

For Office use	Space for Digital Data
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தமிழ் நாடு அரசு

தொழில்நுட்பக் கல்வித் துறை, சென்னை 600 025 - வாரியத் தேர்வுகள்

அடுத்தப் பக்கத்தில் கொடுக்கப்பட்டுள்ள குறிப்புகளை படிக்கவும் (Read the instructions given in the next page)

Q. No.	A	B	C	Q. No.	A	B	C	Q. No.	A	B	C	Q. No.	A	B	C
1.				9.				17.				25.			
2.				10.				18.				26.			
3.				11.				19.				27.			
4.				12.				20.				28.			
5.				13.				21.				29.			
6.				14.				22.				30.			
7.				15.				23.				31.			
8.				16.				24.				Total Marks			

For Revaluation

For Central Valuation

Q. No.	A	B	C	Q. No.	A	B	C	Q. No.	A	B	C	Q. No.	A	B	C
1.	02			9.	02			17.				25.			
2.	01			10.	01			18.				26.			
3.	03			11.		12		19.				27.			
4.	03			12.	02/02	01	01	20.				28.			
5.	01			13.	13			21.				29.			
6.	03			14.		13		22.				30.			
7.	01			15.				23.				31.			
8.	02			16.				24.							
61															

Question Paper Code No.

வினாத்தாளின் குறியீட்டு எண்

1 7 7 6

No. of Pages W

எழுதப்பட்ட பக்க

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26

Date of Examination :

தேர்வு நாள்

16.11.2024

Subject Name :

படத்தின் பெயர்

component based Technology

Perforations to tear fly slip

* simple if statement is used to execute a set of statements syntax:	<pre> if (Test condition) { statement 1; ... statement n; next statement; </pre>
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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 teared 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

17) b) decision making statements in c++

* Decision making statements is used to Execute or skip a set of statements

* If the condition is true set of statements executed else control transferred to next statements

* There are three types of decision statements they are.

i) simple if statement

ii) if...else statement

iii) switch statement

i) simple if statement

* simple if statement is used to execute a set of statements
syntax:

```
if (test condition)
{
```

```
    statement 1;
```

```
    - - -
```

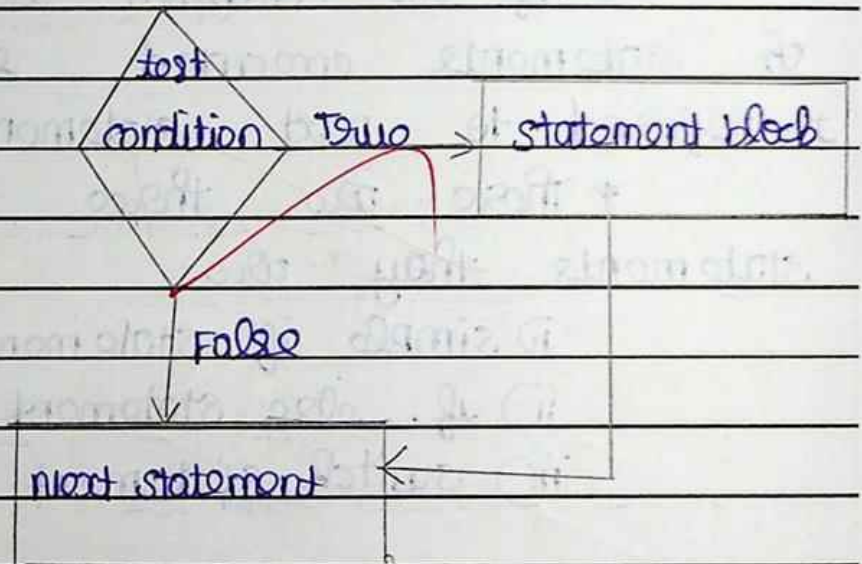
```
    statement n;
next statement;
```



where:

Test condition - condition to be checked
 statement, to n - statement to be
 execute

Flow diagram:



Example:

```

Public static void main (String args)
{
    int a = 100, 40;
    if (i < a)
    {
        console.WriteLine("Pass");
    }
    console.ReadLine()
}
  
```



ii) if... else statement

* if... else statement is used to execute the set of statement when the test condition is true else False statement is executed

Syntax:

```
if (test condition)
```

```
{
```

```
    statement block 1;
```

```
}
```

```
else
```

```
{
```

```
    statement block 2;
```

```
}
```

```
next statement;
```

where:

