Quiz Simulation Prof. M. Barghash IE dept SoE UoJ 7/1/2024

Name ID

Q) Explain with a model how read from a sequential File

Quiz Simulation Prof. M. Barghash IE dept SoE UoJ 7/1/2024

Name ID

Q)Explain with details how to initialize a variable array from excel sheet

Quiz Simulation Prof. M. Barghash IE dept SoE UoJ 7/1/2024

Name ID

Name three arena objects

Name three Arena VBA events

Quiz chapter 5 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

A system with two operators ahmad and said, one in the morning 8AM-5PM and one in the evening 3PM-12PM the arrival to the process is expo(5). Use resource sets to mode the process

CH5

Quiz chapter 6 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

ON the back of the page

Describe how to Analyze alternative scenarios one with numbers of workers equal to two or three and number of machines 5 or six N in PAN with analysis for Entity. Time in system and system.Number out

CH6

Quiz chapter 5 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

A system with two operators supporting a call center. The average of the arrival process reduced with the hour, staring at 8:00-8:30 AM, at 5, then 4.9 at the next half hour then 4.8 etc the prcess takes 2 min and the customers leave describe the solution

CH5

Quiz chapter 6 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

ON the back of the page

Describe how to optimize using optoquest alternative scenarios one with numbers of workers equal to two or three and number of machines 5 or six N in PAN with analysis for Entity. Time in system.

CH6

Quiz chapter 5 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

A system with two operators supporting a call center the arrival process follows an expo(5). There are only 7 telephone lines available. The call takes two minutes customers who find the all lines buisy leave describe the model

CH5

Quiz chapter 6 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

Describe how in one of arena components we can compare between the mean of two alternatives and find the confidence internal for both and plot that confidence interval

CH6

Quiz chapter 5 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

Q) car maintenance shop use call scheduling. Consider one call comes in each day, but the number of cars to be scheduled is uniformly distributed between 5 and 7 arranges the schedule based on three day later 5% two day later 75% and the rest next day. model this part of the system using arena use the split or dublicate block.

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CH5

Quiz chapter 6 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

ON the back of the page

Describe how to Analyze alternative scenarios one with numbers of workers equal to two or three and number of machines 5 or six N in PAN with analysis for Entity. Time in system and system.Number out

CH 6

Quiz chapter 5 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

In a car maintenance shop cars are held in 5 storages based on day. On each day cars are taken from the storage dedicate for that day only to be maintained. Model this part of the maintenance shop using arena.

CH5

Quiz chapter 6 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

ON the back of the page

Describe how to optimize using optoquest alternative scenarios one with numbers of workers equal to two or three and number of machines 5 or six N in PAN with analysis for Entity. Time in system.

CH6

Quiz chapter 5 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

A system with two operators supporting a call center the arrival process follows an expo(5). There are only 7 telephone lines available. The call takes two minutes customers who find the all lines buisy leave describe the model

CH 5

Quiz chapter 6 simulation Prof. M. Barghash Schof Eng UoJ 29/12/2024

Name: ID:

Describe how in one of arena components we can compare between the mean of two alternatives and find the confidence internal for both and plot that confidence interval

CH 6

CH7

Quiz simulation Prof M. Barghash IE SoC UoJ 6/1/2022

Name ID:

Q) Write the sequence for time for each operation is triangular and the parameters are in the table in each cell

Part Type	%	Machine/ Process Time	Machine/ Process Time	Machine/ Process Time	Machine/ Process Time
1	12	1 10.5,11.9,13.2	2 7.1,8.5,9.8	3 6.7,8.8,10.1	4 6,8.9,10.3
2	14	1 7.3,8.6,10.1	3 5.4,7.2,11.3	2 9.6,11.4,15.3	
3	31	2 8.7,9.9,12	4 8.6,10.3,12.8	1 10.3,12.4,14.8	3 8.4,9.7,11
4	24	3 7.9,9.4,10.9	4 7.6,8.9,10.3	3 6.5,8.3,9.7	2 6.7,7.8,9.4
5	19	2 5.6,7.1,8.8	1 8.1,9.4,11.7	4 9.2,10.7,12.8	

CH7

Quiz simulation Prof M. Barghash IE SoC UoJ 6/1/2022
Name ID:

Q) The following are defined in sequences Part 1 sequence: sequence 1 part 2 sequence = sequence 2, etc

Part Type	Workstation/ Process Time	Workstation/ Process Time	Workstation/ Process Time
Part 1	A 5.5,9.5,13.5	C 8.5,14.1,19.7	
Part 2	A 8.9,13.5,18.1	B 9,15,21	C 4.3,8.5,12.7
Part 3	A 8.4,12,15.6	B 5.3,9.5,13.7	
Part 4	B 9.3,12.6,16.0	C 8.6,11.4,14.2	

You are required for model the system (do not model the sentence, already defined) part 1 20% part 2 15% part 3 17% part 4 rest, inter arrival time expo(5).

