CS508 FINAL TERM PAPER SHARED BY STUDENT

ON FEBRUARY 20, 2018 AT 2:06PM

Mostly MCQs from this file.

1. enlist 3 Design issues arithmetic operators. (3)

2. what the elephant is?? a mammal . Write this in prolog(3).

3. SNOBOL concatenation and replacement example (3).

4. JAVA code with errors for inheritance given we have to find error and rewrite code. (5)

5. Enlist php opening and closing tags. (3)

6. Prolog example given to eliminate redundant elements from list(5).

7. Duality in operators of php in controlled statement. with example (5).

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ON FEBRUARY 23, 2018 AT 10:18PM

-overloading sideeffects.

-php odbc connection

-foreach c#

-LIST elements [head|tail] concept

-remprop syntax

Difficulty level was high atleast for me.

Best of luck everyone.

CS508 FINAL TERM PAPER SHARED BY STUDENT

ON FEBRUARY 26, 2018 AT 3:50PM

90% mcqs were from hadi and arsalan file.

Subjective:

1)Java is a object oriented programming language. suppose two pcs one is pentium 1 and the other 1 is intel core 2 duo. Discuss the Longvariable storage? And it is possible that storage of variables are same in any pc???

2)Aik program the java ka us ka output btana tha

3)concatenation ka question tha

4)SNOBOL and SNOBOL4 ka question tha

5)What is static binding and Storage binding? Also discuss advantages and disadvantages

Bus itnay hi yaad hain.

Good luck guyz!!!

CS508 FINAL SUBJECTIVE (12-08-2017)

Q)The list is one of the original LISP data types, based on the concept of List in LISP, answer the following parts.

a) Write a function in LISP that creates a list by taking following three arguments as its elements.

 Foo, Bar, Jack

b) Create a list that inserts symbol 'z' at the front of list L. (5marks)

Q)Suppose there is a function append() in prolog. This function can take 3 arguments. The first two arguments are list and the third argument is a variable which is assigned a value after appending second argument at the end of first argument. Consider the following queries and write down the outputs of them. (5marks)

1. ?- combine([a, b,c],[1,2,3],X).
2. ?- combine([foo,bar,yip,yup], [glub,glab,glib,glob], Result).
3. ?- combine([], [1, 2, 3], Z).
4. ?- combine(combine([ali, is],[a, good], X), [boy, *], Y).

Q)There is usually no need to convert between numbers and strings in PHP. Numbers and strings are interchangeable.

a)Write the resultant output after the execution of following php statements.

$foo = 1 + "11 Rabbits";

$foo = "11.0 rabbits " + 1;

b) Mention the advantages and disadvantages of using strings in numeric expressions.

(3 marks)

Q)How many ways can be used to write foreach statement using php.Write syntax in each case. (3 marks)

Q)What will be the output of the following C# code?

```csharp
using System;

public class HelloWorld
{
    public static void Main()
    {
        string s1 = "hello";

        string s2 = s1;

        s1 = "world";

         Console . WriteLine(s1);

    }
}
```

Q)We have a java program in which a variable named "LongVar" of type long is declared and used. Suppose this program runs on two machines; one is having Intel **Pentium I** processor and the other is having Intel **Core 2 Duo**. How many bytes of memory "LongVar" will consume on each machine? Give reasons to support your answer.

Q)From the given code snippet in C#, find out whether aliasing problem will arise or not? Justify your answer with valid reasons. (5marks)

```
object studentcs = new object();
studentcs.id = 123;
object  studentbba =  studentcs;
studentbba.id = 204;
```

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CS508 Current Final Term Papers In ONE thread 25-feb-2017 to 8 march 2017

Share by Student.

Q41:
Should the name of the class and the name of the file in which it is saved need to match up in case of c#. Justify your answer.
Q42:
What was the primary role behind the development of programming language like php?
Q43:
Write a prolog fact for the following statement
"The empty set is the subset of every set"
Q44:
Identify the approach used in the following record definition system.
"Employee.EmployeeName.First"
Q45:
How is dynamic binding in java different from C++?
Q46:
Explain stack dynamic type of array with two examples.
Q47:
Describe a character array of size 5 in Java also write down the default initial value that will be assigned to each element of an array when no initial value is assigned.
Q48:
How can we define many variables at once in Java Script variables with two examples?
Q49:
Point out the design issues of counted controlled loop with three examples.
Q50:

Suppose you are writing a program for some gaming application in java you need to use arrays data structure to store some values. What basic steps will be taken for array manipulation in Java with two examples?

Q51:

Write a code snipped in C# to print character of vowel array using foreach loop.

