

KATHMANDU UNIVERSITY
End Semester Examination
August/September, 2017

Mark Scored:

Level : B. Sc.

Year : III

Course : ENVS 337

Semester : II

Exam Roll No. :

Time: 30 min

F. M. : 20

Registration No.:

Date SEP 06 2017

SECTION "A"

[20 Q × 0.5 = 10 marks]

Mark "✓" in the appropriate box.

- _____ can develop quickly, sometimes in just a few minutes and without any visible signs of rain.
 Fast floods Rapid flood Flash floods Flush Flood
- A meteoroids are generally exploded in an aerial burst in the atmosphere at an altitude between _____ km, or collide with earth.
 15 and 80 12 and 50 30 and 70 50 and 90
- _____ is degree of loss (range from 0%, no damage to 100%, total loss).
 Environmental hazard Risk
 Vulnerability Elements at risk (E)
- _____ is the mixing of sand or soil and groundwater during the shaking of a moderate or strong earthquake.
 Liquiation Liquefaction Liquilization Liquefraction
- _____ is the population, buildings and civil engineering works, economic activities, public services, utilities and infrastructure, etc at risk in a given area
 Environmental hazard Risk
 Vulnerability Elements at risk (E)
- The transmission is influenced by meteorological conditions including rainfall and humidity and often exhibits strong seasonality.
 Dengue Meningitis Measles Tetanus
- Drought can occur by improper distribution of _____ in time and space, and not just by its amount.
 flood rain snowfall dust
- A localized depression in the surface topography, usually caused by the collapse of a subterranean structure, such as a cave is
 Sinkhole Sinkhole Sinkaihole Holesink
- An event of June 30, 1908, shortly after 7am in Siberia, Observing a blue-white fireball with a glowing tail descending from the sky is known as
 The Tunguska event The fireball event
 The Yellow stone event The Tung Tista event

10. An outbreak of a contractible disease that spreads at a rapid rate through a human population .
 Epidemic NAET Meningitis Tetanus
11. _____ are like small tsunamis.
 Seiches Sesiches Schiie Shichite
12. Frozen water and/or carbon dioxide plus small rock fragments and dust like a “dirty snowball” core is called
 Comet Meteorite Meteor Asteroid
13. There were more than 73,000 snow shoveling-related injuries treated at hospital emergency rooms, doctors' offices and clinics in each year in _____.
 Canada US Nepal India
14. Mathematics, that has been set by the Indian Meteorological Division (IMD) for identifying the _____.
 drought volcano earthquake landslide
15. The term Tsunami has been derived from a _____ term Tsu meaning 'harbor' and nami meaning 'waves'.
 Chinese Japanese American Italian
16. The PTWC is able to alert countries several hours before the _____ strikes.
 landslide volcano earthquake tsunami
17. Wild fire scientists and firefighter classify fire behavior according to the layer of _____ that is allowing the fire spread.
 soil fuel rain wind
18. A meteoroid entering the atmosphere at about _____ km above Earth's surface will become a meteor with emitting the light.
 65 75 85 95
19. _____ is a phenomenon where the sun suddenly releases a great amount of solar radiation, much more than normal.
 Solar storm Solar flare Solar blizzard Solar tornado
20. The second main earthquake hazard is ground displacement (ground movement) along a - _____.
 fold coast ridge fault

SECTION "B"

