

- 1) A since float is 4 bytes and double is 8 bytes.
- 2) A, B and D since upcasting happens automatically.
- 3) D since word String, Integer will be treated as normal variable names.
- 4) C in order to fix we will need to do explicit casting.
- 5) A since the maximum value of byte can be 127, after that it recycles to its minimum value of -128 and then to -127.
- 6) B
- 7) B since 016 will be treated as 16 in octal number system which gets converted to 14 in decimal.
- 8) A
- 9) B since every multiple of 5 will result in an index value of 0 and  $a[0] = 1$ .
- 10) A since java is a dynamic programming language so the memory for the object will be allocated at run time.
- 11) C
- 12) B since static variables belong to the class.
- 13) B since the private variables are only accessible in the class they are defined.
- 14) A toString() method is defined in the object class.
- 15) B since the end index is not counted in the result.
- 16) D since 't' does not exist in the string so it will return -1 as the index.
- 17) C
- 18) B the first statement will create 2 objects, one of them will be in the string pool and the other on a different part of heap. 2nd statement will only create one object since FlipRobo is already present in the string pool. The last 2 statements will not create any new objects.
- 19) B
- 20) A
- 21) A
- 22) B
- 23) B
- 24) D
- 25) B
- 26) D
- 27) D
- 28) A
- 29) C this is an unchecked exception that occurs at runtime.
- 30) A because of this we do not have to import the System class.