CS508 FINAL TERM PAPER SHARED BY STUDENT

ON FEBRUARY 26, 2017 AT 5:26PM

Today was my paper.

Only 15% MCQ'S from past papers 85% conceptual

3 long question From coding

How many typing method in Java ?

One was from Prolog languge , Relation and facts

How many types of constants ?

Write special atoms ?

Read your handout from 22 to 39. Mostly questions are from there.

Best of luck for your paper.

CS508 CURRENT PAPER (20-08-2016)

2 marks questions:

1. Which type of inheritance is achieved through the use of interface in JAVA?
2. Does C supports Boolean expression, justify?
3. Find the length of list L' (D E F G I) by using list manipulation function?
4. What is difference b/w implicit and explicit conversion?

3 marks questions:

1. Separate predicate and clauses:

Man (symbol)

Brother (ahmad, chand)

Snowy(X), rainy(X), cold(X)

1. What is role of monitor in JAVA
2. Name any three control statement in PHP?

5 marks questions:

1. JAVA and C# commonalities?
2. Explain function side effect with occurs in arithmetic expression?
3. Write the resultant output of following function statement in LISP:

1)   Intersection'(a b c) ' (b a b c)

2)   Union'(c) ' (a b c)

1. Being a programmer , you are required to identify different kind of issues and tradeoffs

Face by a programmer while doing string and number inter-conversion in PHP?

CS508 FINAL TERM PAPER SHARED BY STUDENT

ON AUGUST 21, 2016 AT 10:16AM

9 mcqs from past paper
subjective
1-in c c++/java what type of operator are used for short-circuut evalution?
2-which operator are used for inequality in prolog?
3- why one have to be aware of left recursion while writing program in prolog?
4-in c# when does you absolutely have to declare a class as abstract?
5- coercion belong to which type of conversion write disadvantage of using it?
6-name file extension used in php?
7-difference b/w forward and backward chaining which is prefer?
8-what is run-time environment in case of .net similar to java in case of java explain the run time environment ? marks 5
9- annalist the merits and demerits pointers? marks 5
10 why does compiler genrate error in java code segment ?
public interface MYInterface
{
void sumint(inta,intb)
{ intc:
c=a+b;
}
void sumint(inta,intb);
es terha ka kch code tha

CS508 FINAL TERM PAPER SHARED BY STUDENT

ON AUGUST 22, 2016 AT 9:51AM

Cs508 todays Paper 8:00Am
All BC >.< MCQs were from All over the book mostly from the topic Ada ,LISP , Java , C# , Fortran ,PHP , PROLOG etc. :p
1 Question of 5 marks was from past papers
1) What code in LISP language used to compute power of x to y? 5 marks
2) what was main reason of creating php language (3) marks
3) Java code was given we have to tell the error . 5 marks
4) 1 Question was From LISP cdr and other points .3 marks
5) 1 was from php abot $ift1/2 is it valid or not. 2 marks

6) 1 question was from java script. 3 marks

7) Problems caused by Controlled loops in programing languages 5marks

3 question or thay bhol gye

Overall paper was average tha . Plzz pray for my next paper. Allah pak sab ko kamyab karay . Ameen

CS508 FINAL TERM PAPER SHARED BY STUDENT

CS508 Final Exam (20-08-2016) SUBJECTIVE ONLY

Question: 41   (Marks: 2)

Interpret the following axioms.

    c:- a.
    c:- b.

Question: 42   (Marks: 2)

Define value type variable with context to C#.

Modern Programming Languages (CS508)

Question: 43   (Marks: 2)

In C#, which type of variables can be used to create pointers?

Modern Programming Languages (CS508)

Question: 44 (Marks: 2)

Write a single HTML statement that creates a Text Field named "Country".

Modern Programming Languages (CS508)

Question: 45 (Marks: 3)

Write a function in LISP that return the difference of the two lists L3 and L4.

Modern Programming Languages (CS508)

Question: 46 (Marks: 3)

JavaScript is an Object Based Programming language. Identify three types of objects in java script.

Modern Programming Languages (CS508)

Question: 47 (Marks: 3)

How C# rectangular arrays syntax is different from C++ rectangular arrays syntax?

Modern Programming Languages (CS508)

Question: 48 (Marks: 3)

What is meant by compound terms (structures) in PROLOG? Give any example.

Modern Programming Languages (CS508)

Question: 49 (Marks: 5)

What does meant by limited access to variables? Also point out the design considerations for parameter passing.

Modern Programming Languages (CS508)

Question: 50 (Marks: 5)

Given the database below and study the Prolog queries below it. Indicate whether you think the goal will succeed or not by answering yes or no as prompted.

Data:

    blue_box.
    red_box.
    green_circle.
    blue_circle.
    orange_triangle.

