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<b>QUALIFICATION: BACHELOR OF BUSINESS MANAGEMENT</b>	
<b>QUALIFICATION CODE: 07BBMA</b>	<b>LEVEL: 7</b>
<b>COURSE: QUALITY MANAGEMENT SYSTEMS</b>	<b>COURSE CODE: BQM612S</b>
<b>SESSION: JANUARY 2019</b>	<b>PAPER: THEORY</b>
<b>DURATION: 3 HOURS</b>	<b>MARKS: 100</b>

## **2<sup>nd</sup> OPPORTUNITY EXAMINATION – JANUARY 2019**

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**MODERATOR: MR. MATHEW NELENGE**

**THIS EXAMINATION PAPER CONSISTS OF 5 PAGES  
(INCLUDING THIS FRONT PAGE)**

### **INSTRUCTIONS**

1. Answer **all questions**.
2. Read all the questions carefully before answering.
3. Marks are indicated at the end of each question/section.
4. Please ensure that your writing is legible, neat and presentable.

**SECTION A – Multiple Choice Questions (2x10 marks)**

1. What is a process? Choose the correct answer.
  - a) It's a sequence of activities that are intended to achieve some results
  - b) A procedure to follow
  - c) A set of rules
  - d) A routine operation
  - e) None of the above
  
- 2 "six sigma" is a;
  - a) system that measures the productivity and performance of employees
  - b) defect- or error-based metric that equates to zero defects or errors per million opportunities
  - c) defect- or error-based metric that equates to 3.4 or fewer defects or errors per million opportunities
  - d) system without measures
  - e) None of the above
  
- 3 Key Performance Measures in Services are about;
  - a) Accuracy, Cycle time, Cost, Customer satisfaction
  - b) Accuracy, Down time, Cost, Customer satisfaction
  - c) Accuracy, Up time, Cost, Customer satisfaction
  - d) Accuracy, Down time, Cost, Customer satisfaction
  - e) Accuracy, Down time, Cost, Training
  
- 4 Nonconformance (defect or error) is;
  - a) Countable
  - b) Concerned with the degree of conformance of specifications
  - c) Difficult for employees to trace
  - d) any mistake or error that is passed on to a customer
  - e) All of the above

- 5 A Project is;
- a) a temporary work structure that starts up, produces some output or outcome, and then shuts down.
  - b) not a temporary work structure that starts up, produces some output or outcome, and then shuts down.
  - c) an operation that is carried out daily and does not produces some output or outcome, and then shuts down.
  - d) about analyzing the production process
  - e) a temporary work structure that starts up, produces some output or outcome, and then train employees.
- 6 SMART is the abbreviation for;
- a) Smooth, Measurable, Actionable, Related, Timely
  - b) Simple, Meaningful, Actionable, Related, Timely
  - c) Simple, Measurable, Actionable, Reasonable, Timely
  - d) Simple, Measurable, Actionable, Reasonable, Timeless
  - e) Simple, Measurable, Actionable, Related, Timely
- 7 DMAIC is an abbreviation for?
- a) Define, Measure, Analyse, Improve, Control
  - b) Define, Map, Analyse, Improve, Control
  - c) Define, Measure, Act, Improve, Control
  - d) Define, Measure, Analyse, Import, Control
  - e) Define, Measure, Analyse, Improve, Correct
- 8 A learning cycle constitutes of the following?
- a) Planning, Execution of plans, Assessment of progress, Revision of plans based on the assessment findings
  - b) Planning, Design, Assessment of progress, Revision of plans based on the assessment findings
  - c) Planning, Execution of plans, Monitoring, Revision of plans based on the assessment findings
  - d) Planning, Execution of plans, Assessment of progress, Revision of plans based on management decision
  - e) Planning, Execution of plans, Revise budget, Revision of plans based on the assessment findings
- 9 Accuracy is;
- a) the difference between the true value and the observed average of a measurement
  - b) the closeness of repeated measurements to each other
  - c) the measurement where there are no variations
  - d) the right products delivered from the factory
  - e) All of the above

10 Calibration is the process of;

- a) increasing the defects of an item of measuring and test equipment compared to traceable measurement standards.
- b) ignoring the capability and performance of an item of measuring and test equipment compared to traceable measurement standards.
- c) verifying buying new measuring and test equipment
- d) verifying the capability and performance of an item of measuring and test equipment compared to traceable measurement standards.
- e) all the above

**SECTION B – Essay Type Questions (80 marks)**

- 1 What are the categories of critical-to-quality (CTQ) characteristics for? **(15 MARKS)**
  - a. manufactured goods/products
  - b. Five key dimensions of service quality that contribute to customer perceptions? Please describe them.
  - c. Japanese Professor, Noriaki Kano classified them into three categories. Name and describe them.
- 2 Explain the importance of projects and project management in Six Sigma especially as it relates to initial training of Six Sigma experts. **(10 MARKS)**
- 3 What are the characteristics of the different individuals who make up Six Sigma teams? **(10 MARKS)**
- 4 Explain the five stages of the project life cycle. **(10 MARKS)**
- 5 What factors should be considered when selecting Six Sigma projects? **(5 MARKS)**
- 6 What is a SIPOC diagram? How is it used in the SIX Sigma define stage? **(8 MARKS)**
- 7 What is a process map (or flow chart) and what benefits do they provide to project team members and decision –makers? **(8 MARKS)**
- 8 What are the basic questions organizations must ask in order to collect accurate data? **(4 MARKS)**
- 9 Describe different types of check sheets that are useful in quality improvement. **(6 MARKS)**
- 10 Discuss the basic questions that must be addressed in a sampling study. **(4 MARKS)**

**END OF EXAM**