

RISHIKUL SANATAN COLLEGE
DEPARTMENT OF COMPUTER STUDIES
YEAR 11 - WORKSHEET 2
GREEN COMPUTING/ ERGONOMICS

Multiple Choice

Circle the letter or fill in the correct answer

1. Ergonomics' is related to human
 - A. Comfort
 - B. Safety
 - C. Both 'a' and 'b'
 - D. None of the above

2. Conservation of Resources – The 4r's: Reduce, Reuse, Recycle, and _____
 - A. Refurbish
 - B. Replan
 - C. Replace
 - D. Recover



3. Lead-acid batteries are most commonly a component of which piece of IT equipment?
 - A. Pc Motherboard
 - B. LCD monitor
 - C. Uninterruptible power supply
 - D. Surge protector

4. Which of the following refers to complete loss of AC power?
 - A. Brownout
 - B. Blackout
 - C. Noise
 - D. Spike

5. Green computing is also called
 - A. Green laptop.
 - B. Green debugging.
 - C. Green technology.
 - D. Green programming.

6. Pathways to green computing involves complimentary path namely Green Use, Green Disposal, Green Design and _____
- A. Green Production
 - B. Green Waste.
 - C. Green Recovery.
 - D. Green Manufacturing
7. Which of the following refers to 80% loss of power?
- A. Brownout
 - B. Blackout
 - C. Noise
 - D. Surge
8. Reducing the energy consumption of computers and using them in an environmentally sound manner is green
- A. Use
 - B. Design
 - C. Disposal
 - D. Manufacturing
9. Computer users may use special antiglare screen shields to avoid
- A. Eyestrain.
 - B. Back pain.
 - C. Neck pain.
 - D. Repetitive strain injury



10. The picture represents which of the 4 R's
- A. Reduce
 - B. Reduce
 - C. Recycle.
 - D. Refurbish

Open Ended Question

QUESTION 1

- a) Discuss any three aspects of the workplace ergonomists have to consider to ensure it is fit for a worker to occupy

- b) What is **EMF** and give one recommendation in reducing exposure to EMF emissions?
- c) Explain two ways in which you can protect yourself from noise emitted by computers?
- d) List any two basic safety precautions to use when working on a computer
- e) Define the following:
- i. Uninterruptible power supply
 - ii. Power surge
 - iii. Brownout
- f) What is the importance of green computing?
- g) State any two recent implementation of green computing.
- h) What type of “Conservation of Resources” is shown in the picture and why is it important to engage in this practice?



- i) List any three ways to reduce energy consumption.

Essay Writing

Ergonomics is the study of the relationship between people and their working environment. In setting up your office space at home, how would you incorporate ergonomics into your office setup in order to:

- Avoid eyestrain and headache
- Avoid back and neck pain
- Avoid repetitive strain injury

Fire safety guidelines protect lives, structures, and equipment. When working with computer components, one must be aware of the possibility of an accidental fire and know how to react. Discuss:

- Two (3) types of fires
- Four (3) safety procedures that one must follow if a fire breaks out in your computer lab
- Basic rules of fire extinguisher operation

****THE END****

QUESTION 5

1. Discuss two ways how one can reduce his/her exposure to EMF and thereby reducing the effects of EMF on their bodies.
2. State **two** things a computer user could do to avoid eyestrain and headache
3. Use the memory aid P-A-S-S to know how to use a fire extinguisher.
What does P-A-S-S represents?
4. Differentiate between **blackout** and **brownout**.
5. What two risks could be indicated from the image below?



Figure 2.2b *Safe work practice.*

QUESTION 1

Ergonomics

Ergonomics is the study of the relationship between people and their working environment. While working with computers, factors have to be considered which may impact on the health of those who operate these machines.

With reference to the above statement:

- Discuss three(3) physical health issues
- Discuss two(2) mental Health Issues
- Discuss three(2) ways to alleviate Eye Strain and Head Aches
- Discuss two(2) ways to alleviate back and Neck Pain