Queries:

    ?- green_circle.
    ?- circle_green.
    ?- red_triangle.
    ?- red_box.
    ?- orange_Triangle.

Note:- You will give your answer in "yes" or "no" only.

Modern Programming Languages (CS508)

Question: 51 (Marks: 5)

Suppose you are developing a small application using java. The application uses "arraycopy" method for copying array contents. Identify the error(s) in the code given below and also write the correct code.

```
int [ ] A, B;

A = new int[10];
// copies first 5 values from A to B
arraycopy(A, 0, B, 0, 5);
// copies last value from A into last element of B
arraycopy(A, 9, B, 4, 1);
```

Modern Programming Languages (CS508)

Question: 52 (Marks: 5)

```
var students=["Ali", "Aakash", "Taha", "Faiq"];
```

Based on the above Javascript array, what will be the output of following JavaScript statements:

1. document.write(students[2]);
2. document.write("My name is " + students[0]);
3. document.write(students[1]+students[3]);
4. students[2]="Furqan";
   document.write(students[0]+" "+students[1]+" "+students[2]+" "+students[3]);

CS508 MY TODAYS PAPER: 22/08/2015

1) Which type of variable is used in Dynamic storage management and also inefficient and unreliable?

Ans:-   (page # 168)

Explicit Heap Dynamic Variables

2) In how many types we can include JavaScript code in page?

Ans:- page # 141

JavaScript may be placed at three places

In the <head> element

In the <body> element

External to the HTML file

3) How many types of object in Java Script?

Ans:- Pg # 147

There are many types of objects in JavaScript

☐ Built-in objects (primarily type related)

☐ Browser objects (navigator, window etc.)

☐ Document objects (forms, images etc.)

☐ User defined objects

4) **Describe how to define an array in JavaScript? Also make an array naming** "myarray" and give 3 values red , green , blue.

Var myarray=["red", "green", "blue"];

Ans:-   Pg # 144

• Arrays in JavaScript are 0 based

• We access arrays by index values

var firstArray = ["Mars", "Jupiter", "Saturn"];

5) Different types of starting tags recommended in PHP ?? give syntax

Answer:-

1. <?php

echo "this is the recommended style";

?>

2. <script language="php">

echo "this style is also available";

</script>

3. <?

echo "this is short tags style; it needs to be configured";

   ?>

4. <%

echo 'this is ASP-style tags; it may not be available';

%>

6) Different control statements of PHP and give examples

Answer:-

Control Statements

PHP supports the following control statements:

• if

• while

• do while

• for

• switch

• foreach

• break

• continue

7) What is the inheritance mechanism in PHP.
   1) Single?
   2) Multiple?

Answer:-It supports Single inheritance only and uses the keyword extends to inherit from a super class.

8) Find error and if error then correct syntax

        Int a , b ;

        Someobject.f00(ref a, b) ;

Answer:-

        Int a , b ;

b= 0 ;

Someobject.f00(ref a, b) ;

9) What is correct to make pointer in C#
1) **Int *a , b , c;**
2) Int *a, *b, *c

10) What are methods used in java for synchronizing threads?

Ans:-   wait() , notify()

Listed more threads

Start()

Notifyall()

Sleep()

11) System.arraycoppy(A, 1 , B , 0 , 7)
1) What is source array?
2) What is destination array?
3) What is sorce position?
4) What is destination position?
5) Number of elements to be copied.

Answer:-   PG # 125

1) What is source array = A
2) What is destination array = B
3) What is sorce position = 1
4) What is destination position = 0
5) Number of elements to be copied = 7

12) Make an array of 5 values, with type character in java.

String [] afridi={"shalober, malikden" so on" }

;

Char [] Pakistan={ Islamabad, Karachi, peshwar, queta, Lahore }

string[] Pakistan={p,I,q};

string[] Pakistan=new string[3];

pakistan

What is Aliasing ?

Aliasing is used to assign by reference. To assign by reference, simply prepend an

ampersand (&) to the beginning of the variable which is being assigned (the source

variable) as shown below:

```
<?php

$foo = 'Fakhar';

$bar = &$foo; // Reference $foo via $bar.
```

$bar = "My name is $bar"; // Alter $bar...

echo $bar;

echo $foo; // $foo is altered too.

?>

Variable variable

A variable variable is like pointers that is, it maintains the address of a variable in it. This

is shown in the example below:

```php
<?php
$a = 'hello';
$$a = 'world';
echo "$a ${$a}"; // 'hello world"
```

PHP logical operator

AND, OR, XOR, &&, ||, !

There are two types of special words

1. Keyword
2. Reserved

Keywod is a special only in certain context.

