



**தேர்வாளர்களுக்கான அறிவுரைகள்**  
**INSTRUCTIONS TO CANDIDATES**

1. விடைத்தாள் மாற்றிப் பெறுவதற்கு.  
Get the answer book replaced, if
  - விடைத்தாள் சரியாக சேர்ந்து பின் செய்யப்படாமல் இருந்தால்.
  - it is not stapled properly
  - விடைத்தாள் புத்தகப் பக்கங்களின் வரிசை எண் விடுபட்டிருந்தாலோ அல்லது வரிசையாக இல்லாமலிருந்தாலோ (மொத்தம் 30 பக்கங்கள்).
  - the page numbers are missing or not in order (there shall be 30 pages continuously numbered)
  - தலைப்பு பக்கத்தில் விடைத்தாள் புத்தகத்தின் கீழ்பகுதியில் வரிசை எண் அச்சிடப்படாமலிருந்தால்.
  - the serial number of the answer book is not printed at the bottom of the title page
2. உங்களுடைய பதிவு எண்ணையும், பெயரையும் அதற்காக கொடுக்கப்பட்டுள்ள தலைப்பு பக்கத்தின் கீழ்பகுதியில் மட்டும் எழுதவும்; அதைத் தவிர்த்து பதிவு எண், பெயர் ஆகியவற்றை விடைத்தாளில் மற்றப் பக்கங்களில் எழுதக்கூடாது. எந்தவிதமான அடையாளக் குறியீட்டையும் விடைத்தாளில் எழுதக்கூடாது.  
You are prohibited from writing your REGISTER NUMBER or NAME in any part of the answer book, other than the space provided at the bottom of the title page. You are prohibited from writing or leaving any distinguishing marks so as to identify your answer book.
3. தலைப்புப் பக்கத்தில் கொடுக்கப்பட்டுள்ள அதற்குரிய கட்டங்களில் விவரங்களை எழுதவும்.  
Fill up all the particulars, in the relevant boxes, in the title page.
4. கேள்விகளுக்கு பதில் எழுதும் போது விடைத்தாளில் இரண்டு பக்கங்களையும் பயன்படுத்த வேண்டும். பக்கங்களில் தொடர்ந்து விடை எழுதாமல் வெற்றிடம் விடக் கூடாது.  
Use both sides of the paper for answering questions, without leaving spaces/ lines in between.
5. இந்த விடைத்தாள் புத்தகம் போதுமான பக்கங்களை கொண்டிருக்கிறது. இதைத் தவிர கூடுதல் விடைத்தாள் அளிக்கப்படமாட்டாது.  
This answer book contains sufficient pages and no additional sheets will be issued.
6. கேள்விக்கு விடையளிக்கும் முன்பு வினாத்தாள் எண், வருடம், மாதம், காலம் இவைகளை சரிபார்க்கவும்.  
Check the Code Number, Month and year of Examination, Duration etc., in the question paper before answering the questions.
7. கொடுக்கப்பட்டுள்ள வரைப்படத்தாள் / கிராப் ஷீட் தவிர வேறு எந்த விடைத்தாளையும் சேர்க்க கூடாது. விடைத்தாள் புத்தகத்திலிருந்து எந்த பக்கத்தையும் கிழிக்கக் கூடாது.  
No extra sheet is to be attached except the drawing/graph sheets supplied and no sheet is to be torned from the answer book.
8. கைபேசி, துண்டுக் காகிதம் மற்றும் தடை செய்யப்பட்ட இதர பொருட்கள் வைத்திருத்தல், தேர்வுக்கு எதிரான முறைகேடுகளில் ஈடுபடுதல் அனைத்தும் தேர்வு வாரிய விதிகளின்படி தண்டனைக்குரிய குற்றமாகும்.  
POSSESSION OF ANY PROHIBITED MATERIAL, CELL PHONE, BITS OF PAPERS, etc., AND INVOLVEMENT IN MALPRACTICE OF ANY NATURE SHALL BE PUNISHABLE AS PER BOARD'S RULES.



