

Unit 2 - Week 1

Course outline

How does an NPTEL online course work?

Week 1

- An Introduction to the Earth's Atmosphere and Source of Energy-The Sun
- Primary Source of Energy on the Earth-The Sun
- Evolution of the Earth's Atmosphere
- Earth's Second Atmosphere and Rise of Oxygen
- Atmosphere of Other Planets in Solar System

Quiz : Assignment 1

- Assignment 1 solution

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

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FEEDBACK

Assignment 1

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-02-12, 23:59 IST.

1) Which region of the solar spectrum contains maximum energy output from the Sun? 1 point

- Infrared
- Visible
- Ultraviolet
- X-ray

No, the answer is incorrect.
Score: 0

Accepted Answers:
Visible

2) The rotation of the Sun around its own axis is 1 point

- faster at the equator and slower at the poles
- faster at the poles and slower at the equator
- faster at north pole and slower at south pole
- uniform

No, the answer is incorrect.
Score: 0

Accepted Answers:
faster at the equator and slower at the poles

3) Top of the convection cell radiate the energy as a function of 1 point

- distance
- temperature
- pressure
- time

No, the answer is incorrect.
Score: 0

Accepted Answers:
temperature

4) Photosynthesis involves the absorption of the energy corresponding to the wavelength 1 point

- 1000 nm
- 860 nm
- 430 nm
- 230 nm

No, the answer is incorrect.
Score: 0

Accepted Answers:
430 nm

5) The density of the Hydrogen inside the Sun is 1 point

- constant
- decreasing outward
- increasing outward
- decreasing out of the photodphere

No, the answer is incorrect.
Score: 0

Accepted Answers:
increasing outward

6) Around 4 Gya the major species of the Earth's atmosphere was 1 point

- Nitrogen
- Oxygen
- Carbon dioxide
- Water vapor

No, the answer is incorrect.
Score: 0

Accepted Answers:
Water vapor

7) In the beginning, the main source of the free oxygen was 1 point

- Volcano activity
- Photo-dissociation
- Photosynthesis
- Trees

No, the answer is incorrect.
Score: 0

Accepted Answers:
Photo-dissociation

8) Cooling of a terrestrial planet results in 1 point

- increased magnetic field
- loss of the atmosphere
- increased tectonic activities
- denser atmosphere

No, the answer is incorrect.
Score: 0

Accepted Answers:
loss of the atmosphere

9) Venus' surface is so hot because of 1 point

- less distance from the Sun
- absence of the atmosphere
- enhanced green house effect
- slow rotation on its axis

No, the answer is incorrect.
Score: 0

Accepted Answers:
enhanced green house effect

10) Calculate the Sun's temperature with the wavelength corresponding to maximum solar flux 1 point

- 6035
- 5794
- 6100
- 6000

No, the answer is incorrect.
Score: 0

Accepted Answers:
6035

11) A plasma with an isotropic velocity distribution is placed in a magnetic mirror trap with mirror ratio $R_m = 4$. There are no collisions, so the particles in the loss cone simply escape, and the rest remain trapped. What fraction is trapped?

No, the answer is incorrect.
Score: 0

Accepted Answers:
(Type: Range) 0.80,0.90

1 point