

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, April/May 2018

Course: Software Quality Management
Program: B.Tech (CSE)-All IBM Courses
Time: 03 hrs.

Semester: VI

Max. Marks: 100

Instructions:

SECTION A
Total marks= [5×4=20]

S. No.	Attempt all question .Each question carry equal marks.	Marks	CO
Q 1	Define Software Quality. What is it from the user's point of view?	4	CO1
Q 2	Why do we require metrics for measuring software qualities?	4	CO1
Q 3	What are the main standards of ISO 9000 series? Where do you make use of these Standards in software development?	4	CO4
Q 4	State the difference between Lines of Code and Function Point Metrics.	4	CO2
Q 5	What are the six sigma limits? Explain their importance in quality management.	4	CO2

SECTION B
Total marks= [4×10=40]

Answer the following questions			
Q 6	Discuss in detail the hierarchical models of Boehm's and McCall. Explain the Significance of these models in software development process.	10	CO2
Q 7	What are the important quality tasks to be performed for effective Quality Management? Discuss issues and remedies in quality assurance management.	10	CO1
Q 8	Discuss the techniques used by quality auditors for software. Explain the importance of each technique.	10	CO4
Q 9	Bring out salient features of Rayleigh model. Discuss the significance of this Model in the reliability analysis of the software. OR Explain clearly the concept of defect removal effectiveness and its importance in the Software development. How the metrics associated with defect removal effectiveness help in quality planning and management.	10	CO3

SECTION-C
Total marks= [20×2=40]

Answer the following questions			
Q 10	What are the important components of Quality management system? Discuss how	20	CO3

	the reliability growth models are useful for quality management system.		
Q 11	<p>What are the module design metrics used in practice? Discuss the significance of these metrics.</p> <p style="text-align: center;">OR</p> <p>Write short notes on the following</p> <ul style="list-style-type: none">i) Quality Assuranceii) Element of quality management system.iii) Cost of quality and defect preventioniv) Software review	20	CO5