CH4

Quiz simulation Prof M. Barghash IE SoC UoJ 6/1/2022

Name ID:

Two stations system each has one machine the process time are same attribute Pr_time

Interarrival expo(7) min part 1 20% station 1 then station 2, part 2 40% station 2 then 1 , part 3 (rest) station 1 then station 2 then station 1,

Write the mode.

CH4

Quiz simulation Prof M. Barghash IE SoC UoJ 6/1/2022

Name ID:

A model is based on route, sequences already defined , starting from arrival station, then four stations depending on part, then depart station. The distances between the stations is the same as 5 , one transporter is available with speed 10 meters per minute. Parts are: 1(10%) 2 (20%) 3(7%) 4 (rest)

Write the new model.

CH 4

Quiz simulation Prof M. Barghash IE SoC UoJ 6/1/2022
Name ID:

A model is based on route, sequences already defined , starting from arrival station, then four stations depending on part, then depart station. The distances between the stations is the same as 5 , one loop conveyor (arrive to cell1 to cell2 to depart to cell3 to cell 4 to arrive) is available with speed 10 meters per minute. Parts are: 1(10%) 2 (20%) 3(7%) 4 (rest)

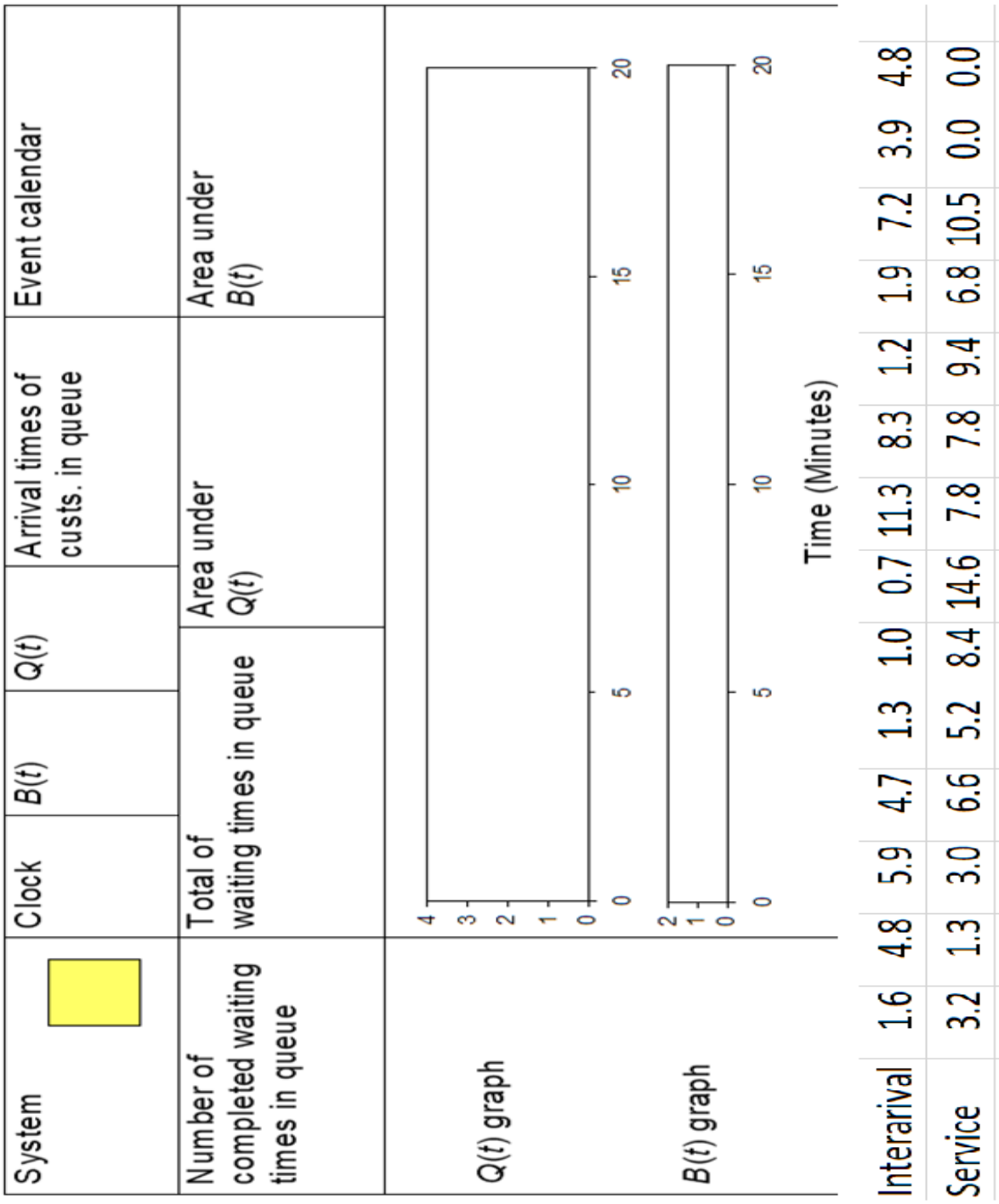
Write the new model.