Test condition - condition to be check

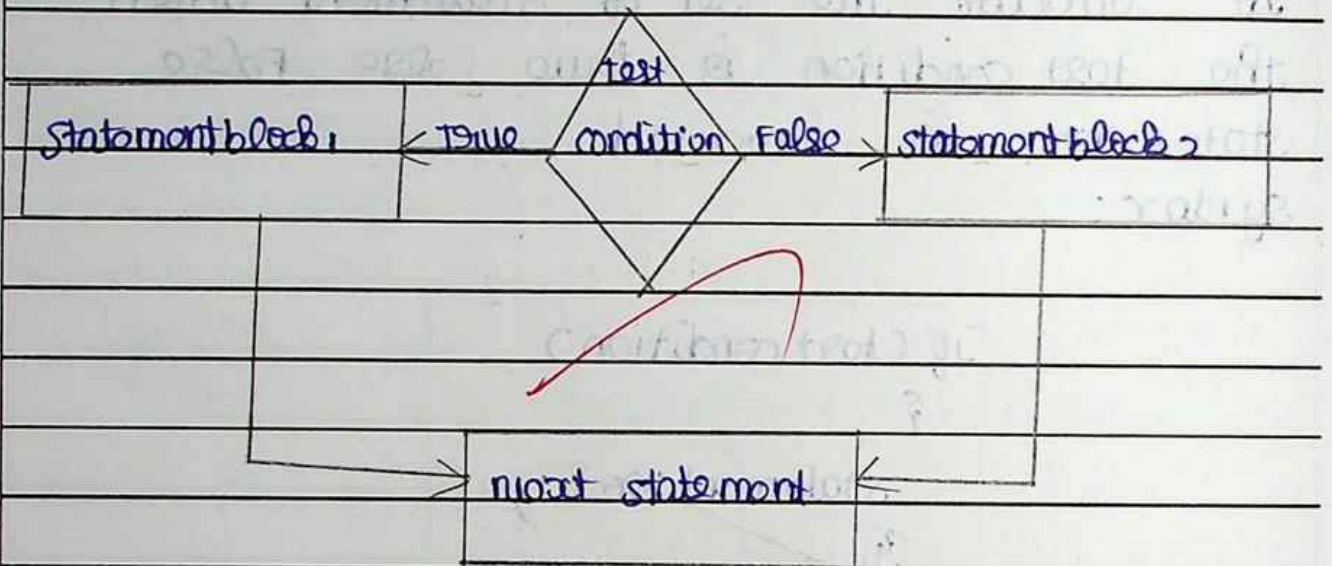
statement block 1 - True body

statement block 2 - False body

if, else - keyword



Flow diagram



Example :

```
public static void main (Event[] args)
```

```
{
```

```
int a = 40;
```

```
if (a > 40)
```

```
{
```

```
    console.WriteLine("Pass");
```

```
}
```

```
else
```

```
{
```

```
    console.WriteLine("Fail");
```

```
}
```

```
    console.WriteLine();
```

```
}
```



iii) switch statement

* switch statement is used to execute a multiple set of statement without test condition

Syntax:

switch (expression)

{

case 1 value:

statement block 1;

case 2 value:

statement block 2;

break;

case n value:

statement block n;

else break;

default statement;

Example:

switch (Day)

{

case: Day 1

console.WriteLine("Monday");



```
        break;
    case 2: Day 2
        console.WriteLine("Tuesday");
        break;
    case 3: Day 3
        console.WriteLine("Wednesday");
        break;
    case 4: Day 4
        console.WriteLine("Thursday");
        break;
    case 5: Day 5
        console.WriteLine("Friday");
        break;
    case 6: Day 6
        console.WriteLine("Saturday");
        break;
    case 7: Day 7
        console.WriteLine("Sunday");
    else
        console.WriteLine("invalid");
        console.ReadLine();
    }
}
```

13) a) Architecture of ADO.NET and its features



.net Data Providers

* .net Data Providers act as the bridge between the users application and Database.

* It retrieve data from database and sent back the data to the database after changes.

