PART I: Structuring of Data- Built in and primitive types, Data aggregates and type constructors, Cartesian product, Finite mapping User-defined types and abstract data types, Type systems, Static versus dynamic program checking.

((MARKS)) (1/2/3...)	1
((QUESTION))	Which of the following data types are available in Java? (GATE CS 2000)
((OPTION_A))	Primitive Datatypes
((OPTION_B))	Reference Datatypes
((OPTION_C))	Both
((OPTION_D))	None of the above
((CORRECT_CHOICE)) (A/B/C/D)	C
((EXPLANATION)) (OPTIONAL)	None

((MARKS)) (1/2/3...)	1
((QUESTION))	The format identifier '%i' in C is also used for _____ data type?
((OPTION_A))	char

((OPTION_B))	Int
((OPTION_C))	Float
((OPTION_D))	Double
((CORRECT_CHOICE)) (A/B/C/D)	B
((EXPLANATION)) (OPTIONAL)	Both %d and %i can be used as a format identifier for int data type

((MARKS)) (1/2/3...)	1
((QUESTION))	Which is correct with respect to size of the datatypes?
((OPTION_A))	char > int > float
((OPTION_B))	int > char > float
((OPTION_C))	char < int < double
((OPTION_D))	double > char > int
((CORRECT_CHOICE)) (A/B/C/D)	C
((EXPLANATION))	char has lesser bytes than int and int has lesser bytes than double in any system

(OPTIONAL)	

((MARKS)) (1/2/3...)	1
((QUESTION))	Which of the following is data type stores longest _____ floating point number.
((OPTION_A))	Float
((OPTION_B))	Double
((OPTION_C))	Boolean
((OPTION_D))	Long
((CORRECT_CHOICE)) (A/B/C/D)	B
((EXPLANATION)) (OPTIONAL)	None

((MARKS)) (1/2/3...)	1
((QUESTION))	_____constructs the aggregates of similar type of elements
((OPTION_A))	Vector
((OPTION_	Array

B))	
((OPTION_C))	Struct
((OPTION_D))	Union
((CORRECT_CHOICE)) (A/B/C/D)	B
((EXPLANATION)) (OPTIONAL)	None

((MARKS)) (1/2/3...)	1
((QUESTION))	Types of Type constructor are :
((OPTION_A))	Cartesian Product
((OPTION_B))	PowerSet
((OPTION_C))	Union
((OPTION_D))	All of Above
((CORRECT_CHOICE)) (A/B/C/D)	D
((EXPLANATION)) (OPTIONAL	None

)	

((MARKS)) (1/2/3...)	1
((QUESTION))	Pick the odd one out
((OPTION_A))	array type
((OPTION_B))	character type
((OPTION_C))	boolean type
((OPTION_D))	integer type
((CORRECT_CHOICE)) (A/B/C/D)	A
((EXPLANATION)) (OPTIONAL)	Array type is not the basic type and it is constructed using the basic type.

((MARKS)) (1/2/3...)	1
((QUESTION))	Identify the user-defined types from the following?
((OPTION_A))	enumeration
((OPTION_B))	classes

((OPTION_C))	both a and b
((OPTION_D))	int
((CORRECT_CHOICE)) (A/B/C/D)	C
((EXPLANATION)) (OPTIONAL)	They must be defined by the users before use unlike the other types which are readily available.

((MARKS)) (1/2/3...)	1
((QUESTION))	When a language has the capability to produce new data type mean, it can be called as
((OPTION_A))	overloaded
((OPTION_B))	extensible
((OPTION_C))	encapsulated
((OPTION_D))	reprehensible
((CORRECT_CHOICE)) (A/B/C/D)	B
((EXPLANATION)) (OPTIONAL)	Extensible is used to add new features to any language.

((MARKS)) (1/2/3...)	1
((QUESTION))	Pick the odd one out.
((OPTION_A))	integer, character, boolean, floating
((OPTION_B))	enumeration, classes
((OPTION_C))	integer, enum, void
((OPTION_D))	arrays, pointer, classes
((CORRECT_CHOICE)) (A/B/C/D)	C
((EXPLANATION)) (OPTIONAL)	Option a consists of all fundamental types, option b consists of user-defined types and option d consists of derived types but option c is a mixture.

((MARKS)) (1/2/3...)	1
((QUESTION))	Type system majorly is associated with following:
((OPTION_A))	Type
((OPTION_B))	Data Object
((OPTION_C))	Both and b
((OPTION_	None

D))	
((CORRECT_CHOICE)) (A/B/C/D)	C
((EXPLANATION)) (OPTIONAL)	This is defined as the set of rules by the language to structure and organize its collection of types

((MARKS)) (1/2/3...)	1
((QUESTION))	To perform static type checking operation, the arguments, expressions, variables must be given a data type.
((OPTION_A))	True
((OPTION_B))	False
((OPTION_C))	Cannot Say
((OPTION_D))	None
((CORRECT_CHOICE)) (A/B/C/D)	A
((EXPLANATION)) (OPTIONAL)	

((MARKS)) (1/2/3...)	1

((QUESTION))	To perform dynamic type checking operation, the checking is done before program execution
((OPTION_A))	True
((OPTION_B))	False
((OPTION_C))	
((OPTION_D))	
((CORRECT_CHOICE)) (A/B/C/D)	B
((EXPLANATION)) (OPTIONAL)	Dynamic type checking performs the type checking operation at the time of the program execution

((MARKS)) (1/2/3...)	1
((QUESTION))	The main purpose of a type system is to
((OPTION_A))	Assign a property called type to various constructs
((OPTION_B))	to reduce possibilities for bugs in computer programs by proper type checking
((OPTION_C))	Only A
((OPTION_D))	Both A and B

((CORRECT_CHOICE)) (A/B/C/D)	D
((EXPLANATION)) (OPTIONAL)	None