Reserved word is a special word which can't be used as user defined words

What is binding ?

Binding is a association between an entity,

What is predictes ?

Predicates are decleartion of relation or rule.   Predicte may have one or more arugument.

What is clause ?
Clauses are definition of predicate statement.

Prolog has two constants

1. Atoms
2. Number

Numbers only including integer and floationg point.

Defferent types of atoms

1. Alphanumeric atoms
2. Symbolic atoms (<, >, +, -. *)
3. Special atoms (; [], {},!)
4. Quoted atoms ('amin' mateen')

Two types of clauses

1. Rule
2. Facts

What is Propositional Logic ?

Propositional Logic is a set of Boolean statements. It involves logic connectives such as

¬ ∧ ∨ ⇔ ⇒.

What is Anonymous variable ?

The _ is a special variable. It is called the anonymous variable. It is used as a place holder for a value that is not required. For example _ is used as a variable in the following clause:

What is vertical bar in prologo ?

Vertical bar is dual purpose in prolog , It is used for list dismantling and list construction.

How many types in java ?

There is two types in java

1. Primitive types
2. Reference types

There is five function of System.arraycopy

1. Src
2. Srcpos
3. Dst
4. Dstpos
5. Count

Int [] [] A;

A= new int[5][];

A[0]=new int [2];

A[1]= new int [3];

Type converstion in java

1. Implicit convertion/205-+2
2. Explicit convertion

Access level in java

Public

Privite

Protected

Puckage

Abstract clases of java is same of Pure virtual.

Throable classes ?

There is two predefined subclasses

Erro

Exception.

C#

Two modes in c#

1. Managed code.
2. Unmanged code.

What is deference between java and c++ ?

The main deference between java and c++ is memory safe. Java is a memeory safe languge and c++ not.

C++ have single and multlple inhertencie

Java have only signle ingertain.c

Two example of predefined reference type in C#?

Answer:

1) object

2) string

CS508 2016 final subjectives.

Q1: Which type of inheritance is achieved through the use of interface in JAVA?

Ans: Java directly supports single inheritance. To support concept of a interface class is used. Inheritance is achieved as shown below:

 class SuperClass

 {

 ...

 }

class SubClass extends SuperClass

{ ...

}

1. Q2: Does C supports Boolean expression, justify?

Ans: Traditionally, C did not provide a standard Boolean type, partly and partly to allow the programmer to make the appropriate space/time tradeoff. (Using an `int` may be faster, while using `char` may save data space. Smaller types may make the generated code bigger or slower, though, if they require lots of conversions to and from `int`.

Q3: Find the length of list L' (D E F G I) by using list manipulation function?

Ans: >(reverse L) ; reverses a list

(D E F G I)

and

>(length L) ; returns the length of list L

5

Q4: What is difference b/w implicit and explicit conversion?

Ans: An implicit conversion means that a value of one type is changed to a value of another type without any special directive from the programmer. A char can be implicitly converted to an int, a long, a float, or a double. For example, the following will compile without error:

char c = 'a';

int k = c;

 long x = c;

 float y = c;

 double d = c;

Explicit conversions are done via casting: the name of the type to which you want a value converted is given, in parentheses, in front of the value. For example, the following code uses casts to convert a value of type double to a value of type int, and to convert a value of type double to a value of type short:

double d = 5.6; int k = (int)d; short s = (short)(d * 2.0);

1. Q5: Separate predicate and clauses:
Man (symbol)
Brother (ahmad, chand)
Snowy(X), rainy(X), cold(X)

Answer: Clauses are definition(s) of Predicate sentence or phrase. It has two types: rules and facts. A rule is a function definition. It may have 0 or more conditions. A fact has all parameters as constants and it cannot contain any condition. Example

– Fact:
brother(ahmed, chand).
 Saying that ahmed and chand are brothers.

Example – Rule:
 brother(X,Y):-
man(X), man(Y),

father(Z,Y),

father(Z,X).

It says that two symbols, X and Y, are brothers if X is a man and Y is a man and their father is same.

Q6: <mark>What is role of monitor in JAVA?</mark>

Answer: A monitor is mechanism to control concurrent access to an object.

