

EXAM 2 REVIEW

Here is some information about Exam 2.

- This examination covers content learned in weeks 3 and 4.
- This exam is worth 120 total points, and includes the following types of questions:
 - 25 Multiple choice questions
 - 5 Multiple answer and matching questions
 - 10 Fill in the blank question
 - 2 Essay questions
- You have 90 minutes to complete the Exam.
- When the time limit is reached, you will automatically be exited from the exam.
- Remember to **choose the best answer**, some questions may have more than one correct answer but only one BEST answer.

By submitting this work, I am attesting that I understand and am abiding the Chamberlain University Code of Conduct.

Good luck!

WEEK 3

Factors affecting microbial growth (CO5)

1. Understand the growth requirements in microorganisms- in terms of sources of carbon (organic are heterotrophs and inorganic are autotrophs), and energy (phototrophs vs chemotrophs).
2. Apply the terms photoautotrophs, chemoautotrophs, photoheterotrophs, chemoheterotrophs, saprobes and parasites.
3. Understand role of macro and micronutrients, vitamins as coenzymes and cofactors for optimal enzyme function.
4. Understand the process of transport of molecules across the cell membrane- passive (diffusion, osmosis, facilitated diffusion) vs active transport, the effects of isotonic, hypertonic and hypotonic solution on cells.
5. Understand temperature, pressure, pH, oxygen requirements of organisms in relation to these terms
 - a. Cardinal temperature, max and mini growth temperature
 - i. Psychrophiles, thermophiles, hyperthermophiles, mesophiles.
 - b. Acidophiles, basophiles and alkaliphiles
 - c. Barophiles, Halophiles