

Rubrics – Software Engineering

Computation questions

<i>Criteria for assessment</i>	<i>Performance levels</i>				
	Excellent 10 / A / 4	Good 8 / B / 3	Satisfactory 6 / C / 2	Marginal Pass 4 / D / 1	Fail F / 0
Correctness (50% weighting)	The results are correct.	The results involve some minor flaws.	The results have moderate flaws.	The results involve some major flaws.	The results are incorrect or there is no result.
Style and Clarity (40% weighting)	The steps are complete, well-written, easy to follow.	The steps are complete and mostly easy to follow, but may contain some unnecessary details or appear a little bit awkward.	The steps are basically understandable except that some parts are not very clear or some important steps are missing.	The steps are hard to understand or the main steps are missing.	There are no steps to reach the results or the steps are incorrect.
Use of mathematical terminology and notation (10% weighting)	Notation is skillfully used; terminology is used flawlessly.	Notation and terminology are used correctly with only a few minor flaws.	Notation and terminology are used correctly with some moderate flaws.	Notation and terminology are used correctly with some major flaws.	Terminology and notation are wrongly used or completely missing.

Essay Type Questions

<i>Criteria for assessment</i>	<i>Performance levels</i>				
	Excellent 10 / A / 4	Good 8 / B / 3	Satisfactory 6 / C / 2	Marginal Pass 4 / D / 1	Fail F / 0
Completeness (40% weighting)	All the key points are included in the answer.	Above 3/5 key points are included in the answer.	Above 2/5 key points are included in the answer.	At least one point is included in the answer.	No key points are included in the answer.
Correctness (50% weighting)	The explanations for all the points are correct.	The explanations for the points are correct for above 3/5 key points.	The explanations for the points are correct for above 2/5 key points.	The explanations for the points are for at least one key point.	No points are explained correctly.
Organization (10% weighting)	The explanations are well organized and easily to follow.	The explanations are organized with some minor unclear parts.	The explanations are partially organized but can still be followed.	The explanations are not organized but can be followed with some difficulties.	The explanations are very difficult to follow.

Model application

Criteria for assessment	Performance levels				
	Excellent 10 / A / 4	Good 8 / B / 3	Satisfactory 6 / C / 2	Marginal Pass 4 / D / 1	Fail F / 0
Completeness (60% weighting)	The key elements and their relationships described in the questions are well captured.	The key elements and their relationships described in the questions are captured with less than 1/3 key elements and relationships missing or incorrect.	The key elements and their relationships described in the questions are captured with less than 2/3 key elements and relationships missing or incorrect.	Some key elements and their relationships (less than 1/3) described in the questions are captured correctly.	No key element s or relationships are captured correctly.
Consistency (10% weighting)	All the parts in the software requirements specification are consistent.	Most parts in the software requirements specification are consistent. One or two inconsistencies can be found.	Three inconsistencies are found in the software requirements specification.	Four inconsistencies are found in the software requirements specification.	More than four inconsistencies are found in the software requirements specification.
Redundancy (10% weighting)	All the elements and relationships in the diagrams are from the problem statements in the questions.	One or two elements and relationships are not from problem statements in the questions.	Three elements and relationships are not from problem statements in the questions.	Four elements and relationships are not from problem statements in the questions.	More than four elements and relationships are not from problem statements in the questions.
Graphic notation (20% weighting)	Notation is correctly used.	Notation is correctly used with minor flaws.	Notation is used with some moderate errors.	Notation is used with major errors.	Notation is not used or used incorrectly.

Programming

Criteria for assessment	Performance levels				
	Excellent 10 / A / 4	Good 8 / B / 3	Satisfactory 6 / C / 2	Marginal Pass 4 / D / 1	Fail F / 0
Function implementation (50 % weighting)	The program passes all the test cases and is implemented according to the requirements.	The program passes most test cases and is implemented according to the requirements or the program passes all the test cases but does not follow some of the requirements.	The program passes half around test cases and is implemented according to the requirements or the program passes all the test cases but does not follow requirements.	The program fails most cases but is implemented according to most requirements or the program passes most test cases but does not follow requirements.	The program fails and does not follow any requirements.
Program structure (40 % weighting)	The program structure follows design completely.	The program structure follows most part of the design.	The program structure follows only a few parts in the design.	The program structure follows very few parts in the design.	The program structure does not follow the design at all.
Comment (5 % weighting)	Comments are appropriately added and explain the program very well.	Comments help the explanation but are improper at some places.	Comments are provided with some help in program understanding.	Comments are sparse or vague.	No comments are provided.
Code style (5 % weighting)	A clear coding style is consistently applied, greatly enhancing program readability.	A clear coding style is consistently used in the most part of the program, helping in the program readability.	A coding style is used in a small part of program. The program is not readable at some places.	Only a very few efforts are made in improving the program readability.	No coding style is applied for the purpose of readability.

Testing

Criteria for assessment	Performance levels				
	Excellent 10 / A / 4	Good 8 / B / 3	Satisfactory 6 / C / 2	Marginal Pass 4 / D / 1	Fail F / 0
Completeness (40% weighting)	More than 90% of the software application is covered.	Around 60% of the software application has been covered.	Around 40% of the software application has been covered.	Around 20% of the software application has been covered.	Less than 10% of the software application has been covered.
Correctness (60% weighting)	The testing methods have been correctly applied.	The testing methods are applied correctly in most cases.	The testing methods are applied correctly in some cases.	The testing methods are applied correctly in few cases.	No testing method is correctly used.

Oral Presentation

Criteria for assessment	Performance levels				
	Excellent 10 / A / 4	Good 8 / B / 3	Satisfactory 6 / C / 2	Marginal Pass 4 / D / 1	Fail F / 0
Slides Content (30% weighting)	Slides clearly introduce software development process and techniques.	Slides introduce software development process and techniques but unclear in a few slides.	Slides introduce software development process and techniques, but unclear in many slides.	Slides introduce software development process and techniques, but unclear in most slides.	Slides content is not given as required at all.
Slides Design (20% weighting)	Slides are well designed	Slides are designed but not very attractive.	Slides are designed in a fair way.	Slides are designed in a bad way.	The slides are designed in a very boring way.
Slides organization (10% weighting)	Slides are well organized.	Slides are organized but not perfect.	Slides are organized fairly.	Slides are organized in a bad way.	Slides are not organized in a mess.
Slides Presentation (20% weighting)	The slides are presented clearly and fluently without reading slides.	The slides are presented without reading slides. There is some unclearness.	The slides are presented by reading the slides in most time or unclearly in most time.	The slides are all read by presenters.	No presentation.
Responsiveness (10% weighting)	Highly responsive to questions from audiences.	Generally responsive to answer most questions from audiences.	Reluctantly interacts with audience; responds to question inadequately.	Unable to answer most of questions from audience.	Unable to answer any questions.
Time management (10% weighting)	The presentation is finished in time.	The presentation is a little bit overrun; within 1 minute above the allotted time.	The presentation is overrun for more than 1 minute.	The presentation is overrun for more than 1 minute and not all contents are able to be presented.	Absence or late in the scheduled time for presentation without providing an acceptable reason.