HPC mark

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HPC long practical feedback for PokMan (Pok Man Ho) 2020

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Your final mark is : 85 %

Mark allocation break down
1) Technically correct answers to all questions worth 60 % of final grade
Your mark : 54.6 /60
2) Quality of free text answers worth 8 % of final grade
Your mark : 5.5 /8
3) Quality of graphical outputs worth 8 % of final grade
Your mark : 6 /8
4) Quality of code worth 8 % of final grade
Your mark : 6.5 /8
5) Answers to challenge questions worth 16 % of final grade
Your mark : 12 /16

Marks for main questions
Q 1 : 2 / 2
Q 2 : 1 / 1
Q 3 : 1 / 1
Q 4 : 2 / 2
Q 5 : 2 / 2
Q 6 : 2 / 2
Q 7 : 1 / 2 comments: length(neutral_time_series(c(1,54,23,54,52,2,3,234),207))!= 208 as expected
Q 8 : 3 / 3
Q 9 : 3 / 3
Q 10 : 1 / 1
Q 11 : 0 / 1 comments: incorrect length
length(neutral_time_series_speciation(c(1,54,23,54,52,2,3,234),0,207)) != 208
Q 12 : 3 / 4 comments: excellent on techincal side but text answer not really correct - the reason is convergence on a dynamic equilibrium
Q 13 : 3 / 3
Q 14 : 3 / 3
Q 15 : 2 / 2
Q 16 : 4 / 4
Q 17 : 4 / 6 comments: answer did not finish in 60 seconds when passed that as a wall time
Q 18 : 6 / 6
Q 19 : 10 / 10
Q 20 : 9 / 10 comments: excellent but was not supposed to save the results to pdf file
Q 21 : 2 / 2

Q 22 : 2 / 2
Q 23 : 8 / 8
Q 24 : 2 / 2
Q 25 : 1 / 2 comments: elbow bent to the left instead of to the right as specified
Q 26 : 1 / 2 comments: text answer was not really complete - needed to explain why there is an error and what was needed to solve it
Q 27 : 3 / 3
Q 28 : 4 / 4
Q 29 : 3 / 3
Q 30 : 3 / 4 comments: the end result is not quite correct, it does not replicate the model result in the worksheet

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Total 91 / 100

Marks for text quality : 5.5 /8
Comments...
In question 8 very good but would be nice to mention extinction and (lack of) speciation / immigration
In question 12 the text was a bit unclear and did not explain the underlying reasons
In question 16 good but does not really explain why the initial condition has not effect
In question 21,22 very good but a little explanation of the maths would have helped
In question 23 very good
In question 26 did not go into much detail of explanation

Marks for graphics quality : 6 /8
Comments...
In question 8 excellent but lacked a title
In question 12 good but y axis cuts off part of the min line - it needed to start at zero. I found the legend a little unclear just min and max are short names
In question 16 very good but could have improved x axis labels e.g. 2-3 4-7 and so on
In question 20 very good though would have been nice to include sizes instead of generations on the four panel
In question 23 excellent
In question 30 I like the two colours

Marks for code quality : 6.5 /8
Comments...
good but room for additional clarity in comments and choices for variable names

Marks for challenge questions : 12 /16
Comments...
challenge question A, excellent - though I am not sure that the equilibrium times are fully correct
challenge question B, excellent, having a different colour for each might have been clearer
challenge question C, does not look correct to me richness should be stable - I think multiple runs of different lengths were averaged incorrectly
challenge question D, not really correct in terms of reasoning for why it is faster and (0.1K trials used approx 0 hours) was not very informative. The results were supposed to be directly compared with the HPC output
challenge question E, very good, would be nice to show the initial points and their progression towards

the gasket
challenge question F, excellent and very imaginative answer
challenge question G, very impressive, beat last year's record - the only small thing is I think this is partly at the expense of accuracy on some of the parameters only being to 1dp, solution used 149 characters in total, previous record: 154 characters