

- ii) “Classes”, “Objects” and “Methods” in Java
- iii) PHP Scripting Language
- iv) JavaScript Control Structures

MASTER OF LIBRARY AND INFORMATION SCIENCE
(DIGITAL LIBRARY) EXAMINATION, 2024

(2nd Year, 1st Semester)

Information Technology - III

Course : MLDL-12

Time : Two Hours

Full Marks : 50

The figures in the margin indicate full marks.

Answer **all** questions.

1. A) In computer programming, how do Programming, Scripting and Mark-up Languages differ? Describe briefly different types of scripting language with examples. How to use external JavaScript file in a HTML code? Illustrate with a suitable example.

3+3+4

OR

1. B) What are scripting languages and why is it used? How to write HTML code dynamically using JavaScript? Explain with a related example.
2. A) How to declare variables in different ways in JavaScript? Explain with suitable examples. What is Function in JavaScript? How to create a Function in JavaScript? Illustrate it with suitable examples.

2+2+3+3

5+5

OR

[Turn over

[2]

2. B) How to create Objects in JavaScript? Explain with a suitable example. How to create an 'Array' in JavaScript? What is the use of Math objects in JavaScript? Illustrate with an example. 5+5

3. a) Write java codes for the following problems (*any 4*):
5×4=20

i) Check whether a Number or a string is Palindrome or Not? Take input from the keyboard during execution of the program.

ii) Print Grade according to the following logic.
Marks should be in between 0 to 100 and taken during run time.

Grade = "A" if marks ≥ 80

Grade = "B" if marks ≥ 60 but < 80

Grade = "C" if marks ≥ 40 but < 60

Grade = "FAIL" if marks < 40

iii) Write java code to print the following pattern:

```
1  1  1  1  1
2  2  2  2
3  3  3
4  4
5
```

iv) Write java code to display prime numbers below 100.

[3]

Clue: Prime numbers are divisible by 1 and the same number only

3, 5, 7, 11, 13, 17

v) Write java code to print the following pattern:

```
1
2  3
4  5  6
7  8  9  10
```

vi) Convert given days into years, months and days.
(Consider: 1 year = 365 days and 1 month = 30 days)

vii) Write a Java Program to demonstrate the working of a Banking system where we can open new accounts with three variables (id, name and initial balance). Create a suitable class which has deposit, withdrawal and check balance methods.

viii) Write a Java Program to demonstrate the working of a Library system where we insert books with three variables (id, title and price) and display books from the stock. Create a Book class which has insert() and display() methods.

4. Write Short Notes (*any two*) : 5×2

i) Scanner class in Java

[Turn over