Thread 1:

```java
public void a()
{
    Synchronized (someObject) {
        // do something (1)
    }
}
```

Thread 2:

```java
public void b()
{
    synchronized(someObject) {
        // do something else (2)
    }
}
```

Q7: <mark>Name any three control statement in PHP?</mark>

Ans: PHP supports the following control statements:

• if

- while

- do while

- for

- switch

- foreach

- break

- continue

Q8: <mark>JAVA and C# commonalities?</mark>

Ans: Java and C# are very similar and have a number of commonalities.

a. Both of these languages compile into machine-independent language-independent code which runs in a managed execution environment.

b. Both C# and Java compile initially to an intermediate language: C# to Microsoft Intermediate Language (MSIL), and Java to Java bytecode. In each case the intermediate language can be run - by interpretation or just-in-time compilation - on an appropriate 'virtual machine'. In C#, however, more support is given for the further compilation of the intermediate language code into native code.

c. Both of these have garbage Collection coupled with the elimination of pointers (in C# restricted use is permitted within code marked unsafe).

d. Both have powerful reflection capabilities.

e. In case of both these languages, there is no header files, all code scoped to

packages or assemblies, no problems declaring one class before another with

circular dependencies.

Q9: <mark>Explain function side effect with occurs in arithmetic expression?</mark>

Ans:
Functional side effects: when a function changes a two-way parameter or a

non-local variable

- Problem with functional side effects:

à When a function referenced in an expression alters another operand

of the expression; e.g., for a parameter change:

a = 10;

/* assume that fun changes its parameter */

b = a + fun(a);

Q10: <mark>in c c++/java what type of operator are used for short-circuut evalution?</mark>

Ans: C, C++, and Java: use short-circuit evaluation for

the usual Boolean operators (&& and ||), but

also provide bitwise Boolean operators that are

not short circuit (& and |)

Q11: which operator are used for inequality in prolog?

Ans: `inequality \==`

Q12: which operator are used for inequality in prolog?

Ans: While writing programs one has to be aware of the left recursion, failing to do that may result in infinite loops. It has a steep learning curve and suffers from lack of standardization.

Q13: in c# when does you absolutely have to declare a class as abstract?

Ans: When at least one of the methods in the class is abstract.

When the class itself is inherited from an abstract class, but not all base abstract methods have been over-ridden.

Q14: coercion belong to which type of conversion write disadvantage of using it?

Ans: Coercion is an implicit type conversion

- Disadvantage of coercions:

They decrease in the type error detection ability of the compiler

- In most languages, all numeric types are coerced in expressions, using

Widening conversions

- In Ada, there are virtually no coercions in expressions

Q14: name file extension used in php?

Ans: .php

Q15: difference b/w forward and backward chaining which is prefer?

Ans: Backward chaining (from goal to fact) finds that D can be proven if sub-goal C is true because D :- C. The system then deduces that the sub-goal is C is true because C :- A, B. Since the system could prove C it has proven D.

To deduce a goal (theorem), the logic programming system searches axioms and

combines sub-goals. For this purpose we may apply forward (from fact to goal) or

backward (from goal to fact) chaining. For example, given the axioms:

C :- A, B.

D :- C.

Given that A and B are true, forward chaining (from fact to goal) deduces that C is true

because C :- A, B and then D is true because D :- C.

Q16: what is run-time environment in case of .net similar to java in case of java explain the run time environment ? (5marks)

Ans: C# is a strongly-typed object-oriented language. It is Similar to Java

and C++ in many respects. The .NET platform is centered on a Common Language

Runtime (CLR - which is similar to a JVM) and a set of libraries which can be exploited

by a wide variety of languages which are able to work together by all compiling to an

intermediate language (IL).

Q17: annalist the merits and demerits pointers?

Ans: Dangling pointers

 A pointer points to a heap-dynamic variable that has been deallocated

- Lost Heap-Dynamic Variables

à A heap-dynamic variable that is no longer referenced by any

program pointer

 The process of losing heap-dynamic variables is called memory leakage

- Pointers are like goto's - they widen the range of cells that can be accessed

by a variable

- Pointers are necessary - so we can't design a language without them.

With programming in _____ we state what and not how.

_____ support array with built in bounds checking.

When the type is fixed before run time then this is called as_____.

FORTRAN , PL 1 and BASIC language provide_____

If type binding is dynamic then _____must be dynamic.

If type binding is dynamic then _____must be dynamic.

When the type is fixed before run time then this is called as_____.

Dangling pointer errors in Java reduce the language _____ .

There is no arithmetic expression precedence rule in _____

In Java the arithmetic expression evaluation order is always from _____

We cannot pass array in _____ by value as it has no fix size. But it has fixed size in structure.

In C programming language array is passed by_____.

Java supports _____ programming paradigm.

In Java Explicit conversions are done through _____.

The earliest form of a computer language was _____ motion.

Prolog database is based upon _____.

