

10. The second main earthquake hazard is ground displacement (ground movement) along a -----
 fold river ridge fault
11. The Tunguska Event: caused more than ----- km² of forest was flattened and burned.
 3000 2000 4000 5000
12. Drought can occur by improper distribution of ----- in time and space, and not just by its amount.
 flood rain snowfall heatwave
13. Blizzard is a strong cold winds filled with -----
 water mist snow fog
14. The early warning is the process of monitoring situations in communities or areas known to be vulnerable to slow ----- hazards (UNDP, 2002).
 onset set on setting sitting on
15. Asteroid is a Rock or metallic particle in space with a diameter between 10 m to ----- km
 10 100 1000 10000
16. Drought is a ----- disaster and it is difficult to demarcate the time of its onset and the end.
 Rapid on-set Rapid in-set slow on-set Slow in-set
17. Tsunamis those less than ----- minutes from the source cause the majority of damage.
 30 40 50 60
18. The smartest thing do to manage a flood risk by purchasing flood -----
 paper information insurance assurance
19. A major cause of morbidity and mortality among displaced populations, particularly in children aged <5 years is-----
 Meningitis Tetanus
 Acute respiratory infections Dengue
20. Tunguska event was occurred on June 30, -----, shortly after 7am in Siberia
 1890 1980 1908 1809

SECTION "B"

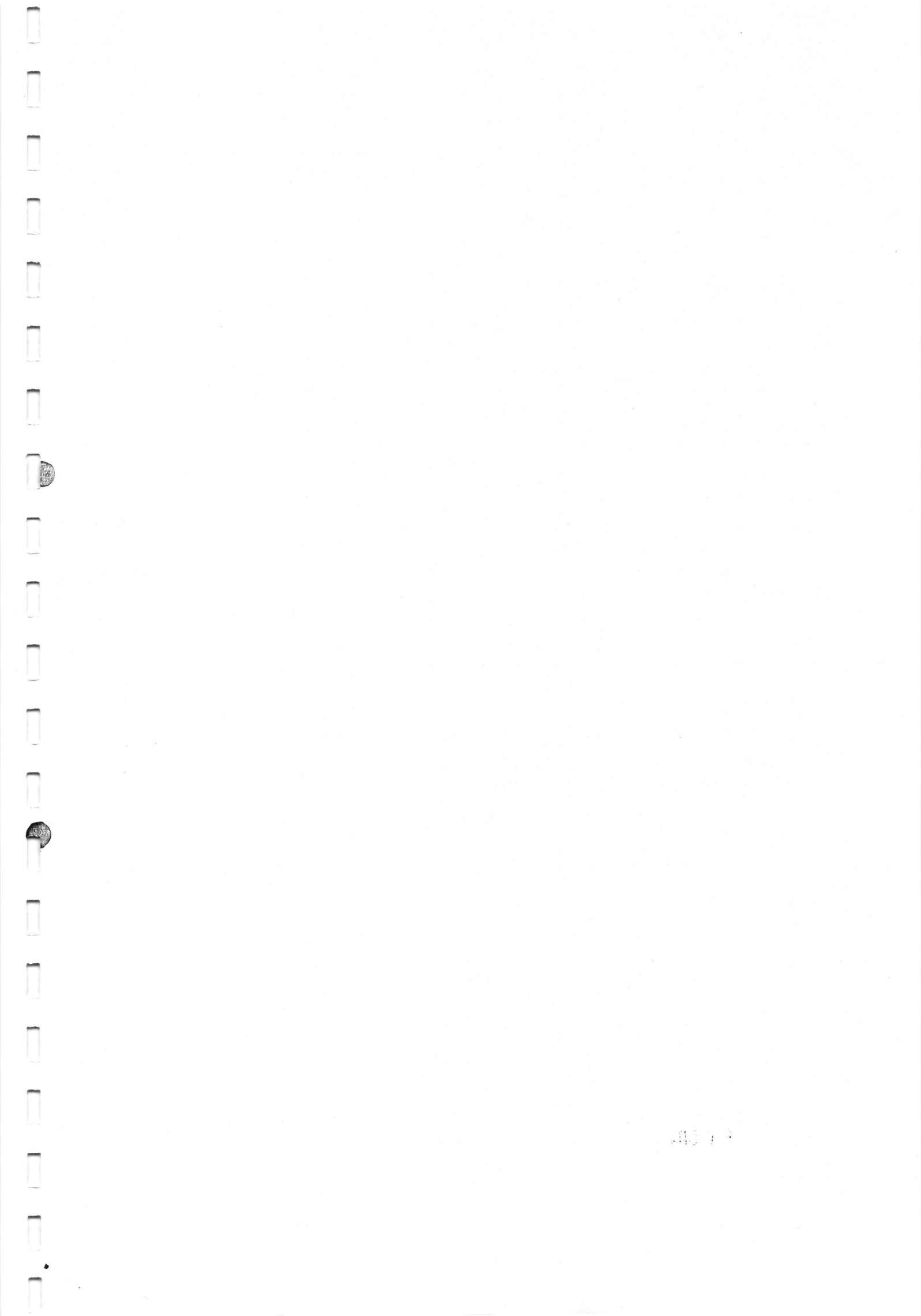
[20 Q. × 0.5 = 10 marks]

