



FINAL EXAM FOR ACADEMIC YEAR 2019/2020
S-1 PROGRAM

Exams	: Forest Protection/SVK232	Name	:
Day/Date	: Thursday, 05 December 2019	NIM.	:
Time	: 13.00-15.00 WIB	No absence	:
Room	: RK. Tanjung 1	Prog. Study	: S1

Attention !

Read the du'a before the exam! Write your name, NIM, and absent number! Please fill in the answers on the question paper directly and please return the questions! Answers are neatly written, legible and clear! Before writing the answer, first read all the questions carefully!

A. Fill in the blanks below with right answer

Forest fires can occur when there are 3 (three) elements united, namely: fuel, oxygen, and(1) **(LO-9)**. Forest fuels consist of bottom fuel, fuel(2) **(LO-9)** and header fuel. An example of underground fuel is soil.....(3) **(LO-9)**. Heat transfer in forest fires is dominated by processes.....(4) **(LO-9)** . While the conduction process is less influential in forest fires, because forest fuel is(5) **(LO-9)** which is bad. Fire behavior is the way how fire develops which is influenced by fuel, weather, and(6) **(LO-10)**. The most common type of fire that occurs in all forest types is fire.....(7) **(LO -10)**, while the fires that occur in conifer stands in Canada and America are generally the type of fire.....(8) **(LO-10)**. The nature of the fuel that most influences forest fires is(9) **(LO-9 & LO-10)**. In Indonesia, the weather element that most determines whether or not a fire is prone to fire is(10) **(LO-10)**.

The front part of the fire that spreads the fastest is called the(11) **(LO-10)**. Forest encroachment is indicated by
(12)**(LO13)**,
(13)**(LO13)**
 ,.....(14)**(LO13)**
 ,.....(15)**(LO-13)**.

B. Choose the answer you think is correct by circling

1. (B – S) Making yellow firebreaks is part of the educational approach to forest fire prevention **(LO-12)**.
2. (B – S) The use of fire by traditional communities in land preparation is done on the grounds that it is cheap, easy, fast and produces fertilizer **(LO-9)**.
3. (B – S) Fuel processing such as making charcoal briquettes is a 'law enforcement' approach in forest fire prevention **(LO-12)**.
4. (B – S) The part of the fire that spreads the fastest in the direction of the wind is called the radius of fire **(LO-10)**.
5. (B – S) Fighting forest fires carried out from the air is included in indirect extinguishing **(LO-12)**.
6. (B – S) Ilaran fire is a path made during fire fighting indirectly **(LO-12)**.
7. (B – S) Illegal grazing is a forest disturbance caused by human activities in grazing their livestock **(LO-13)**.
8. (B – S) Theft of forest products is identical to forest encroachment **(LO-13)**
9. (B – S) Shifting cultivation mostly occurs in Java Island **(LO-13)**
10. (B – S) Land preparation by burning is the main cause of forest and land fires in Indonesia **(LO-10)**.

C. Choose the answer that you think is correct by circling

1. The basis of fire control is **(LO-12)**:

- a. Nice behavior. The Principle of the Fire Triangle
- c. Apid's Environmental Triangle Principle. Fire impact assessment

2. Shifting cultivation that occurs outside Java is caused by the following factors, EXCEPT **(LO-13)**:

- a. Hereditary culture
- b. Want to get higher results
- c. land preparation without burning
- d. Want to get more fertile land

3. The impact of forest fires on vegetation is **(LO-11)**:

- a. Turning off the vegetation
- b. Inflicting wounds on vegetation
- c. Answers a and b are correct
- d. Nothing is right

4. Impact of fire on the ground, EXCEPT **(LO-11)**:

- a. Damage the chemical properties of the soil
- b. Damage the physical properties of the soil
- c. Destroys the biological properties of the soil. Damaging hydrological function

5. The most greenhouse gases produced in forest fires are **(LO-11)**:

- a.CO₂
- b. NO₂
- c.CO₂
- d. CH₄

6. The most dominant causes of forest and land fires in Indonesia are **(LO-10)**:

- a. Land preparation
- b. Natural resource extraction
- c. negligence
- d. Lightning

7. Following are the impacts of fires on wildlife **(LO-11)**:

- a. Reduce aesthetics. Improve habitat
- c. Worsening the microclimate. Increase fertility

8. The part of the fire that lies between the fire radii is called **(LO-9)**:

- a. nice back. fire island
- b. apid bay. fire head

9. Fire prevention activities through the manufacture of green firebreaks include the approach: **(LO-12)**

- a. Law enforcement
- c. Engineering
- b. Education
- d. Construction

10. Effective firebreaks on peatlands are **(LO-12)**:

- a. Green firebreak
- c. Yellow firebreak
- b. Trench/canal
- d. Burning bulkhead

11. The following are agencies related to the eradication of illegal logging, except **(LO-13)**:

- a. POLRI
- b. Ministry of Trade
- c. Ministry of Communication
- d. Ministry of Home Affairs

12. The causes of illegal grazing are **(LO-13)**:

- a. The number of livestock owned
- b. The loss of village land
- c. High public awareness
- d. Strict supervision

13. The theft of forest products other than timber with the highest value is **(LO-13)**:

- a. honey
- c. vegetables
- b. wild animal
- d. Medicinal plants

14. Herding is a local tradition **(LO-13)**:

- a. Sumatra
- c. Borneo
- b. Nusa Tenggara
- d. Bali

15. Theft of forest products is usually paired with activities **(LO-13)**:

- a. grazing
- c. Illegal Trade
- b. farming
- d. Fire

D. Answer the following questions briefly, clearly and correctly

1. Write the equation for the combustion reaction in a forest fire **(LO-9)**

.....

2. The stages of shifting cultivation outside Java consist of **(LO-13)**:

- a.
- b.
- c.
- d.
- e.

3. The main causes of forest fires in Indonesia are **(LO-10)**:

- a.
- b.
- c.
- d.

4. Requirements for direct fire fighting include **(LO-12)**:

- a.
- b.
- c.
- d.
- e.

6. Alternative solutions for illegal grazing, namely **(LO-13)**:

- a.....
- b.....
- c.....
- d.....