* There are two types of .net Data Providers components

* .net Framework for Microsoft SQL server Data source

* .net Framework for OleDb Data source

* There are four objects in .net Data Provider They are

- i) connection - object is used to make connection with database
 - ii) command - object is used to access the data base command
 - iii) Data Reader - object provide the stream of Data base
 - iv) Data adapter - object is used to provide bridge between the Data base and data set
- * .net data providers act as the bridge between the users application and data set



i) connection

* This object is used to create connection and transfer the data to users application

* This can be done with the help of OLEDB connection or connection

ii) command

* This object is used to create delete, update etc records of data using data base command

iii) Data Reader

* This object is used to read the data from row wise in read only format

* This can be done with the help of OLEDB Data Reader or Data Reader

iv) Data Adapter

* Data adapter act as the bridge between the Data Base and Data set



* It retrieve data from data base and send back the data to data base after changes

* It can be done with the help of OLEDB Data Adapter, sql Adapter

Data set

* Data set is a collection storage retrieved from data base.

* It is a collection of Data table collection, Data Relational collection

* Data set can combine with .Net Data providers

Data set

Data table collection
table collection

table row collection

column collection

Execution collection

Data Relational collection



* There are three types of objects in data set

- i) Data table object
- ii) Data row object
- iii) Data table collection object

i) Data table object

* Each Data table object contain atleast one table object.

* Each table contain atleast one row, or column

* collection of rows are called Data Row collection

* collection of columns are called Data column collection

ii) Data row object

* All the Data table objects are available in this object

iii) Data table collection object

* This object is used to provide controls like Data row collection, Data column collection



Features

- * Accessing Data
- * Data Reader
- * Data set
- * Independent of Data Base
- * XML coded Data

14) b) ASP. not Page life cycle

* The following are the various type of ASP. not Page life cycle

- 1) Page request
- 2) Page initialization
- 3) Page Load
- 4) Validation
- 5) Post back event Handling
- 6) Page rendering
- 7) Page start
- 8) Page unload

1) Page request

* when the Page is request the server check the request for first time

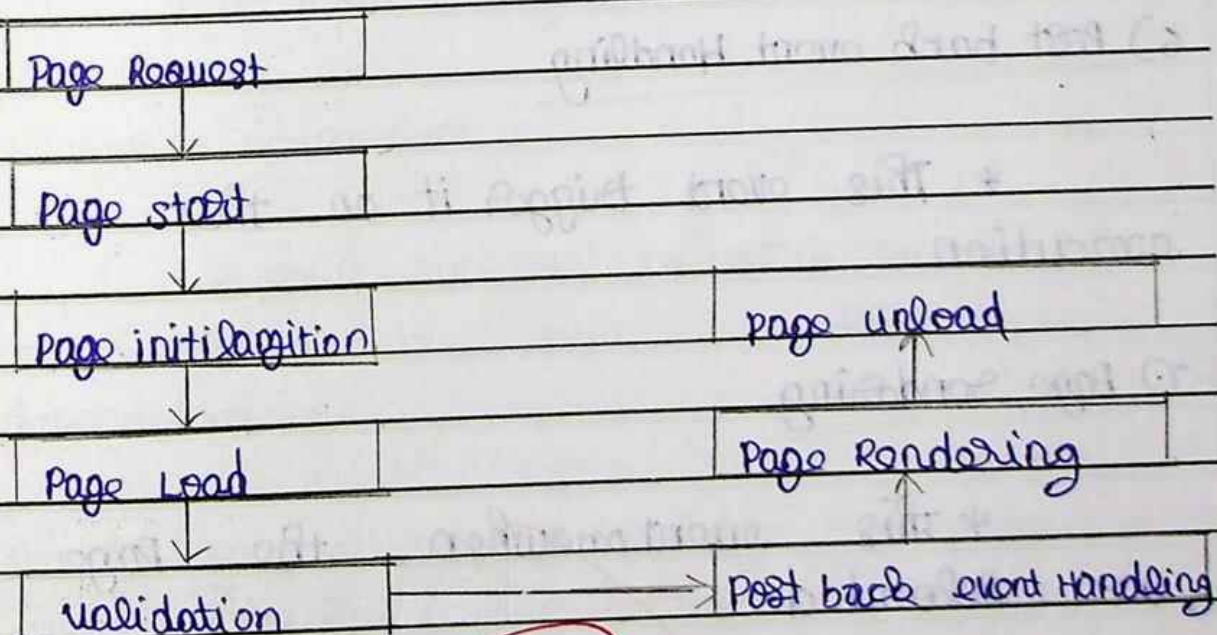


or not to compile the new page

2) Page start

* In this method there are two object request and response are created to hold the information about page request Page Response

Flow Diagram of ASP.NET Page life cycle



3) Page initialization

* In this method all the controls are placed in the form like label, Button etc...



