



GUJARAT TECHNOLOGICAL UNIVERSITY
Syllabus for Bachelor of Vocation (B.Voc), 4th Semester
Branch: Software Development
Subject Name: QA Engineer
Subject Code: 21140208

With effective
from academic
year 2022-23

Type of course: On-Job Training (Elective)

Prerequisite: NA

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE (V)	PA (I)		
-	-	15	15	-	-	100	100	200

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

OJT Hands on Exercise/Training:

Sr. No.	Content	Total Hrs.	% Weightage
1	<p>Contribute to quality assurance of projects</p> <p>PC1. establish clearly the scope of your role and responsibilities in relation to quality assurance</p> <p>PC2. check that projects comply with your organization's requirements during every phase</p> <p>PC3. collect required data/information against key indicators using standard templates and tools</p> <p>PC4. analyze data/information to accurately identify risks to projects</p> <p>PC5. generate reports on checks carried out, data/information collected and risks identified using standard templates and tools</p> <p>PC6. schedule review meetings at agreed project milestones</p> <p>PC7. provide required information to project management reviewers, internal auditors and technical reviewers in time for review meetings</p> <p>PC8. check that the key actions from review meetings are accurately recorded</p> <p>PC9. monitor project progress to check that key actions are taken on time</p> <p>PC10. obtain advice and guidance from appropriate people, where necessary</p> <p>PC11. comply with relevant standards, policies, procedures, guidelines and service level agreements (SLAs) when contributing to quality assurance</p> <p>PC12. carry out root cause analysis of process failures in projects to facilitate process improvements</p> <p>PC13. identify and share good practice with others to improve productivity</p>	100	20
2	<p>Manage your work to meet requirements</p> <p>PC1. establish and agree your work requirements with appropriate people</p> <p>PC2. keep your immediate work area clean and tidy</p> <p>PC3. utilize your time effectively</p>	20	20



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	<p>PC4. use resources correctly and efficiently PC5. treat confidential information correctly PC6. work in line with your organization’s policies and procedures PC7. work within the limits of your job role PC8. obtain guidance from appropriate people, where necessary PC9. ensure your work meets the agreed requirements</p>		
3	<p>Work effectively with colleagues PC1. communicate with colleagues clearly, concisely and accurately PC2. work with colleagues to integrate your work effectively with them PC3. pass on essential information to colleagues in line with organizational requirements PC4. work in ways that show respect for colleagues PC5. carry out commitments you have made to colleagues PC6. let colleagues know in good time if you cannot carry out your commitments, explaining the reasons PC7. identify any problems you have working with colleagues and take the initiative to solve these problems PC8. follow the organization’s policies and procedures for working with colleagues</p>	20	20
4	<p>Maintain a healthy, safe and secure working environment PC1. comply with your organization’s current health, safety and security policies and procedures PC2. report any identified breaches in health, safety, and security policies and procedures to the designated person PC3. identify and correct any hazards that you can deal with safely, competently and within the limits of your authority PC4. report any hazards that you are not competent to deal with to the relevant person in line with organizational procedures and warn other people who may be affected PC5. follow your organization’s emergency procedures promptly, calmly, and efficiently PC6. identify and recommend opportunities for improving health, safety, and security to the designated person PC7. complete any health and safety records legibly and accurately</p>	20	20
5	<p>Provide data/information in standard formats PC1. establish and agree with appropriate people the data/information you need to provide, the formats in which you need to provide it, and when you need to provide it PC2. obtain the data/information from reliable sources PC3. check that the data/info is accurate, complete and up-to-date PC4. obtain advice or guidance from appropriate people where there are problems with the data/information PC5. carry out rule-based analysis of the data/information, if required PC6. insert the data/information into the agreed formats PC7. check the accuracy of your work, involving colleagues where required PC8. report any unresolved anomalies in the data/information to appropriate people PC9. provide complete, accurate and up-to-date data/information to the appropriate people in the required formats on time</p>	20	10



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6	Develop your knowledge, skills and competence PC1. obtain advice and guidance from appropriate people to develop your knowledge, skills and competence PC2. identify accurately the knowledge and skills you need for your job role PC3. identify accurately your current level of knowledge, skills and competence and any learning and development needs PC4. agree with appropriate people a plan of learning and development activities to address your learning needs PC5. undertake learning and development activities in line with your plan PC6. apply your new knowledge and skills in the workplace, under supervision PC7. obtain feedback from appropriate people on your knowledge and skills and how effectively you apply them PC8. review your knowledge, skills and competence regularly and take appropriate action	20	10
	Total	200	100

Course Outcomes:

Sr. No.	CO Statement	Marks % Weightage
CO-1	Understand basics of quality assurance of projects	30
CO-2	Contribute to manage your work to meet requirements	20
CO-3	Understand how to Work effectively with colleagues	10
CO-4	To understand data/information in standard formats	20
CO-5	To develop knowledge skills of software projects with quality analysis	20

Reference:

https://nsdcindia.org/sites/default/files/QP_SSC-Q1302_QA-Engineer.pdf