52

From the given code snippet in C#, find out whether aliasing problem will arise or not? Justify your answer with valid reasons.

```
object studentcs = new object();
studentcs.id = 123;
object  studentbba =  studentcs;
studentbba.id = 204;
```

51

Find out whether there is an error or not in the given C# program. If there is an error give reason.

```
Using System;
```

```
class Addition
{
   int a, b;
   public  Addition (int a, int b)
   {
      this.a = a;
      this.b = b;
   }
   public void Add()
   {
      a = 6;
      b = 7;
      result=a+b;
      Console.WriteLine(result);
   }
 private readonly int a, b;
 public static void Main()
 {
    Addition addi=new Addition(4,6);
    addi.Add();
 }
}
```

50

Explain problem with Functional Side Effects which occurs in arithmetic expressions.

Note: Use of same example given in handouts is not allowed.

49

Suppose there is a function append() in prolog. This function can take 3 arguments. The first two arguments are list and the third argument is a variable which is assigned a value after appending second argument at the end of first argument. Consider the following queries and write down the outputs of them.

1. ?- combine([a, b,c],[1,2,3],X).
2. ?- combine([foo,bar,yip,yup], [glub,glab,glib,glob], Result).
3. ?- combine([], [1, 2, 3], Z).
4. ?- combine(combine([ali, is],[a, good], X), [boy, *], Y).

48

What will be the output of the following C# code?

```csharp
using System;
public class HelloWorld
{
  public static void Main()
  {
        string s1 = "hello";
        string s2 = s1;
        s1 = "world";
        Console.WriteLine(s1);
    }
}
```

47

In how many ways the static type binding is performed? Briefly define each.

46

Write the resultant output of the following Php code.

```php
<?php
$a = 'hello';
$$a = 'world';
echo "$a ${$a}";
?>
```

45

Suppose you have to select heads from the following lists of members. Use prolog's list head and tail concept to do this.
1. [Ali, | [Saad, Sana, Haadi]]
2. [Suleman, Arshad, | [Akbar, Aliya, Sara]]
3. [Aneela, Ainie, Fahad, Jibran | []]

44

Identify error in the following JavaScript statement and also write corrected statement.

```
x=x+1    alert(x)
```

43

Consider the following
```
short int num= 50000;
System.Console.Println(num);
```
Which type of run-time error will occur in this case? Justify your answer.

42

How C# char is different from C++ char? Give two reasons.

41

Write vowel predicate in prolog which has vowel letters list as an argument.

Arrays in PHP are not like C/C++ arrays but they are _____.

Symbolic expression in LISP is a form of _____

In JavaScript navigator is a _____object.

The document object model in Java Script include the features and issues of _____.

In JavaScript _____operator is used for concatenation.

Expert system_____ provide a structure to design expert system.

_____ operator in Prolog is used for List construction and also for List dismantling.

_____operator is used to return a reference from a function in PHP.

In php *foreach* statement works only on _____.

PHP syntax look like _____.

_____is more strongly typed language then _____.

Each Thread has its own set of _____and _____.

Every class in Java is part of some _____.

In LISP there is no concept of _____ .

List in LISP is itself a _____.

_____ may also change global variable as a side effect.

Random number generation with strict requirements is available in _____.

Which statement is true about SNOBOL?

In Ada all pointers are initialized to _____.

_____ is the correct size of a Decimal datatype.

In C#, if you don't use new keyword, you must _____ all the values in the struct by hand before you use it.

In C#, reference type objects use memory of _____ data structure.

The inference mechanism is based upon _____.
Prolog database is based upon _____.

The earliest form of a computer language was _____ motion.

My today's Paper of CS508 (11am)

Total Questions: 52

MCQ'S: 40

2 Marks Q: 4

3 Marks Q: 4

5 Marks Q: 4

Some of the MCQ'S are:

1. Threads in Java are based upon the concept of Monitor
2. A class declared as 'sealed' cannot be inherited from
3. In C# the value type and reference type variable are interconvert able through _____ concept.

Tagged type

Boxing

Interfaces

None of the given

4. In _____, Boolean values can convert to integers.

 C#

 C++

Java

 Ada

5. In _____ control statements were based directly on IBM704 hardware.

Ada

FORTRAN I

FORTRAN 77

IBM Assembly language

6. _____ is a unit level control iterative statement.

Recursion

Iteration

Loop

Switch statement

7. In ENIAC physical motion was eventually replaces by _____ signals.

Analog

Digital

Electrical

Logical

8. Function must have at least _____ return statement.

Three

Two

One

Four

9. _____ operations must have one of its parameters of tagged type.

Concurrent

Synchronized

Generic

Primitive

10. In C# value type objects use memory of _____ data structure

List

Tree

Stack

Heap

11. _____ has efficient use of processor and memory.

C++

Plankul kool

LISP

CORBA

12. _____ programming language is known as "Write Only" language.

