Name: _____ **Test ID: 777777**

CONS101 – MIDTERM EXAM

OCTOBER 27, 2016

This exam has 3 parts, with 25 questions in total (each worth one mark).
You have 50 minutes to complete it (about 2 minutes per question).

Before starting:

1) Write your name on both the exam sheet AND the scantron sheet

2) On the scantron sheet, fill in your Student ID number

3) On the scantron sheet, fill in the Test ID, which you will find on the top right corner of your exam sheet. There are four versions of this exam (same questions, different order) and this number tells us which version you answered.

Please fill in your responses to all questions on the scantron sheet. You are allowed to write or make marks on the exam sheet, but we will only grade the answers recorded on your scantron sheets.

At the end of exam, please turn in both the exam sheet and the scantron

Correct answers are in red

Part I: Multiple Choice (1 point each) – Choose the best answer

1) Assisted migration:
   a. is being considered because species niches are moving faster than species can migrate
   b. is only important for endangered species
   c. is being tested for some species, for example, whitebark pine in B.C.
   d. A and C
   e. All of the above

2) Approximately what proportion of people on the planet couldn't use a microwave, even if you bought it for them?
   a. 5%
   b. 10%
   c. 20%
   d. 40%
   e. 65%

3) If we wanted to restore coastal British Columbia to the period prior to widespread colonial change, which baseline might be most appropriate?
   a. 1650 – when European flu started to reach the region
   b. 1792 – the year that Captain Vancouver arrived in the region
   c. 1827 – the year that Hudson's Bay Company established a trading post in present-day Vancouver
   d. 1867 – the year the country of Canada was founded
   e. 1880 – when deer were first introduced to Haida Gwaii and other coastal islands

4) What are the main goals of CONS101?
   a. To get you excited about conservation
   b. To introduce you to some professors in the Faculty of Forestry conservation program
   c. To provide you with the incentive to get outdoors and into nature
   d. To give you an overview of some of the grand challenges in conservation
   e. All of the above

5) Which activity uses the largest amount of freshwater globally?
   a. Industry
   b. Domestic household use
   c. Hydroelectric dams for energy production
   d. Irrigation of crops
   e. Aquaculture

6) Approximately what percentage of global forested land area has been lost to deforestation?
   a. 5%
   b. 25%
   c. 50%
   d. 65%
   e. 80%

7) Approximately how much terrestrial land area is urban?
   a. 5%
   b. 15%
   c. 35%
   d. Enough that rooftop gardens can make a substantial contribution to food production
   e. Both A and D

8) Why is achieving global food security a major conservation issue?
   a. Because the greatest cause of deforestation is clearing for agriculture
   b. Because much of the future potential cropland area is in the frontier forests of Canada
   c. Because food demand is projected to increase at the same rate as population growth
   d. Because the plains of Levant were completely deforested thousands of years ago

9) If you want to determine how much energy is required for you to walk to school, what factors do you need to consider?
   a. Energy required for road construction
   b. Energy required to grow food
   c. Energy required for a hot water shower
   d. A and B
   e. All of the above

10) Coho salmon, which are highly dependent on freshwater habitat:
   a. spawn and rear in very small streams in fall and winter
   b. are doing okay mostly because we raise many of them in hatcheries
   c. have been heavily affected by habitat alteration, including ditch draining and culverts
   d. A and C
   e. All of the above

11) What might happen to salmon stocks if catch is very high compared to escapement?
   a. The stock may crash
   b. The stock will likely be ok as long as there are no dams on the rivers where they spawn
   c. The stock will likely be fine as long as predators such as otters are not very common
   d. The stock will likely be stable

12) How can the global average footprint be higher than the global average biocapacity? (In other words, how can we be using more than one planet's worth of resources?)
   a. It's an issue of scale - many countries, like Canada, have a higher national biocapacity, so it's sustainable for them to have a higher footprint
   b. Because we are using planetary resources unsustainably, which is driving many of our current conservation issues
   c. Because we switched the ecological footprint units to global hectares, which makes it seem like we have greater land capacity
   d. B and C

13) Why are we worried about the ability of trees in BC to keep up with climate change?
   a. Because data from the last ice age suggests that they typically extend their range by about 100-200 meters per year
   b. Because they would need to move about 7km a year to keep up with changing climate
   c. Because they are already 150 km behind their ideal climate
   d. A and B
   e. All of the above

14) To restore historical baseline conditions on Vancouver Island, how should we manage current deer populations?
   a. Do NOT hunt deer, because they are endangered
   b. Do NOT hunt deer, because they are needed as prey to maintain cougar populations
   c. DO hunt deer, because there are too many of them
   d. Do NOT hunt deer because they browse invasive species
   e. B and D

15) In which way(s) does "New Conservation" differ from earlier views of nature and our relationship to it?
   a. It is anthropocentric and utilitarian and views nature as resources to be used wisely
   b. It views humans as citizens of nature
   c. It values ecosystem services and embraces partnerships with traditional 'enemies' such as businesses
   d. It promotes a return to traditional conservation focused on the importance of preserving native biodiversity

Part II - Fill in the Blanks (1 point each)

1) _____ is(are) a measure of the amount of biologically productive land an individual, country or activity uses.
   a. Average global biocapacity
   b. Ecological footprint
   c. Global hectares
   d. Embodied energy
   e. Carbon emissions

2) The removal of _____ predators can lead to profound shifts in vegetation
   a. invasive
   b. exotic
   c. apex
   d. adaptive
   e. baseline

3) _____ is arguably the most important global conservation challenge
   a. Land-use change
   b. Forest degradation
   c. Species extirpation
   d. Species migration
   e. Escapement

4) _____ are groups of salmon populations that possess unique traits that are adaptive to local conditions.
   a. Endemics
   b. Stocks
   c. Sub-populations
   d. Species
   e. Anadramous

5) The Canadian boreal forest is an example of a(an) _____ forest.
   a. frontier
   b. old-growth
   c. wilderness
   d. asynchronous
   e. fragmented

Part III – True or False (1 point each)

1) Globally, the rate of deforestation has declined since 1990
   a. True
   b. False

2) The main cause of the extinction of salmon stocks is habitat destruction.
   a. True
   b. False

3) A carnivorous diet requires less energy than a vegetarian diet.
   a. True
   b. False

4) Bald eagles are a conservation success story
   a. True
   b. False

5) Since 1990, China has had a high rate of net forest increase
   a. True
   b. False

END OF EXAM