

KATHMANDU UNIVERSITY
End Semester Examination
February/March, 2018

Marks Scored:

Level : B. Sc.
Year : IV

Course : ENV5 440
Semester: I

Exam Roll No. : Time: 30 mins.

F. M. : 20

Registration No.:

Date

MAR 07 2018

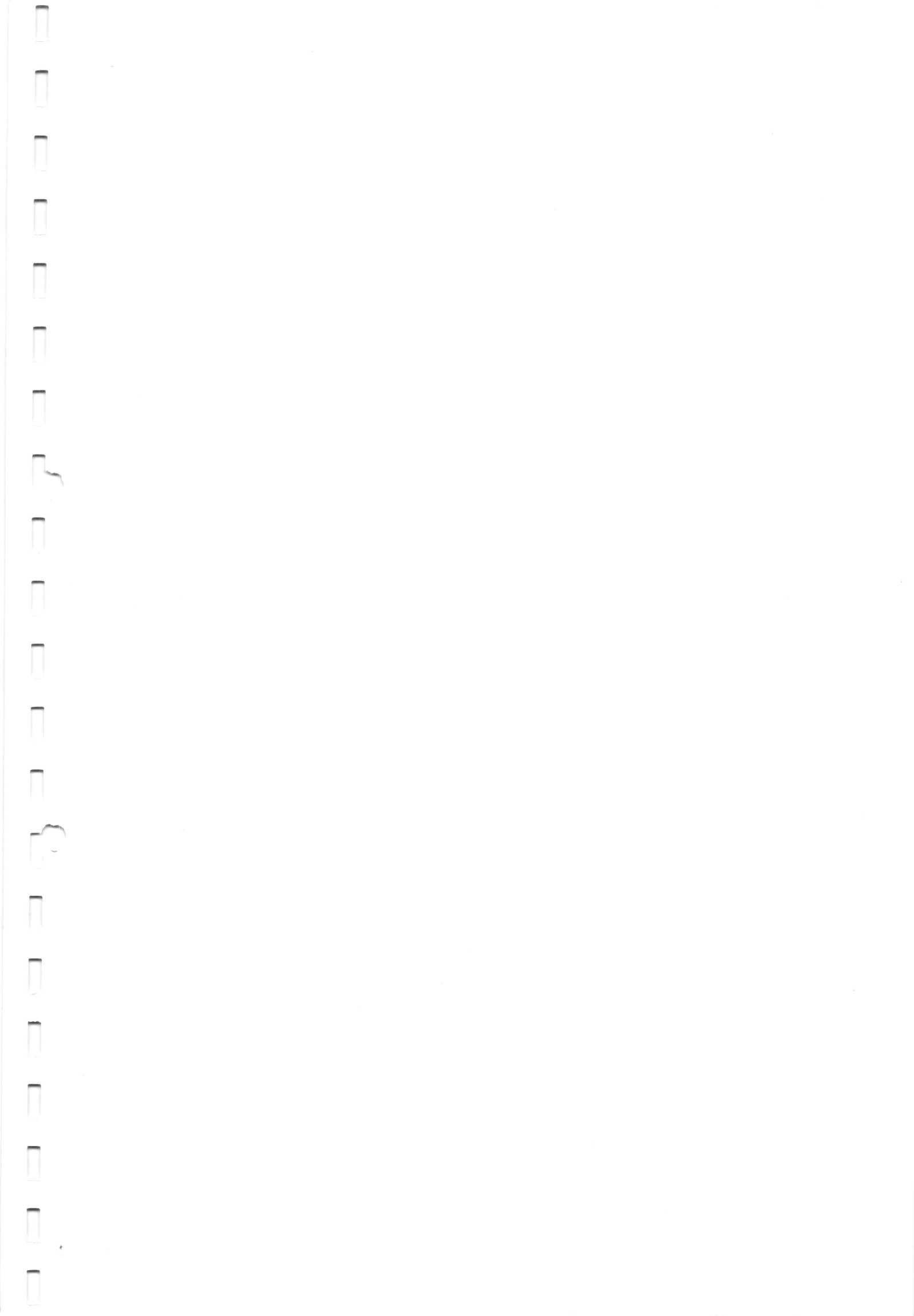
SECTION "A"

[40Q × 0.5 = 20 marks]