FORTRAN

BASIC

APL

PL/1

13. Everything in LISP is considered as _____

Class

Object

Function

Symbol

14. The Era of 1970's is known as :_____

Analysis and elaboration

Effective software technology

Discovery and description of programming language concepts

Aspect-Oriented Programming

15. All primitive types in _____ have fixed size.

FORTRAN

C++

JAVA

C#

16. An array in PHP is an ordered _____

Data structure

MAP

Tree

Execution type

17. There may be _____ *elseif* within the same php *if* statements.

Several

Few

Single

Two

2 Marks Q: 4

Which operator is used to access element of a struct type?
Just like C++, the dereference operator '->' is used to access elements of a struct type.

Write the functionality of "=" operator in prolog.

Which type of binding time it is when you want to bind a non static local variable to a memory cell.

Runtime - e.g. bind a non-static local variable to a memory cell

Write the difference between public class and non public class in java.

A public class can be used in any package and a non-public class can only be used in its own package.

3 Marks Q: 4

What are the three conditions in which a string is evaluated as a float in php.

The string will evaluate as a float if it contains any of the characters '.', 'e', or 'E'. Otherwise, it will evaluate as an integer.

Coercion belongs to which type of conversion? Also write the Disadvantage of using it?

Coercion is an implicit type conversion, and it's disadvantage is that they decrease in the type error detection ability of the compiler. In most languages, all numeric types are coerced in expressions, using widening conversions. In Ada, there are virtually no coercions in expressions

Write a property named HOURS in C# which enables a client to specify a time in hours. The getter/setter for the Hours property performs the conversion between hours and seconds.

Convert the following into prolog rules:

1. Socrates is a mortal if he is a human.
2. X is an animal if X eats grass.
3. X is a sportsperson if X plays football.

5 Marks Q: 4

Write the difference between Managed and unmanaged code and also mention at least 3 scenarios where unmanaged code is useful.

MANAGED CODE

1. Managed code is executed under the control of Common Language Runtime(CRL).

2. It has automatic garbage collection. That is, the dynamically allocated memory area which is no longer is in use is not destroyed by the programmer explicitly. It is rather automatically returned back to heap by the built-in garbage collector.

3. There is no explicit memory's allocation and deallocation and there is no explicit calls to the garbage collector i.e. call to destructor.

UNMANAGED CODE (Java does not have this concept**)**

The unmanaged code provides access to memory through pointers just like C++. It is useful in many scenarios. For example:

• Pointers may be used to enhance performance in real time applications.

• **External Functions:** In non-.net DLLs some external functions requires a pointer as a parameter, such as Windows APIs that were written in C.

• **Debugging:** Sometimes we need to inspect the memory contents for debugging purposes, or you might need to write an application that analyzes another application process and memory.

In a program we need two dimensional int type array, the array has 2 rows where first row has 5 columns and second row has 3 columns. Write down the code of declaring this array in java.

int [ ][ ] A; // A is a two-dimensional array

A = new int[2][]; // A now has 2 rows, but no columns yet

A[0] = new int [5]; // A's first row has 5 column

A[1] = new int [3]; // A's second row has 3 columns

What does meant by limited access to variables? Also point out design considerations for parameter passing.

Limited access to variables, which means one-way whenever possible.

Design Considerations for Parameter Passing

1. Efficiency

2. One-way or two-way

- These two are in conflict with one another!

Good programming =>limited access to variables, which means one-way whenever possible

Efficiency =>pass by reference is fastest way to pass structures of significant size.

You are required to identify order of execution of HTML tags:

www.ranapk.com

```
<body>
<h1>Hello World</h1>
<script type="text/javascript">
//script statements
</script>

<body>
<h3>Welcome to this website</h3>
<script type="text/javascript">
//script statements
</script>

<body>
<h2>Mobile Applicaions</h2>
<script type="text/javascript">
//script statements
</script>

</body>
```

- You can use as many **<script>** tags as you like in both the **<head>** and **<body>** and they are executed sequentially.

- ```html
  <h1>Ready start</h1>
  <script language="Javascript" type="text/javascript">
      alert("First Script Ran");
  </script>
  <h2>Running…</h2>
  <script language="Javascript" type="text/javascript">
      alert("Second Script Ran");
  </script>
  <h2>Keep running</h2>
  <script language="Javascript" type="text/javascript">
      alert("Third Script Ran");
  </script>
  </h1>Stop!</h1>
  </body>
  ```

CS508 FINAL TERM PAPER SHARED BY STUDENT

on March 11, 2015 at 8:21pm

My Today Paper
Sir say MCQs saray lectures say mix diye thay.
Short question
1) Write one line html code to define text field containing "Paksitan".
2) Wrtie the use of "!" in PROLOG.
3) Static binding
4) Why variable in prolog are loosely held?
5) Which language you'll use to develop intelligent business system. Case ma medical system tha...
6) JavaScript k program ka output btana tha array ka question tha concatenation k sth.
bs ye he questions yaad hain...