## PART-B

### III. a). NET framework architecture

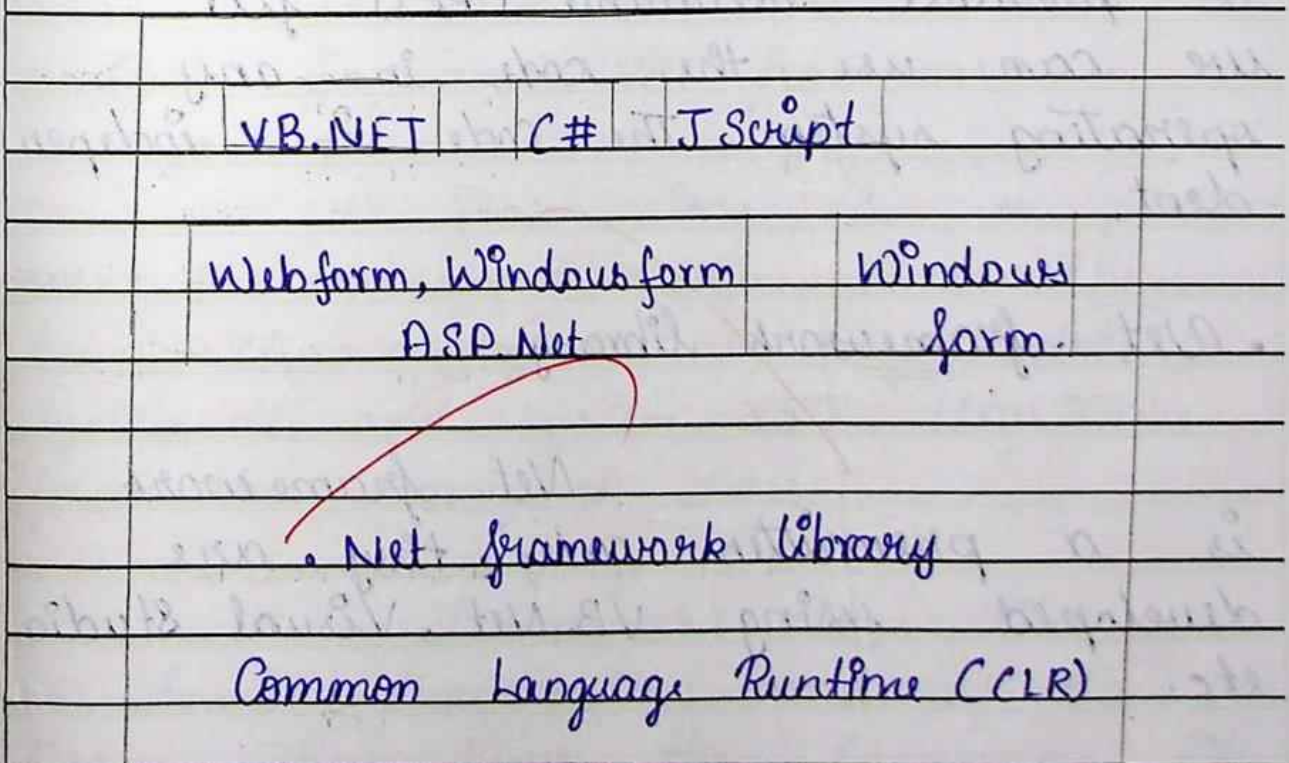
Net framework architecture as three types.

\* .Net framework language

\* .Net framework libraries

\* Common language runtime (CLR)

The figure given below shows





## • .NET Language.

.Net framework uses languages like VB.NET, JScript, C# etc.... Using these languages we can develop web form and windows form.

User can create a source code using .NET framework. The .NET Compiler check and analyze code and stored in the managed module.

Managed module is a portable executable (PEs) file we can use the code in any operating system. The code is independent.

## • .Net framework library

.Net framework is a prewritten code. They are developed using VB.Net, Visual Studio etc....



We can develop windows form and web form using class in the class library. The class are organized.

These class library have a common functions such read, write graphical interaction etc... These class library are divided into two types.

- \* base class library

- \* framework class library.

