LEAN SIX SIGMA

SOME PRACTICE QUESTIONS

(1) Which one of the following is not a step in the DMAIC methodology?

a) Design
b) Analyse
c) Improve
d) Measure

(2)

Which one of the following best describes the role of a Yellow Belt in a Lean Six Sigma project?

a) Yellow belts are experts in the functional process that they work on

b) Yellow belts are responsible for project selection and review

c) Yellow belts are Lean Six Sigma project leaders

d) Yellow belts remove road blocks, and support teams

(3)
Which one of the following best describes kaizen?

a) It usually comprises those in the Gemba

b) It is used to make strategic decisions

c) It must have a methodology that is well documented to make it work

d) It is always adopted to save costs

(4)

What is the main role of the Define phase?

a) To define solutions

b) To define process control methods

c) To define the problem and its impact on the customer

d) To define root causes of problems

(5)
Which of these tools are used to prioritise customer requirements?

a) Gantt Chart
b) Affinity Diagram
c) KANO model
d) All of the above

(6)

The Lean Six Sigma concept called 'Critical to Quality' (CTQ) always focuses on what?

a) Reducing product variation

b) Reducing in-process inventories and minimising product touch points

c) Meeting the specific requirements of the customer

d) Minimising shipping damage

(7)
Which of these is not a step in the VoC Methodology?

a) Determine customer needs

b) Gather customer information

c) Criticise customer feedback

d) Analyse customer information

(8)
Which one of the following statements on Value Stream Maps is untrue

a) You should work with those in the Gemba to create the Value Stream Map

b) The process map is used as a foundation to build the Value Stream Map on

c) You can show people and other resources in the Value Stream Map

d) The Value Stream Map is created for the customer to see how their requirements are met

(9) Which of these is a measure of central tendency

a) Quartile
b) Mode
c) Count
d) Mole

(10)

Which of the following statements does not apply to a Swim Lane (or Cross-Functional) Diagram?

a) Relevant activities carried out by an actor will fall within their own swim lane

b) It is possible to have an activity reflected as being carried out by more than one actor

c) There is no need to indicate a start and end points in the swim lane diagram

d) The swim lane diagram can either be drawn vertically or horizontally

(11)

Complete the following statement:
With respect to <u>discrete data</u>, _____

a) You need a tool to measure it

b) You can only describe it with yes or no answers

c) The value can take any number between identified limits

d) The value can only take specific numbers between identified limits

(12)

Which of the following does not relate to Standard Deviation?

a) It is obtained by subtracting the smallest observation (minimum) from the largest observation (maximum)

b) The greater the standard deviation, the more variation that exists in a process

c) It is always greater than zero

d) It is obtained by taking the square root variance and measures the spread around the mean

(13)

What can the Fishbone Diagram not be used for?

a) To ascertain cause and effect

b) To determine the yield of a process

c) To ascertain options for a solution

d) To get to the root cause of a problem

(14)

Which of the following is true concerning SPC?

a) SPC is the collective term for Control Charts

b) Toyota has been continuously developing and improving SPC since TPS started in 1948

c) SPC cannot work with Special Cause variation

d) SPC is a group of statistical modelling techniques

(15)

Which of the following statements applies to the (control and specification) limits for variation of a process over time?

a) Control limits are set by the customer

b) Specification limits are set by the process owner

c) It is best practice to set Specification limits narrower than Control limits

d) A suitable control chart and the right control limits will help to differentiate special cause variation from common cause variation.

(16)

Which element of waste best describes the unnecessary movement of materials and/or finished goods?

a) Motion

b) Inventory

c) Transport / Conveyance

d) Over processing

(17)

The focus of the Analyse phase is...

a) To get to the root cause of the problem and show the desired state

b) To select the improvement solution from a list of options

c) To create a SIPOC of the process

d) To create the goal statement

(18)
The fuel warning light that indicates low fuel is…

a) Poka Yoke – Shut out type

b) 5S

c) Poka Yoke – Attention type

d) MoSCoW prioritisation

(19)

The Pugh Matrix is used for…

a) Understanding the root cause of a problem
b) Selecting a solution from amongst a list of options
c) Ascertaining risk in the process
d) Brainstorming a solution

(20)

What is the purpose of the *Pilot* in the Improve phase?

a) To decide which areas of the process needs to be improved

b) To ensure that the new process maintains the improvements

c) To verify root cause and proposed improvement actions before the full implementation

d) To secure resources for the ongoing process