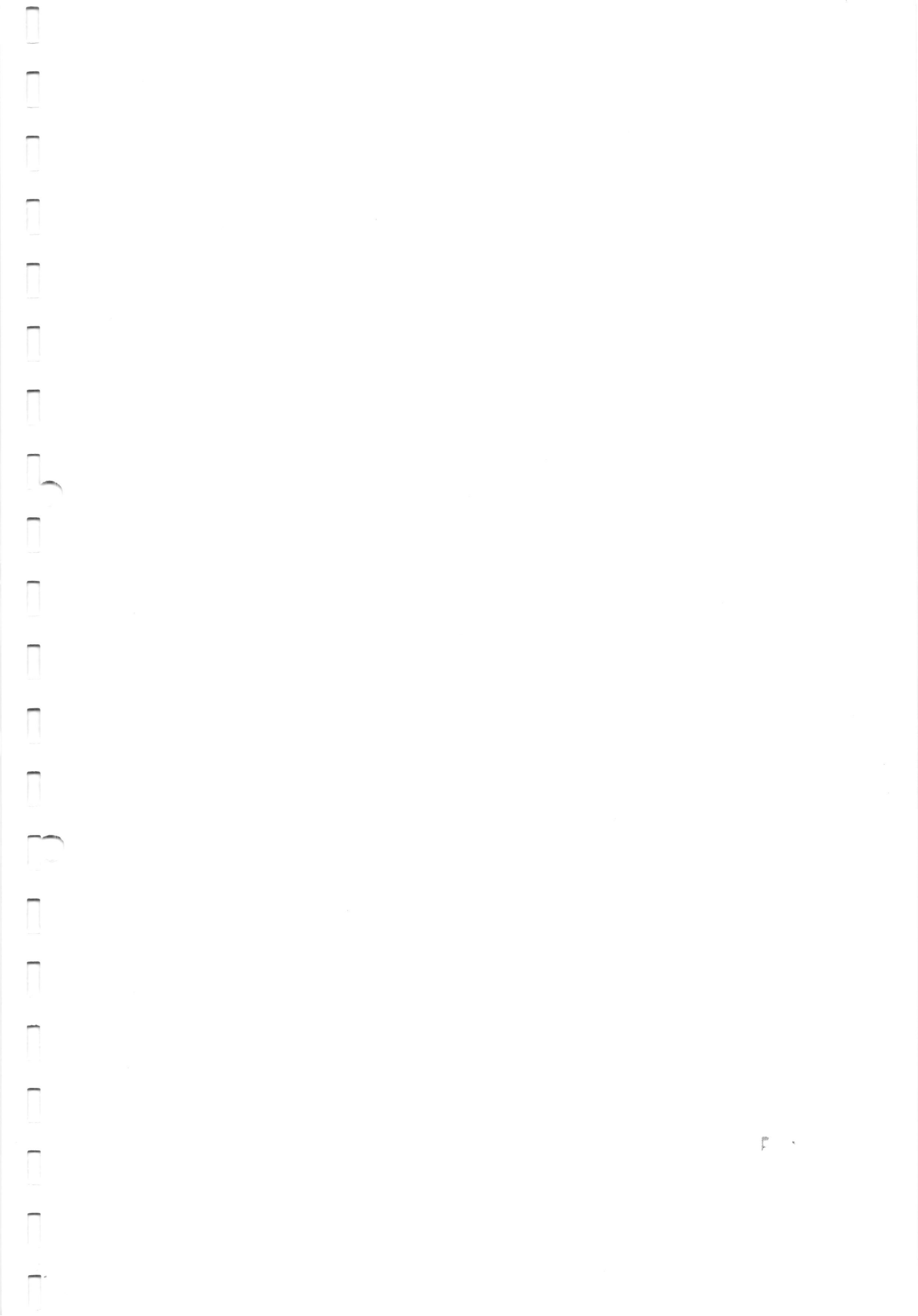
[20 Q. × 0.5 = 10 marks]

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

21. On a yearly basis, 70 to 75 damaging volcanoes occur throughout the world.
22. Local tsunami events or those less than 30 minutes from the source cause the majority of damage.

SEP 06 2017

23. A supervolcano is an eruption which is thousands of times larger than a normal eruption. []
24. Social drought is form of drought occurs when moisture level in soil is insufficient to maintain average crop yields. []
25. An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of soil beneath the Earth's surface. []
26. Astronomers group Asteroids, Meteoroids, and Comets on the basis of diameter and composition. []
27. Drought is basically caused by deficit rainfall, which is a meteorological phenomenon. []
28. During a wildfire, plant tissue and other organic material is rapidly oxidized and broken down by combustion, or burning. []
29. In 1995 the US National Oceanic and Atmospheric Administration (NOAA) began developing the Deep Ocean Assessment and Reporting of Tsunami (DART) system. []
30. Most of the hazards to people come from disasters are caused by natural structures itself. []
31. Anthropogenic hazard is a threatening event, or the probability of occurrence of a potentially damaging phenomenon within a given time period and an area. []
32. Drought is negative balance between precipitation and water use (through evaporation, transpiration by plants, domestic and industrial uses etc) in a geographical region. []
33. Snow shoveling can pose threats to the leg and knee, if proper precautions are not taken. []
34. Source of infection is more likely to be the killed people than survivors by the natural disaster. []
35. Sudden numbers of dead bodies in the disaster-affected area can fuel fears of outbreaks. []
36. The first main volcano hazard is the effect of ground shaking. []
37. The state of Bihar in India which receives more than 3000 mm of rainfall every year is declared drought affected as it is insufficient to have two good crops. []
38. The tsunamis travel much slower than ordinary waves. []
39. There are a significant number of meteorite craters on the surface of Earth, and more than 170 have been identified. []
40. Wildfire is a self-sustaining, rapid, high-temperature biochemical oxidation reaction that releases heat, light and other products. []



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F. M. : 55

SECTION "C"

[3Q. × 7 = 21 marks]

Answer *ANY THREE* questions.

1. What are the major steps for landslide hazard management?
2. Discuss several ways in which awareness and engineering structure decrease the flood hazard.
3. What is seismic hazard? How can we mitigate in context of Nepal?
4. Briefly describe four ways to mitigate wildfire hazard in Chure and Mahabharat forest area of Nepal.

SECTION "D"

5. Write short note on (*ANY FOUR*) [4 Q. × 4 = 16]
 - a. Role and functions of youth in Disaster Management
 - b. Poverty and vulnerability
 - c. Techniques of assessment in disaster response phase
 - d. Role of information dissemination in disaster management
 - e. Drought management
6. Differentiate between (*ANY FOUR*) [4 Q. × 3 = 12]
 - a. Hazard and total risk
 - b. Cloudburst and Hailstorm
 - c. Meteor and comet
 - d. Forecasting and Warning
 - e. Normal flood and Flash flood
7. Discuss in the following terms (*ANY THREE*) [3 Q. × 2 = 6]
 - a. Post flood impacts
 - b. Drought mathematics
 - c. Debris flows
 - d. Impact Hazards