CH2

Quiz 1 Simulation Prof M. Barghash IE dept Sch of Eng. UoJ 20/10/2024

Name ID

Draw the parts in queue Q(t) and the machine status B(t) for the following system then find the average time in system simulation time =20

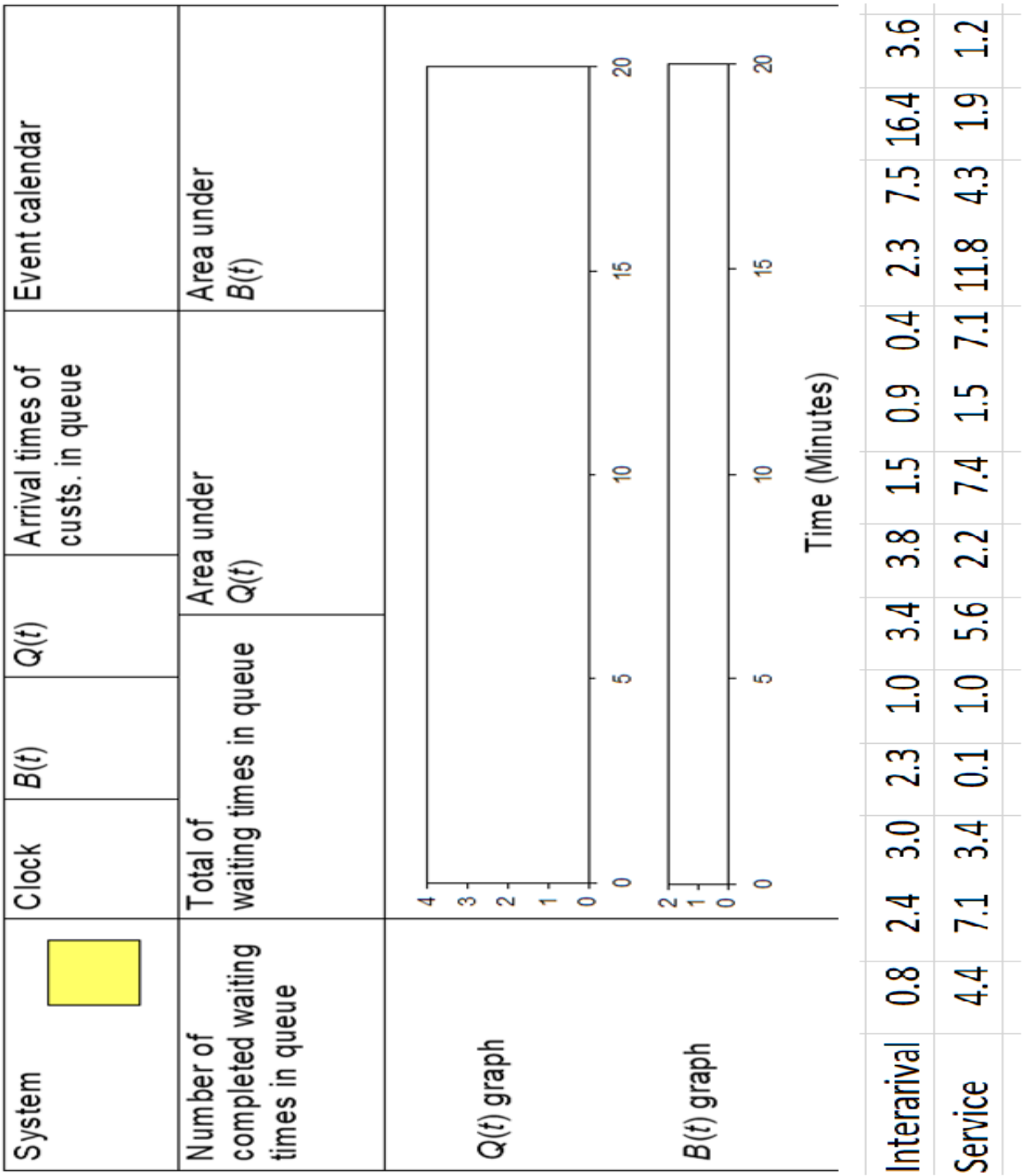


CH2

Quiz 1 Simulation Prof M. Barghash IE dept Sch of Eng. UoJ 20/10/2024

Name ID

Draw the parts in queue Q(t) and the machine status B(t) for the following system then find the average time in queue simulation time =20



CH2

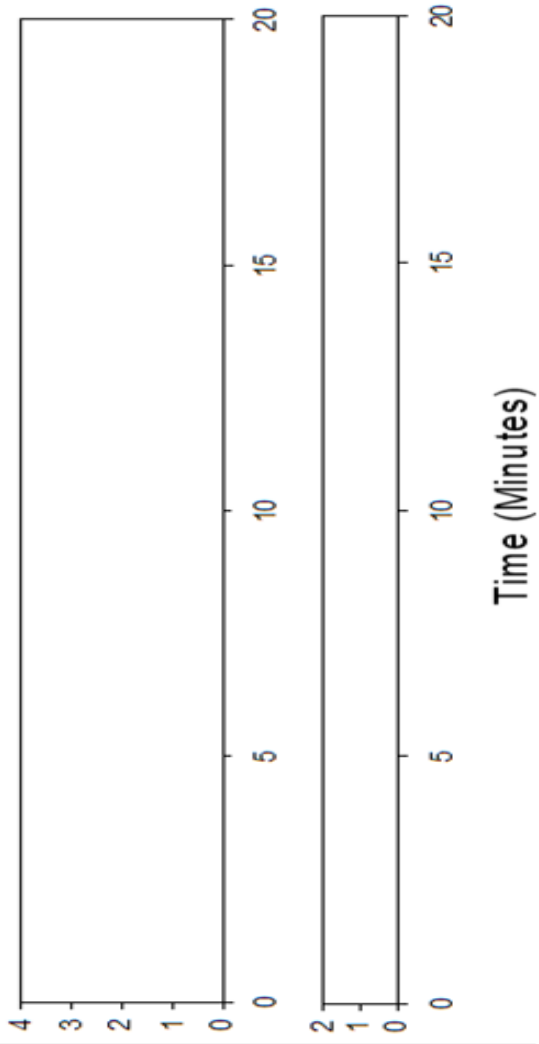
Quiz 1 Simulation Prof M. Barghash IE dept Sch of Eng. UoJ 20/10/2024

Name ID

Draw the parts in queue Q(t) and the machine status B(t) for the following system then find the average time in system simulation time =20

System	Clock	B(t)	Q(t)	Arrival times of custs. in queue	Event calendar
Number of completed waiting times in queue	Total of waiting times in queue		Area under Q(t)	Area under B(t)	

Q(t) graph



B(t) graph

Service	2.1	2.8	2.5	2.9	5.6	11.2	5.4	1.2	4.0	1.5	2.8	1.8	5.6	1.6					
Interarival	2.7	1.8	1.6	1.5	7.7	3.0	1.3	12.8	2.6	11.0	2.4	8.9	0.3	0.1					

CH2

Quiz 1 Simulation Prof M. Barghash IE dept Sch of Eng. UoJ 20/10/2024

Name ID

Draw the parts in queue Q(t) and the machine status B(t) for the following system then find the average time in queue simulation time =20

System	Clock	B(t)	Q(t)	Arrival times of custs. in queue	Event calendar
Number of completed waiting times in queue	Total of waiting times in queue		Area under Q(t)	Area under B(t)	

Interarival	3.5	1.1	0.1	0.0	1.4	1.0	18.1	0.4	0.4	2.3	3.9	0.4	3.8	4.7
Service	1.8	0.0	3.8	1.8	5.3	4.1	2.5	4.2	0.0	0.9	6.7	4.2	5.3	1.8