

**ALGORITHMS, PSEUDOCODE & FLOWCHART**

Total questions: 40

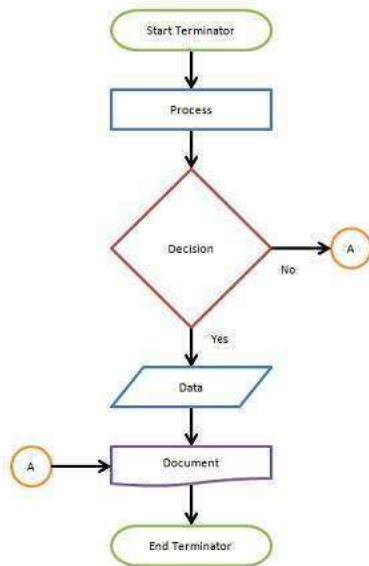
Worksheet time: 22mins

Instructor name:

Name Class Date 

1. To repeat a task number of times we use
  - a) input statement
  - b) output statement
  - c) conditional statement
  - d) loop statement
  
2. If .....then ....else .....endif check
  - a) many conditions
  - b) three conditions
  - c) two conditions
  - d) one condition
  
3. Repeat .....Until is a
  - a) Negative loop
  - b) Positive loop
  
4. What is an Algorithm?
  - a) A Pseudocode
  - b) A flowchart
  - c) Step by step instructions used to solve a problem
  - d) A decision
  
5. What are the three algorithm constructs?
  - a) Sequence, selection, repetition
  - b) Input, output, process
  - c) Loop, input/output, process
  - d) Input/output, decision, terminator
  
6. What is the difference between a flowchart and pseudocode?
  - a) A flowchart is diagrammatic whilst pseudocode is written in a programming language (eg. Pascal or Java)
  - b) A flowchart is textual but pseudocode is diagrammatic
  - c) A flowchart and pseudocode are the same thing
  - d) A flowchart is a diagrammatic description of an algorithm whilst pseudocode is a textual description of an algorithm
  
7. In a flowchart a calculation (process) is represented by
  - a) A parallelogram
  - b) A rectangle
  - c) A rhombus
  - d) A circle
  
8. A flowchart needs to represent the a situation where for each mark a student is award 'Pass' or 'Fail'...the system will consider the mark and if it's 50 or over award 'Pass', else it awards 'Fail'. This is an example of which of the algorithm constructs?
  - a) Sequence
  - b) All of the above
  - c) Decision
  - d) Loop
  
9. What is a flowchart?
  - a) A diagram that represents a set of instructions
  - b) A bullet point list of instructions
  - c) A specific programming language
  - d) A text-based way of designing an algorithm
  
10. Programming languages give computers instructions
  - a) True
  - b) False

11. We can show the sequence of steps in an algorithm in a structural diagram called a flow chart.
  - a) True
  - b) False
12. When you write an algorithm the order of the instructions is very important.
  - a) True
  - b) False
13. What should be considered when designing an algorithm?
  - a) If the correct software is being used
  - b) If the correct hardware is being used
  - c) If there is more than one way of solving the problem
14. In a flowchart how are symbols connected?
  - a) Symbols do not get connected together in a flowchart
  - b) With lines and an arrow to show the direction of flow
  - c) With dashed lines and numbers
  - d) With solid lines to link events
15. When can algorithms be used?
  - a) Only with flowcharts
  - b) Only when programming
  - c) Only with computers
  - d) Any time to design solutions to problems



16.
  - a) This is codechart
  - b) This is decision chart
  - c) This is a flowchart
  - d) This is an algorithm
17. A flowchart
  - a) is a type of graphic diagram that represents an algorithm,
  - b) Helps you plan out computer code
  - c) All of the above
  - d) Uses shapes to help organize a process
18. What shape represents the start and end of a flowchart
  - a) Oval
  - b) Diamond
  - c) Square
  - d) Rectangle
19. What does an arrow represent in a flow chart
  - a) Stop
  - b) Start
  - c) Decision making
  - d) Data Flow

20. What does a searching algorithm do?

- a) Help to organise data
- b) Search through a set of data
- c) Save a set of data



21.

What is this symbol used for in a flowchart?

- a) A task to carry out
- b) A decision/question



22.

What is this symbol used for in a flowchart?

- a) A task to carry out
- b) A decision/question

23. What is an Algorithm?

- a) A task for the computer
- b) A set of instructions in order

24. What is the purpose of a flowchart?

- a) Because it is easier
- b) To plan the program before it is made

25. A set of instructions in order

- a) Flowchart
- b) Algorithm

26. A diagram to show each step

- a) Flowchart
- b) Algorithm

27. A flowchart does not need to have a Start

- a) False
- b) True

28. A flowchart does not need to have an End

- a) False
- b) True



29.

What does this shape represent?

- a) Process
- b) Start/Stop
- c) Decision
- d) Input/Output



30.

What does this shape represent?

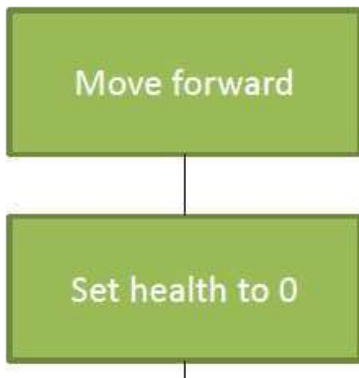
- a) Process
- b) Decision
- c) Start/End
- d) Input/Output



31.

What does this shape represent?

- a) Input/Output
- b) Decision
- c) Process
- d) Start/End



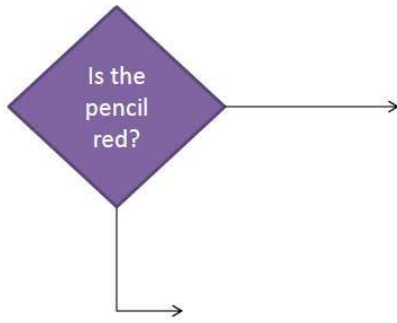
32.

What's missing from this part of a flowchart?

- a) A Line
- b) A Diamond
- c) An Arrow
- d) A Square

33. What do you Start a Flowchart with?

- a) Diamond shape
- b) Square shape
- c) Parallelogram shape
- d) Sausage shape



34.

What's missing ?

- a) Pink/Blue
- b) Yes/No
- c) On/Off
- d) Hello/Goodbye

35. How do you repeat things in a Flowchart?

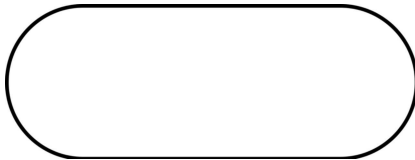
- a) Start/Stop
- b) Play
- c) Loop



36.

What flowchart symbol does this represent?

- a) Input/Output
- b) Start/End
- c) Decision
- d) Process



37.

What is this symbol?

- a) Process
- b) Input/Output
- c) Start/End
- d) Decision

38. What does this pseudocode do?  
print "Hello"

- a) Nothing
- b) Prints the word "Hello" to the output
- c) hello is print in pseudocode
- d) The code won't work

39. What is pseudocode?

- a) Simple programming language, which is linked to a specific language
- b) Complicated programming language
- c) A type of cheese
- d) Simplified programming language, that is not a specific language

40. What is white box testing?

- a) Testing when the user has no knowledge of programming.
- b) Testing when the user has knowledge of programming.