4.) Page load

* When the page is loaded all the controls are set to their default value

5.) Validation

* used to check the page is valid or not valid

6.) Post back event Handling

* This event triggers it on the execution

7.) Page Rendering

* This event occurs when the page is reloaded

8.) Page unload

* This is the final step in ASP.NET page life cycle. In this finally the page is unloaded from memory



15) b) SOAP fundamental and its building blocks

* SOAP stands for (Simple Object Access protocols)

* The following are the SOAP building blocks

1) HTTP support

* This is the easy way to transfer message

* HTTP stands (Hypertext Transfer Protocols)

2) Platform independent

* SOAP support multiple languages and platform so SOAP is Platform independent

3) Simplicity

* SOAP is easy to create message

4) Interoperability

* message can be added to the SOAP



at any time

5) message passing

* It is used to transfer the message over the internet

SOAP Fundamentals

* The following are the SOAP fundamentals

- 1) SOAP envelop
- 2) SOAP Header
- 3) SOAP Body
- 4) SOAP fault

1) SOAP envelop

* SOAP envelop contains the address URI and contains the encoding URI

2) SOAP Header

* SOAP Header contains the Authentication details



3. SOAP Body

* SOAP Body contain the actual message and SOAP fault

4. SOAP fault

* SOAP fault is used inside the Body and it is used to check the error

Syntax:

```
<?xml version="1.0">
```

```
<soap:envelop: username="abc" password="xyz">
```

```
<soap:encoding: username="abc" password="xyz">
```

```
</soap:encoding>
```

```
<soap:Header> mobile content
```

```
</soap:Header>
```

```
<soap:body>
```

```
content
```

```
</soap:body>
```

```
</soap:envelop>
```



Example :

```

<?xml version="1.0">
<SOAP:Envelope: HTTP/1.1>
<SOAP:encoding: HTTP/1.1>
</SOAP:encoding>
<SOAP:Header>
  mobile
</SOAP:Header>
<SOAP:Body>
  name: Rodmigi
  Price : 10000
</SOAP:Body>
</SOAP:Envelope>
  
```

12) mouse event

* MA

12.03.17 Mouse event

* Mouse event is an action when the mouse is pressed, clicked, released, moved

* Mouse move is the process of moving the mouse over the



form

* Mouse Down is a action when the mouse is pressed

* Mouse Up is a action when the mouse is released

12.0.2 ii) create context menu

* open visual studio and create a window form

* Add Internet information service in the administrative tools

* expand local computer expand website

* In tool box there is a context menustrip tool. Drag and Drop the context menu tool in the form

Form1



contextMenuStrip

* set the short cut key: for save control + s,
for cut - control + x, for copy - control + c
for paste control + p.

* Run the application by pressing F5



PART-A

1) .net Framework

- * .net Framework is a multilanguage environment of microsoft corporation
- * This was developed by w3c world wide web consortium
- * It support multiple languages
- * It support only on windows
- * During the execution compiler compile the byte code called (MSIL) microsoft intermediated language

3) window form

* window forms are used to place the controls ^{from} the tool box

* To create the window form open visual studio select window, desktop and give the name to Project

* window forms are used to control the ~~for~~ execute the tools



* During runtime one or more controls are placed in the single window form

Form		[Min] [Max] [Close]	
label	name		
PushButton	OK		
	Button2		

4) Tooltip

* Tool tip is used to identify the work of the tools

* If the mouse points any tool it describes about that tool creating tool tip

* Create a window form

* Drag and Drop the tool tip at the end of the form



and retrieve data rows
from database

string()

- used to read row one
by one based on the
result if the result is
false no data to read

Data set:

* Data set is a collection of relational
collection and Data table collection

* It use fill() method to
transfer the content from net data
provider to Data set

T.D HTML controls

* HTML Button

* HTML label

* HTML TextBox

* HTML CheckBox

* HTML List Box

* HTML ComboBox

* HTML RadioButton



9.7 Internal DTD

* The elements are used inside the Document type definition is called Internal DTD

External DTD

2 * The elements are used outside the Document type definition is called External DTD

10. SOAP

* SOAP stands for Simple Object Access Protocol

* SOAP is used to transfer message over the internet

8. API

* API stands for Application Programming interface

2 * Using API is the front end application



2) object

* object is define as a entity that contain (methods and elements)
creating object

object objectname

Extra Questions

2) b) show

* show is used to display the model form

* if it wants to go next work existing form must closed

show dialog ()

* show dialog is used to display the model form

answer Book Contains

20 Written Pages

Principal & Chief Coordinator