The .Net class libraries are available in any .NET framework.

Base class is a part (or) subset of the entire class. They have the operations of `mysql.dll`, `System.dll` and `System.data.dll`. These forms the framework class.

framework class library is known the entire class of the library. They have the language like



ASP.Net, Visual Studio and ADO.Net

Common language Runtime (CLR)

Common language Runtime (CLR) is used to manage the execution of the web application.

At the run time, they provide some services like memory allocation, thread management, garbage collection etc... Common Type System (CTS) is used to provide a safe environment to the code.

At the compile time, the .NET compiler compiles and converts the code into CIL code. At the run time, the CLR compiles the CIL code into the native of the operating system.

They provide some services like Memory management, thread management, garbage collection etc...



### B.. a) Stored procedure

When the execution of the web application the source code have been parsed and utilized. These process takes place everytime when the user execute the web application. This method is very expensive to use.

In this we parsed and utilized the source code repetably and stored in a memory location. When the user wants it we can access that it knows as stored procedure

How to create a stored procedure.

→ Open a new Application Start → program and click the view option.

→ In view option. select the server and expand it



→ In the server tab select SQL server and expand it.

→ Expand the required node.

→ Select the stored procedure and click the new stored procedure. As per figure given below.

|                  |      |             |  |
|------------------|------|-------------|--|
| Application      |      | [-] [ ] [X] |  |
| File             | View | Import      |  |
| Toolbox :        |      |             |  |
| Properties       |      |             |  |
| Webform          |      |             |  |
| Application      |      |             |  |
| Server →         |      |             |  |
| MSQL Command     |      |             |  |
| MySQL Connection |      |             |  |
| SQL Server →     |      |             |  |
| node 1 ←         |      |             |  |
| node 2           |      |             |  |
| node 3           |      |             |  |
| node 4           |      |             |  |
| node 5 ←         |      |             |  |



Stored procedure →

new Stored procedure

Update

Save

\* We can change the name and style using properties.

\* Go to properties and change into stored procedure 1.

\* Click on Save. And the stored procedure save in the memory location

144. by ASP.NET page life cycle.

The process to execution a program is called life cycle. means the steps by step process. There are two types of life cycle.