- I. Mark "X" in the most appropriate answer box.
1. If wellbeing of people is like a tree and agriculture is its root, what are the branches?
 Produce Manufacture Commerce Photosynthesis
 2. Querns, pestles, mortars are the technologies of earlier agriculture referring to
 Grinding stones Storage jars Granaries Sickles
 3. To feed the present world population, a minimum annual increase in food production is necessary
 1% 5% 10% 15%
 4. The term 'yoke and oxen' in the development of agricultural system refers
 Bronze age Iron age Golden age Silver age
 5. The origin of Potato, Tomato, Peanut, and Pineapple is considered to be from
 Mexico South America
 South-east Asia Sub-sahara Africa
 6. Cattles, sheep, goats are domesticated by seed planters are
 Herd animals Predatory animals
 Pet animals Dooryard animals
 7. Among the following it is NOT the 'cash crop' for Nepalese farmers
 Millet Banana Tea Sugarcane
 8. Pressure to turn agriculture at the margins of a resource area links to
 Oasis hypothesis Natural habitat hypothesis
 Edge hypothesis Social hypothesis
 9. Though "Green Revolution" fed additional 3 billion people than in 1960 but the hunger and food insecurity got apparent during the food crisis of the year
 2007 1997 1987 1967
 10. It is the crop originated in North America
 Sunflower Millet Rubber Rice
 11. FAO estimates that food production must rise in the world by 70% to meet the food need of the people of the year
 2015 2020 2030 2050

12. The highest childhood stunting due to food nutrition deficiency is recorded in
 Nepal Lao People's Democratic Republic
 India Bangladesh
13. The highest level of pesticides use (kg per hectare of farmland) is in
 USA Germany Colombia China
14. The discarded philosophy in food security context
 Poverty reduction increases household purchasing capacity
 Higher per capita income growth brings more poverty reduction
 Traditional food production system is sustainable
 Sustained poverty reduction enhances long-term food security
15. According to MOAC/Nepal (2008), area occupied by agricultural land is
 7% 16% 28% 39%
16. In hilly region of Nepal, where year round irrigation is available trans-planting of paddy is done during
 March-April May-June
 July-August September-October
17. Among the followings it is not one of the dimensions of food security
 Food access Food utilization
 Food business Food availability
18. The science and art of cultivation on the soil, raising crops and rearing livestock is farming but cultivation of fruits and vegetables in specific is
 Agriculture Viticulture Horticulture Sericulture
19. In mountains of Nepal, the best time of planting maize is
 March-April May-June
 July-August September-October
20. The amount of nitrogen in the chemical fertilizer, under the name "urea", available in Nepalese market is
 21% 18% 46% 60%
- II. Fill the gaps with appropriate word/s or value.
21. Tillage systems developed only when seed culture moved from highlands to valleys through the selection of improved varieties and _____
22. The percent of world's food calories lost or wasted between field and fork is about _____ percent.
23. For the purpose of revenue, until the year 2000, Nepal government had categorized the Khet and Bari land into Chahar/Char, Abbal, Sima and _____
24. A commitment to satisfy human food and fiber needs and to enhance the quality of life for farmers and society as a whole, now and into the future _____

25. Traditional agriculture is highly cyclical whereas conventional agriculture is highly _____
26. In intensive traditional agriculture in developing countries, the major role among land, labor, capital and fossil fuel energy, is of _____
27. The normal plough can dig up to the depth of _____ inches.
28. Agriculture is often viewed as consisting of three types of systems: economic, _____ and social.
29. The land which is usually used as open pastures and not sold or purchased is categorized as _____ lands in Nepal.
30. The term used to define the type of agriculture where farmers produce what they consume and consume what they produce is _____
31. An integrated farming system which involves technical aspects, economic aspects and _____ is called organic farming.
32. In vegetables, the recommended dose of nitrogen (kg/hectare) for Nepal is _____
33. This is the only district where millet and wheat are the two principal crops _____
34. It is defined as the cultivation of land with high inputs of labour, fertilizers and pesticides to obtain the maximum output _____
35. The recommended dose of nitrogen (kg/ha) in irrigated crop land of Nepal _____
36. _____ is plowing a land perpendicular to the slopes and as horizontally as possible.
37. The highest food deficit condition is in the continent _____
38. Double cropping, Triple cropping, Quadruple cropping are the types of _____ pattern.
39. _____ is the practice of growing two or more crops simultaneously on the same field.
40. According to the six-year comparison study between organic, IPM and conventional cotton production systems by Swezey et al. 2007, the lowest plant diversity is found in the system _____



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SECTION "B"

[3Q × 7 = 21 marks]

Attempt *ANY THREE* questions:

1. Discuss on the relationship of agricultural development and population growth.
2. Write in detail on the land use planning of Nepal.
3. What is sustainable agriculture? How it is practiced to reduce the environmental impacts?
4. On the basis of your interaction with farmer during your field work, discuss the challenges and opportunities of agriculture in rural Nepal.

SECTION "C"

5. Write short notes on (*ANY FOUR*): [4Q × 3=12]
 - a. Food security
 - b. Land use classification
 - c. Agricultural intensification
 - d. Crop rotation
 - e. Land degradation
6. Differentiate between: [4Q × 3=12]
 - a. Inorganic and organic farming
 - b. Issues and challenges in land use
 - c. Food sufficiency and food insecurity
 - d. Modern and traditional agriculture
7. Give reasons why? [5Q × 2 = 10]
 - a. Modern farming contributes to global warming
 - b. Soil is the primary component of life
 - c. Pesticide pollution is in soil, water and air
 - d. Agricultural lands are shrinking in the world
 - e. New generation people are less strong than hunters and gatherers