Mark "T" for true and "F" for false

1. Most of the seismic hazards to people come from man-made structures themselves.
2. The PTCC is able to alert countries several hours before the tsunami strikes.
3. Hazard is a probability of occurrence of a non-potentially damaging phenomenon

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4. Haze is fine dust, smoke, water and salt particles that increase the clarity of the atmosphere. []
5. Aftershock is a smaller earthquake that precedes a mainshock on the same section of a fault. []
6. Disaster is a sudden event that causes great damage or loss of life during a limited time and limited geographic area. []
7. Debris flow is loose sediments plus water that is pulled upslope directly by antigravity. []
8. An earthquake is a phenomenon that results from and is powered by the sudden release of stored energy that radiates seismic waves. []
9. A solar flare is a phenomenon where the sun suddenly consumes a great amount of solar radiation, much more than normal. []
10. Astronomers group Asteroids, Meteoroids, and Comets on the basis of diameter and colour. []
11. Fire is a high-temperature biochemical oxidation reaction that releases heat, light and other products. []
12. Agricultural drought is form of drought occurs when moisture level in soil is sufficient to maintain average crop yields. []
13. There are a significant number of meteorite craters on the surface of Earth, and more than 370 have been identified. []
14. Leptospirosis is a zoonotic bacterial disease that is transmitted through contact of the skin and mucous membranes with water, damp vegetation, or mud contaminated with rodent urine. []
15. The term Tsunami has been derived from a Japanese term Tsu meaning 'harbor' and nami meaning 'popular'. []
16. Comet is frozen water and/or carbon dioxide plus small rock fragments and dust like a "dirty snowball" core is ice surrounded by rock particles. []
17. Epicenter is the point on the surface of the Earth directly above a focus. []
18. Limnic eruption is a rare type of natural disaster in which SO_2 suddenly erupts from deep lake water, posing the threat of suffocating wildlife, livestock and humans. []
19. A subsequent, less intense earthquake that occurs a few minutes to a year or so after a main earthquake, and in the same general area is known as beforeshock. []
20. Tornado is a natural disaster resulting from a thunderstorm, that is violent, rotating columns of air which can blow at speeds between 50 and 300 mph, and possibly higher. []



KATHMANDU UNIVERSITY
End Semester Examination
August, 2018

Level : B. Sc.
Year : III
Time : 2 hrs. 30 mins.

AUG 19 2018
Course : ENVS 337
Semester: II
F. M. : 55

SECTION "C"

[3 Q.×7=21 marks]

Answer *ANY THREE* questions

1. Suggest three engineering/non-engineering solutions in detail that could be done in *Radhe Radhe* (Bhaktapur) area to decrease the risk from the Hanumante river food. Discuss on effective mitigation measures.
2. "Disasters can provide development opportunities," Discuss.
3. Discuss three environmental friendly engineering methods that sometimes can prevent a landslide.
4. If you were working as Disaster Manager for drought, then what would be your strategies on the coming dry season in Nepal?

SECTION "D"

5. Write short note on (any *FOUR*)
 - a. Minimizing Impact Hazard
 - b. Natural disasters in Nepal
 - c. Natural service functions of wildfire
 - d. Public Awareness as a tool of disaster management
 - e. Role of information dissemination in disaster management[4 Q.×4=16 marks]
6. Differentiate between (any *FOUR*)
 - a. River flooding and Tsunami Flooding
 - b. Lahars and Debris flow
 - c. Relief and Rehabilitation
 - d. Avalanche and Flashflood
 - e. Forecasting and Warning[4 Q.×3=12 marks]
7. Discuss in the following terms (any *THREE*)
 - a. Causes of tsunami
 - b. Pyroclastic flows
 - c. Post flood impact
 - d. Hazard Map[3 Q.×2=6 marks]