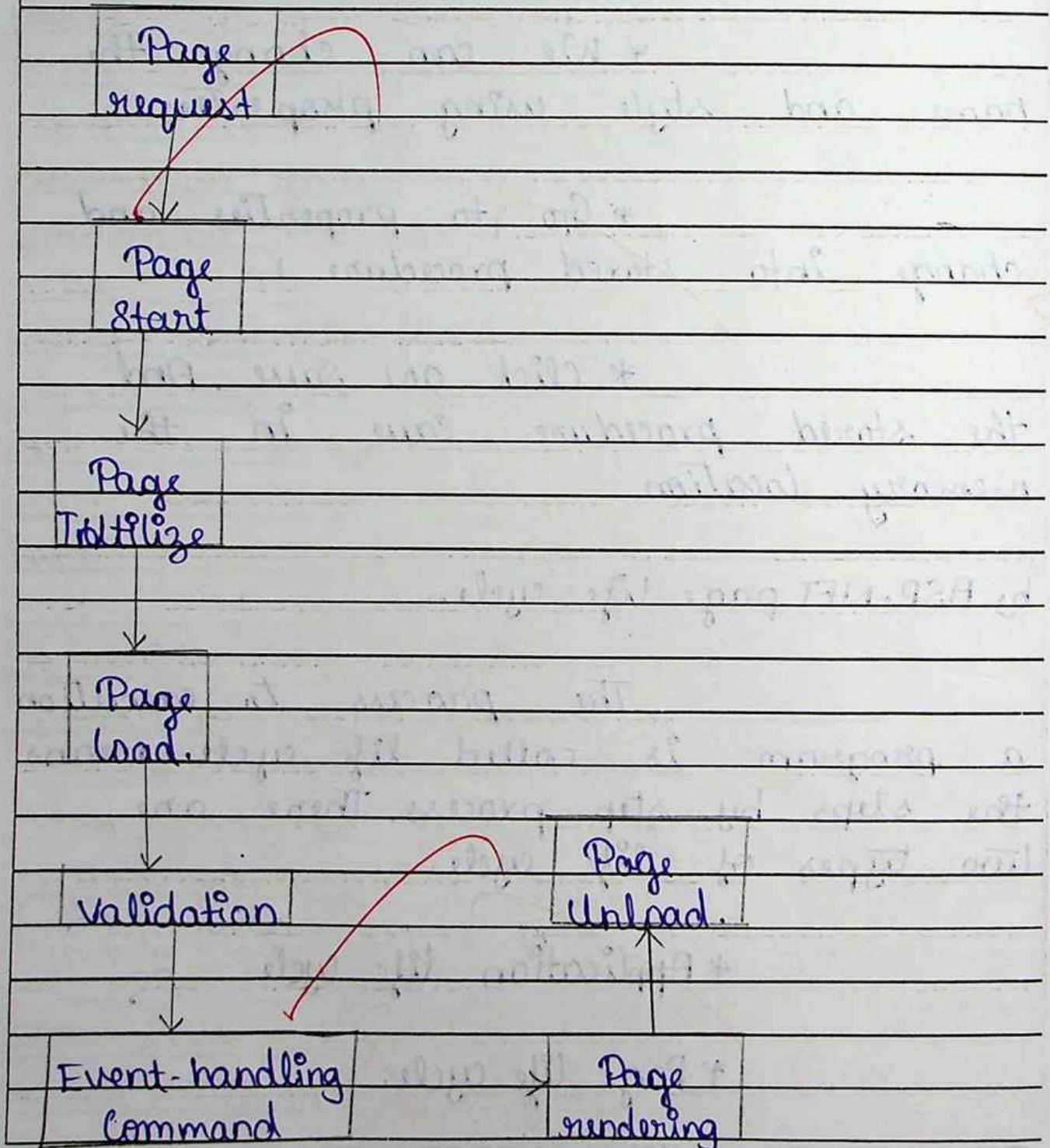
\* Application life cycle

\* Page life cycle.



## Page life cycle:

The figure given below shows the process of Page life cycle.





## Page request

When the user request a page. It will check that this is first-time or not. Then provide the requirement for the user.

## Page start

In this method the page properties are set to system default values.

## Page Initialization

Then the controls in page like button, Textbox are get Initiated.

## Page load

This method triggers the home page to open the same page as the user refresh.



## Validation.

This check the input that the user given in the home page are valid.

## Page rendering

This method execute before the information as been sent to the users.

## Unload

This method remove the memory after user gets the information.

## Event handling

This Method manage the event in the home page on the run time.



15.. b) SOAP fundamentals.

Simple Object Application protocol (SOAP) are used to communicate with database and the server.

It is used to share the information among the server

SOAP is a communication based protocol. It supports both client and the server. There are five features in the SOAP.

HTTP based - It is used to create message easily

Platform Independent - It is a XML format. So the code is Independent can run in any hardware.

Extensibility - We can add an



Element easily

Simplicity - It is used to send the Information in Simple form.

Message passing - It is used to exchange messages easily.

SOAP building blocks.

SOAP is a XML document. It has four major components.

\* SOAP envelope

\* SOAP Header

\* SOAP Body

\* SOAP fault.



<SOAP Envelope>

<SOAP-encoding> - /www.encoding/  
- d.tcs SOAP.com/  
d/t.

</encoding> - /www.encoding/  
d.tcs SOAP.com/  
d/t.

<header>

</header>

<body>

<fault> </fault>

</body>

</SOAP Envelope>.

SOAP envelope  
contains the details about the  
path of the message to the addressing  
point.



SOAP header contains the authentication and Information of the message.

SOAP body contains the actual message the user sent.

SOAP fault is inside the SOAP. It is used to indicate the error message. SOAP fault is optional.

12. a) i) Events.

Events is known as actions done by the mouse and keyboard. like typing, pressing, releasing etc... they are known as events.

There are three types of Mouse events.

