The Open University of Sri Lanka
B.Sc./B.Ed Degree Programme-Level 03-2008/2009
BTU 1201/BTE 3201 – Plant Diversity
Assessment Test I

Duration – One (01) hour **Reg.No. .....**

Date: 31st January 2009 **Time: 1.30 p.m.– 2.30 p.m.**

Answer all questions on this paper itself.

There are **three (03)** questions and **four (04)** pages in this question paper.

01. Given below include both true and false statements. Indicate the true statement by writing letter "T" and false statement by writing "F" in the space given in front of each statement.

i. Gas vacuoles in Cyanobacteria are not true vacuoles bound by tonoplast. (.....)

ii. The last stage of the viral replication cycle is the assembly of the viral components. (.....)

iii. So far teichoic acid has been recorded only in gram negative bacteria. (.....)

iv. Rhizomorphs are mostly found in the members of Basidiomycetes. (.....)

v. Fungal hyphae is not a part of the vegetative phase of fungi. (.....)

vi. The binomial system of nomenclature was proposed by Whittaker in 1969. (.....)

vii. The antibiotic Cephalosporin blocks the peptidoglycan synthesis in bacterial wall. (.....)

viii. Plasmogamy, karyogamy and mitosis are the stages of sexual reproduction in fungi. (.....)

ix. *Cystopus* produces club-shaped sporangiophores and conidia in chains. (.....)

x. *Absidia* produces sporangiophores as groups along the stolons opposite the rhizoids. (.....)

xi. The sexual spores of Ascomycotina are the ascopores. (.....)

xii. The vegetative body of Myxomycota is a mass of protoplasm. (.....)

xiii. Turnip yellow mosaic virus shows an icosahedral symmetry. (.....)

xiv. Asci are produced in definite fruit bodies in all members of Ascomycetes. (.....)

xv. Pycnidia are a type of asexual fruit bodies produced by fungi. (.....)

xvi. The photosynthetic pigments of cyanobacteria are contained in well organized Chloroplasts. (.....)

xvii. *Helminthosporium* is a plant parasitic fungus and causes rots in ripe fruits. (.....)

xviii. *Volveriella* is an edible fungus cultivated in Sri Lanka. (.....)

xix. The normal vegetative cells of *Saccharomyces ludwigii* are diploid. (.....)

xx. Mycoplasma lack true cell walls. (.....)

2) Give one (01) example for each of the following. Your answer should be a generic name.

i. A cyanobacterium that reproduces by budding .....

ii. A bacterium that converts ammonia into nitrites in soil.....

iii. A well known bracket fungus that causes root diseases in many economic plants .....

iv. A fungus often growing on stale bread and having grey coloured colony .....

v. The fungus that causes the damping off diseases in seedlings .....

vi. A bacterium that produces spores in sac-like sporangia .....

vii. A commonly found stink-horn in Sri Lanka .....;

viii. A bacterium that forms mutualistic associations with the roots of leguminous plants .....

ix. A filamentous cyanobacterium with a basal heterocyst .....

x. A parasitic fungus that causes white rust disease in *Amaranthus* plants .....

3) Give three (3) basic differences between the following. No diagrams are required.

i. Endomycorrhizal and ectomycorrhizal association in fungi.

	Endomycorrhizal association	Ectomycorrhizal association
a)	.....	.....
	.....	.....
b)	.....	.....
	.....	.....
c)	.....	.....
	.....	.....

ii. Sexual reproduction structures of *Aleurina* and *Eurotium.*

	Aleurina	*Eurotium*
a)	.....	.....
	.....	.....
b)	.....	.....
	.....	.....
c)	.....	.....
	.....	.....

iii. Gram positive and Gram negative cell walls of bacteria.

	Gram positive	Gram negative
a)	.....	.....
	.....	.....
b)	.....	.....
	.....	.....
c)	.....	.....
	.....	.....

iv. Primary and secondary mycelia of *Agaricus*.

	Primary mycelia of *Agaricus*	Secondary mycelia of *Agaricus*
a)	.....	.....
	.....	.....
b)	.....	.....
	.....	.....
c)	.....	.....
	.....	.....