

## QC Case Study Evaluation Criteria – VCCQC – 2020

SL	PROBLEM SOLVING STEPS	QC	
		MARKS	TOTAL
<b>1</b>	<b>identification of the problems (unsolved)</b>		<b>5</b>
	up to 19	1	
	20-29	2	
	30-39	3	
	40-49	4	
	50 and above	5	
	By any appropriate method, given by Management, instant problem		
<b>2</b>	<b>selection of the problem</b>		<b>5</b>
	a,b,c categorization of the problem	1	
	priority/ranking method	2	
	base used for priority/ranking	2	
	By any appropriate method, given by Management, instant problem to be mentioned		
<b>3</b>	<b>Define the problem</b>		<b>10</b>
	Mile stone chart proposed	1	
	Flow diagram/pictorial diagram of the process	2	
	discription of the problem with lebeled diagram or detailed flow diagram or any other creative way	5	
	Objectives	1	
	Goals/Target	1	
<b>4</b>	<b>Analysis of the problem(measure the problem)</b>		<b>10</b>
	To see that required data/verbal data given for 4W+ 1 H		
	as how much also.		
	Impact on performance parameter like Quality, Productivity, Cost, etc. Stratification of data, Pareto chart, graphs, histogram etc as required to be mentioned.		

<b>5</b>	<b>Find out probable causes and root causes</b>		<b>10</b>
	Circle up to the age of two years may use dispersion analysis		
	Circle above the age of two years should use Cause enumeration type or Production process classification type. By using Dispersion analysis type, they will be given marks out of 5		
	Proper headers, causes. Sub causes, sub sub causes etc	2 5	
	Marking/listing the probable root causes	3	
<b>6</b>	<b>Root cause analysis ( validation of root causes)</b>		<b>5</b>
	by Use of appropriate method for validation		
<b>7</b>	<b>Data analysis</b>		<b>10</b>
	Collection of appropriate data for the validated root causes	5	
	Pareto diagram	5	
	( in case pareto diagram not required, marks will be given out of 10 for collection of appropriate data)		
<b>8</b>	<b>Development of the solution</b>		<b>10</b>
	Minimum number of developed solutions may be 5.		
<b>9</b>	<b>Foreseeing Probable resistance</b>		<b>5</b>
	Minimum number of probable resistance should be 5 along with the solution of identified probable problems.		
<b>10</b>	<b>Trial implementation and check performance</b>		<b>15</b>
	Use of PDCA	5	
	trial implementation	5	
	Check performance	5	
<b>11</b>	<b>Regular implementation</b>		<b>10</b>
	Present status	5	
	Overall gains- Tangible and intangible gains	5	
<b>12</b>	<b>Follow up and Review</b>		<b>5</b>
	Follow up system developed	3	
	Review results	2	
	<b>Total</b>		<b>100</b>

## Allied Case Study Evaluation Criteria – VCCQC – 2020

SL	PROBLEM SOLVING STEPS	Allied	
		MARKS	TOTAL
<b>1</b>	<b>identification of the problems (unsolved)</b>		
	up to 19	NA	
	20-29	NA	
	30-39	NA	
	40-49	NA	
	50 and above	NA	
	By any appropriate method, given by Management, instant problem	NA	
<b>2</b>	<b>selection of the problem</b>		<b>5</b>
	a,b,c categorization of the problem	NA	
	priority/ranking method	NA	
	base used for priority/ranking	NA	
	By any appropriate method, given by Management, instant problem to be mentioned	5	
<b>3</b>	<b>Define the problem</b>		<b>15</b>
	Mile stone chart proposed	1	
	Flow diagram/pictorial diagram of the process	3	
	discription of the problem with lebeleed diagram or detailed flow diagram or any other creative way	6	
	Objectives	2	
	Goals/Target	3	
<b>4</b>	<b>Analysis of the problem(measure the problem)</b>	20	<b>20</b>
	To see that required data/verbal data given for 4W+ 1 H		
	as how much also.		
	Impact on performance parameter like Quality, Productivity, Cost, etc. Stratification of data, Pareto chart, graphs, histograme etc as required to be mentioned.		

