Roll No. __22L-7971__　　　Name __Hasan Yahya__　　Section __BSE-5B__

(In-class) Assignment 1
Weight: 5%; CLO 3

59/60

FASTHealth is a software house that specializes in developing Django-based web apps for hospitals and clinics desiring to automate their information management systems. It is considering adopting the following SQA plan (see Table 1) for its next client.

Table 1: SQA Plan

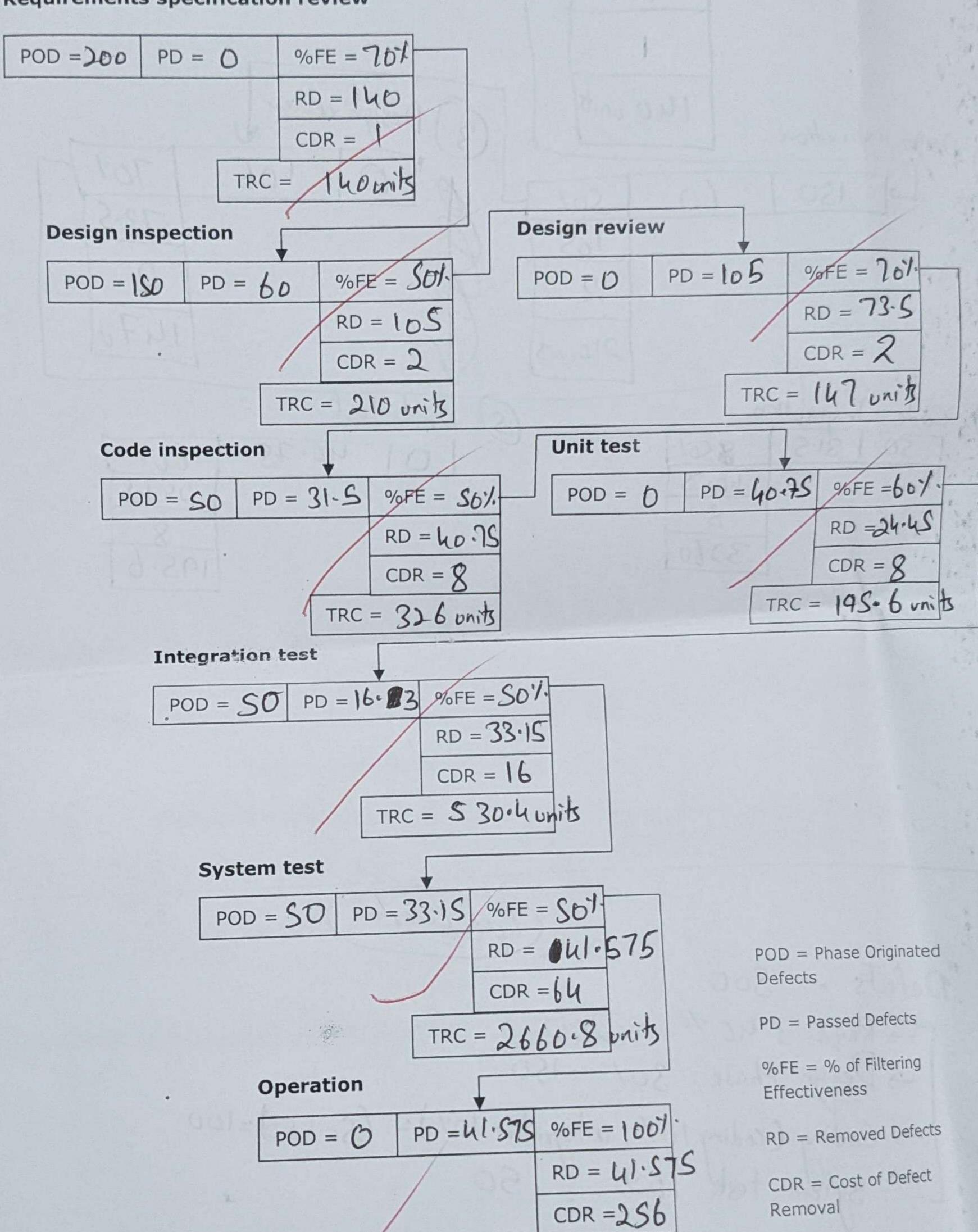| No.	SQA Activity	Defect Removal Effectiveness	Cost of Removing a Detected Defect (Cost Units)
1	Requirements specification review	70%	1
2	Design inspection	50%	2
3	Design review	70%	2
4	Code inspection	50%	8
5	Unit test - code	60%	8
6	Integration test	50%	16
7	System test	50%	64
8	Operation phase	100%	256

Using the defect origin distributions in Table 2, complete the process-oriented illustration of the above SQA Plan on the following page <u>assuming the removal of</u> **500** defects. <u>All values should be accurate to **3** decimal places.</u>

Table 2: Distribution of Software Defect Origins

No.	Software development phase	Average percentage of defects originating in phase
1	Requirements specification	40%
2	Design	30%
3	Coding (coding 10%, integration 10%)	20%
4	System test	10%

There is **no** partial credit in this question. Therefore, check your answers carefully.

Requirements specification review

POD = 200	PD = 0	%FE = 70%
		RD = 140
		CDR = 1
	TRC =	140 units

Design inspection

POD = 180	PD = 60	%FE = 50%
		RD = 105
		CDR = 2
	TRC =	210 units

Design review

POD = 0	PD = 105	%FE = 70%
		RD = 73.5
		CDR = 2
	TRC =	147 units

Code inspection

POD = 50	PD = 31.5	%FE = 56%
		RD = 40.75
		CDR = 8
	TRC =	326 units

Unit test

POD = 0	PD = 40.75	%FE = 60%
		RD = 24.45
		CDR = 8
	TRC =	195.6 units

Integration test

POD = 50	PD = 16.3	%FE = 50%
		RD = 33.15
		CDR = 16
	TRC =	530.4 units

System test

POD = 50	PD = 33.15	%FE = 50%
		RD = 41.575
		CDR = 64
	TRC =	2660.8 units

Operation

POD = 0	PD = 41.575	%FE = 100%
		RD = 41.575
		CDR = 256
	TRC =	10643.2 units

POD = Phase Originated Defects

PD = Passed Defects

%FE = % of Filtering Effectiveness

RD = Removed Defects

CDR = Cost of Defect Removal

TRC = Total Removal Cost