\* Mouse pointer

\* Mouse pressed



## \* Mouse Released

### Mouse pointer

When the mouse drag and point a control is called Mouse pointer.

### Mouse pressed (or) Up

When the mouse press a object or control. is known as Mouse pressed.

### Mouse released (or) down

When the mouse releases the object or a control is known as Mouse released.

### Example:

When you drag the mouse point the button is called mouse pointer. Then press the button and execute the event is called mouse pressed and then



release the button the execution stops is called Mouse released.

## ii) Context Menu.

In the menu when we right clicked there shows a panel is called context menu.

There are two types of context menu.

- \* System context menu

- \* Custom context menu.

### System context menu.

In System when we right clicked the default panel is opened is called System Context menu.



|         |                                                                                                                                                                                                                                                       |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form:   |    |
| Option  |                                                                                                                                                                                                                                                       |
| Save AS |                                                                                                                                                                                                                                                       |
| Print   |                                                                                                                                                                                                                                                       |
| hide.   |                                                                                                                                                                                                                                                       |

### Custom context menu

Custom context menu is known as the panel created by the user with their own function.

There are three components in context menu: Save AS, print, hide.

### How to create a context menu:

→ Open a new Application form and go to toolbox and select context menu<sup>strip</sup> and drag it to the Application Form.



|                          |                                                                                                                                                                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form1                    |    |
| Context menu Strip       |                                                                                                                                                                                                                                                       |
| <div>Type the text</div> |                                                                                                                                                                                                                                                       |

→ Select the type option and Enter the item Save AS, Print and Hide.

→ Run the application.

→ Go to properties and change the name context menu Strip into control menu Strip.

→ Run the application.

The Context menu created by the user with own function is ready.



|                       |         |
|-----------------------|---------|
| Control Menu Strip 1. |         |
|                       |         |
|                       | Save As |
|                       | Print   |
|                       | Hide    |

## PART-A.

### 1. Uses of .NET framework.

- \* .NET framework supports multilanguage.

- \* .NET framework manage the execution time using Common Language runtime (CLR)

- \* The Application created by .NET framework are portable can be used in any Operating System.

### 2. Object:

Object is known as a group of function or an Element used in program.



CREATE OBJECT  
Objectname;

#### 4. Tooltip

Tooltip used to help the user when they point the mouse on the control eg. Button, Text box etc.. It shows that what is used for.

Example:

Form1



click here to  
run the program

OK

→ Select the tooltip from the toolbox and select the button.

show. ("click here to run the program").



## 10. SOAP

SOAP means Simple Object Application protocol.

It is an communication protocol

It is used to communicate with the database and the server.

## 8. Web API

Web API mean Web Application program Interface.

It can be used by web server through Internet.

Web API can customized by the user for their requirement.

## 5. Dataset

Dataset is known as collection of Tables.



Each Dataset must contain a single Table.

In Dataset a group of row is called Data rows. And A group of column is known as Data column.

### 6. Datareader & Dataset

Datareader is used to read the data in the read-only format.

Dataset will take the data and change and give it back.

### 9. DTD

DTD is used to declare a element in the form. There are two types of DTD

\* Internal DTD

\* External DTD



### 5. Dataset

Dataset is a temporarily storage area. To store the information.

