two advanced form controls.
- 13 Tabulate any six differences between Data Reader and Data Set.
- 14 Write the features of ADO .Net.
- 15 Write the difference between HTML vs XML.
- 16 What are the need and use of Schema?

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Contd..2

**PART-C**

**(5 x 10 = 50 Marks)**

**Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.**

**(ii) All questions carry equal marks.**

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|----|---|--|----|
| 17 | A | i) Explain about Automatic Memory Management.                            | 5  |
|    |   | ii) Explain about .NET web Services.                                     | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain in detail about .NET framework architecture with a neat diagram. | 10 |
| 18 | A | i) Explain about any two types of operators in C# .NET.                  | 5  |
|    |   | ii) Explain about do..while with example.                                | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain in detail about dynamic arrays with example.                     | 10 |
| 19 | A | i) Explain about Text Box and Picture box with example.                  | 5  |
|    |   | ii) Explain how to create a window form with an example.                 | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain in detail about various events in windows forms.                 | 10 |
| 20 | A | i) Explain how you will connect to Data Source in ADO .NET.              | 5  |
|    |   | ii) What are the steps required to create a Stored Procedure?            | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain about ADO .NET Architecture with a neat diagram.                 | 10 |
| 21 | A | i) Explain about XML Schema.   | 5  |
|    |   | ii) Explain about XML Serialization in the .NET Framework.               | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain in detail about XML Components.                                  | 10 |

# Code: 150-7401A

# COMP

THIAGARAJAR POLYTECHNIC COLLEGE, SALEM

Autonomous Examinations, Nov 2021 (Feb 2022)

Reg. No.

DIPLOMA IN COMPUTER ENGINEERING

Software Engineering

Year/Sem: III / V

Time: 3 hrs.

Date: 11.02.2022

Max. Marks : 75

Session: II (01.00 pm to 04.00 pm)

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## PART-A

(5 x 2 = 10 Marks)

**Note: (i) Answer any FIVE questions out of which question No.8 is compulsory.**

**(ii) All questions carry equal marks.**

- 1 List any two advantages of spiral model.
- 2 Mention the Components of Software systems.
- 3 What do you mean by software metrics?
- 4 Define the term: Software Design.
- 5 Define Software version control.
- 6 Differentiate between Verification and Validation.
- 7 Define: Re-Engineering.
- 8 What is Black box testing?

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## PART-B

(5 x 3 = 15 Marks)

**Note: (i) Answer any FIVE questions out of which question No. 16 is compulsory.**

**(ii) All questions carry equal marks.**

- 9 What is the need for Software Engineering?
- 10 Describe Project Scheduling.
- 11 Differentiate between White box testing and Black box testing.
- 12 What are the points to be considered for the accuracy of project estimation?
- 13 What is adaptive maintenance?
- 14 State any three benefits of ISO certification.
- 15 State any three testing objectives.
- 16 Define MTTF and MTTR in reliability metrics.

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Contd..2

**PART-C**

**(5 x 10 = 50 Marks)**

**Note: (i) Answer all the questions choosing either sub-division (A) or sub-division (B) of each question.**

**(ii) All questions carry equal marks.**

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|----|---|--|----|
| 17 | A | Explain the RAD model in detail.   | 10 |
|    |   | <b>(OR)</b>  |    |
|    | B | i) What are the problems present in SRS?                                   | 5  |
|    |   | ii) Write short notes on Software myths.                                   | 5  |
| 18 | A | Explain the COCOMO model.  | 10 |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain the architecture of CASE environment.                              | 10 |
| 19 | A | Explain the lifecycle of a debugging task.                                 | 10 |
|    |   | <b>(OR)</b>  |    |
|    | B | Discuss the basic guidelines for selecting Testing tools.                  | 10 |
| 20 | A | Explain the following in software:   |    |
|    |   | i) Need for maintenance  | 5  |
|    |   | ii) Factors affecting the effort.  | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Explain the characteristics and application areas of Reverse Engineering.  | 10 |
| 21 | A | i) Discuss the need for getting ISO 9000 certification.                    | 5  |
|    |   | ii) What are reliability metrics? Explain.                                 | 5  |
|    |   | <b>(OR)</b>  |    |
|    | B | Discuss the software engineering code of ethics and professional practice. | 10 |

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