ON FEBRUARY 27, 2016 AT 12:09PM

1. from JS **2Marks**
2. from JS **2Marks**
3. package name inclusion (not remembered) **2Marks**
4. Algol if then statement **2Marks**
5. separate Prolog atom and variable from following **3marks**
6. why pointers are included in C#. give solid arguments **3Marks**
7. reason behind the php evolution **3Marks**
8. when string is evaluated as float **3Marks**
9. Enumeration and Immutability implementation **5marks**
10. **.**Design issue for arithmetic expressions **5Marks**
11. Two object were given, second one was initialized by first, have to prove either Aliasing exist or not **5Marks**
12. A company want to design an expert system for real time medical problem. which programming language is most appropriate? support with arguments. **5marks**

ON FEBRUARY 27, 2016 AT 10:54PM

My today cs508 paper. Almost 40% mcqs were from past papers.
1. Backward chaining problem. (2)
2. Int x and x=23 identify the error and also correct the errors. (2)
3. Coercien is related which type of casting also write disadvantages of that casting. (3)
4. Give syntax of java and c+ multi dimensional arrays. (3)
5. Ek tha k we have varable named myvary of type long and if we run this in pentium 1 and core 2 duo computer to ye dono me kitni kitni memory le ga. Give reasons(3)
6. Ek boxing ka code diya to or kaha tha k output maloom kry.(5)
7. Backward chaining and foreward chaining ka question tha solve krna tha. X: Y , Z and W:X kuch is trh ka tha (5)
C# and java arrays ek dosry se related he how? And type if multi dimensional arrays in c#. (5)
8. Which languages support type arguments? Matlb k aisi konsi languages hai jin k arguments dety waqt unki tatype b dena zruri he. Name btaiye. (5)
9. Php opening and ending tags likhy (3)
Baqi yad ni aa rhy. Remember ne in ur prayers..

Mcq's were easy and simple … 20 to 25 Mcq's were from Past papers and 7 to 8 Mcq's from Midterm Specially form ADA .. and remaining were new ……
Read ADA , LISP , PROLOG, JAVA, C# , PHP , Java Script ….. No need to study last lectures 39 to 45 … hardly 2 mcqs were there from these lectures and 1 short qs ….

Subjective :

Name the Package in which built in Class for string creation is used in Java. **[2 marks]**

Name any two Special predicates used in PROLOG language. **[2 marks]**

Consider the following

double a;

float b;

If we convert "a" to "b" Does the variable "a" will lose some data and also mention the conversion type. **[2 marks]**

How JavaScript statements are terminated? **[2 marks]**

Name any three Control statements supported by PHP? **[3 marks]**

Enlist any 3 design issues related with arithmetic expression? **[3 marks]**

Which of the following sequences are PROLOG atoms and variables? **[3 marks]**

explain, X, b , < ----- > , MyVariable

A company use visual studio 2005 .. If they use numeric type with range -32,768 to 32,767 , which types of data types you will use ? **[3marks]**

Categories the following Java variables and function with primitives and Reference types ?

Long, byte, Struct, array , class   **[5 marks]**

Code was given in C# and write the output .. Qs was very easy and simple **[5 marks]**

Write the name of languages that which have pretest logical loop statements **[5 marks]**

Declare a jagged array in C# with named "studentName" and there should b 3 elements in array. **[5 marks]**

CS508 FINAL TERM PAPER SHARED BY STUDENT

Today's My CS508 paper started at 29/02/2016 10:30 AM

MCQS from mostly from past papers 20 to 25.

1. Which type of variable is used in Dynamic storage management and also inefficient and unreliable?(**2Marks**)

1. why prolog used steep learning curve?(**2Marks**).
2. Write package name in java working with arrays. (**2Marks**)
3.
4. Identify the error in given statement. Also write the corrected code.

x=x+1   alert(x) **(3Marks).**

1. Write extensions of php file.(**3Marks**)
2. Write c# program using arrays which prints vowel using foreach loop.(**5Marks**)
3. Suppose you are required to write a program for gaming in java you need to used array data structure what are the basic steps working with java arrays.(**5Marks**)
4. **9.**   Write a semantic model of parameter passing. **(5Marks)**
5. **10.** Write output for given code in php. And also write advantages and disadvantages.

$foo = 1 + "10 Rabbits";

$foo = "10.0 rabbits" + 1; **(5Marks)**