<b>5</b>	<b>Find out probable causes and root causes</b>	10	<b>20</b>
	Circle up to the age of two years may use dispersion analysis		
	Circle above the age of two years should use Cause enumeration type or Production process classification type. By using Dispersion analysis type, they will be given marks out of 5		
	Proper headers, causes. Sub causes, sub sub causes etc		
	Marking/listing the probable root causes		
<b>6</b>	<b>Root cause analysis ( validation of root causes)</b>	3	
	by Use of appropriate method for validation		
<b>7</b>	<b>Data analysis</b>	7	
	Collection of appropriate data for the validated root causes		
	Pareto diagram		
	(in case pareto diagram not required, marks will be given out of 10 for collection of appropriate data)		

<b>8</b>	<b>Development of the solution</b>	0	<b>30</b>
	Minimum number of developed solutions may be 5.		
<b>9</b>	<b>Foreseeing Probable resistance</b>	0	
	Minimum number of probable resistance should be 5 along with the solution of identified probable problems.		
<b>10</b>	<b>Trial implementation and check performance</b>	15	
	Use of PDCA trial implementation Check performance		
<b>11</b>	<b>Regular implementation</b>		
	Present status	5	
	Overall gains- Tangible and intangible gains	10	

<b>12</b>	<b>Follow up and Review</b>		<b>10</b>
	Follow up system developed	5	
	Review results	5	
<b>Total</b>			<b>100</b>

## 5-S – workplace management Evaluation Criteria - VCCQC – 2020

**Note:** In case team has taken any specific problem on 5-S and solve it they must follow DMAIC method and evaluation will be done accordingly. In case some unit/ zone/zones/sub zone/sub zones has done excellent implementation of 5-S and management want to send the team for the presentation. Such case study will be evaluated in the following way.

Name of the area/unit/workplace.....

<b>1</b>	<b>Initial efforts</b>		<b>15</b>
	5-S organization structure	3	
	Initial Photographs	5	
	Steps taken in zone/Sub zone before going for 1S	7	
<b>2</b>	<b>Activities of House keeping</b>		<b>20</b>
	Implementation of 1 <sup>st</sup> S	10	
	Implementation of 2 <sup>nd</sup> S	5	
	Implementation of 3 <sup>rd</sup> S	5	
<b>3</b>	<b>Implementation of 4<sup>th</sup> S</b>		<b>10</b>
	Development of standard practices	5	
	Follow-up of standard practices	5	
<b>4</b>	<b>Audit system</b>		<b>15</b>
	Self-audit system	5	
	Management audit system	10	
<b>5</b>	<b>Status of 5-S implementation</b>		<b>25</b>
	Before/After Photographs	5	
	Tangible/intangible gains	10	
	Status of Jagruti group	5	
	Status of 5-S home	5	
<b>6</b>	<b>Follow-up and review system</b>		<b>15</b>
	Management actions for sustenance and growth of 5S	10	
	Special activities	5	
<b>TOTAL</b>			<b>100</b>

## Six - Sigma Case Studies Evaluation Criteria - VCCQC – 2020

<b>DEFINE</b>	<b>20</b>
Business case/Voice of customer	5
Project charter	10
SIPOC	5
<b>MEASURE</b>	<b>15</b>
Performance measures	7
Key Process parameters	4
Key product parameters	4
<b>ANALYSE</b>	<b>25</b>
Identification of causes/ Cause & Effect diagram	10
Validation of causes	5
Identification of root causes	5
Data collection/validation of root causes	5
<b>IMPROVE</b>	<b>25</b>
Creative solutions	15
Design of experiments/ Hypothesis testing	10
<b>CONTROL</b>	<b>15</b>
New/Up-dation of standards	5
Results/benefits	10
<b>TOTAL</b>	<b>100</b>

## Evaluation Criteria of SAFETY CIRCLE – VCCQC - 2020

1. If the team is from the Quality circle and team has taken project under Quality Circle, case study will be evaluated as per the QC case study evaluation norms on 12 steps problem solving method basis.
2. In case, project is taken under Lean Safety Circle (LSC), may be by the QC team (not through Quality Circle method of selection of problem), and LSC team is formed, this will be evaluated as DMAIC method as in case of LQC.