### 5. Windows forms

\* Control

\* Process menu

\* Tool box

Answer Book Contains

22

Written Pages

*[Signature]*

PRINCIPAL & CHIEF COORDINATOR



2. Dotted

Dotted is a temporary  
storage area to store the information

to be used later

3. Dotted

4. Dotted

5. Dotted

6. Dotted

7. Dotted

8. Dotted

9. Dotted

10. Dotted

11. Dotted

12. Dotted

13. Dotted

14. Dotted

15. Dotted

16. Dotted

17. Dotted

18. Dotted

19. Dotted

20. Dotted

21. Dotted

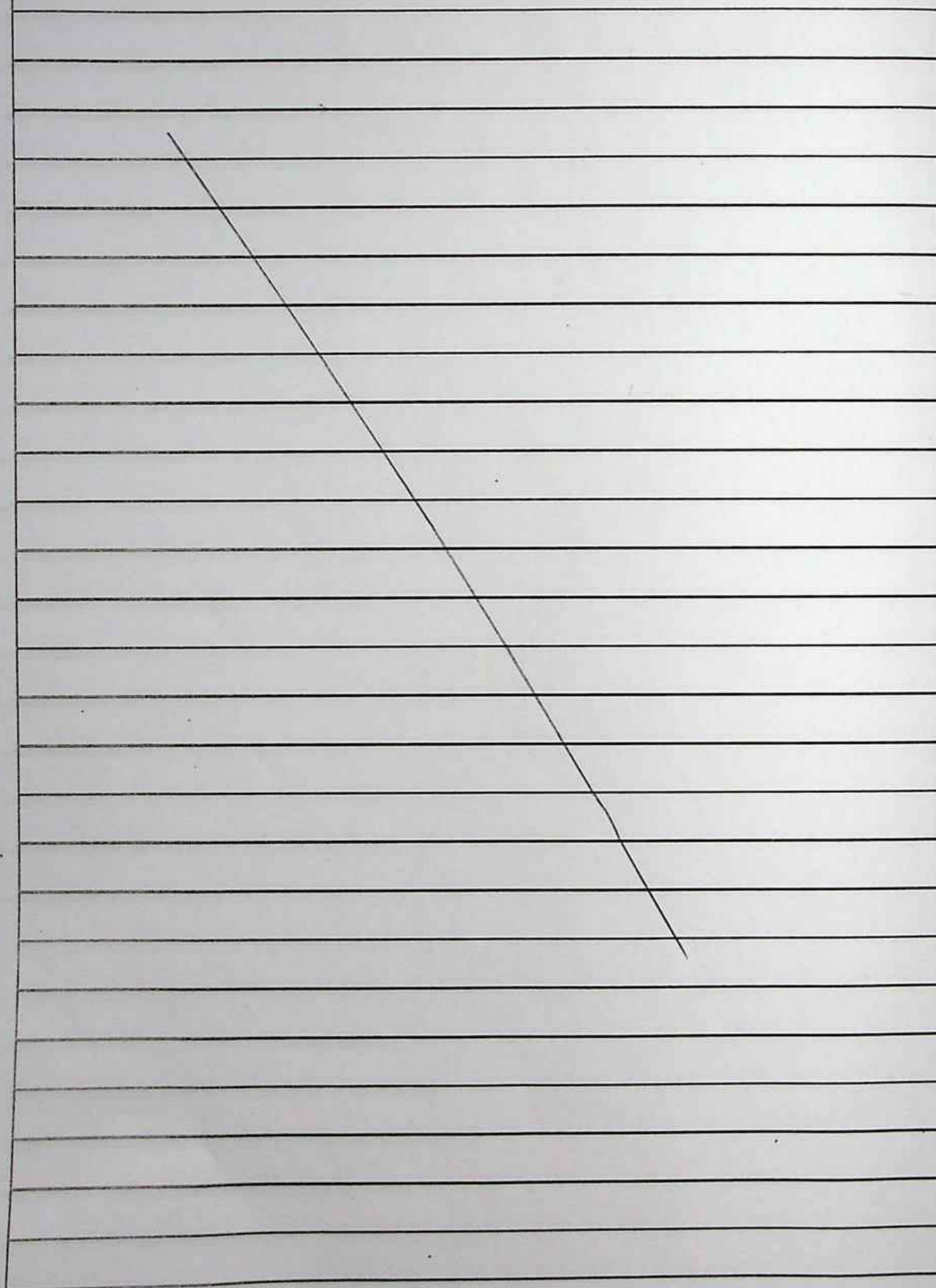
22. Dotted

23. Dotted

24. Dotted



This image shows a single sheet of white paper with horizontal blue or grey ruling lines. At the top center, there is a vertical barcode consisting of black bars of varying widths. In the top right corner, the number "25" is printed in a small, black font. The rest of the page is blank, with no handwriting or other markings.









A series of horizontal lines for writing, with a diagonal line crossing through the middle section.

