



དཔལ་ལྷན་འབྲུག་གཞུང་།  
རྒྱལ་གཞུང་གི་གཞི་གཞུག་ལྷན་ཚོགས།



**ROYAL GOVERNMENT OF BHUTAN  
ROYAL CIVIL SERVICE COMMISSION**

**BHUTAN CIVIL SERVICE EXAMINATION 2012  
MAIN EXAMINATION  
(OCTOBER 13, 2012)**

**EXAMINATION CATEGORY : TECHNICAL  
PAPER II : GENERAL SUBJECT KNOWLEDGE  
for BIO SCIENCE GROUP**

**ROYAL CIVIL SERVICE COMMISSION  
BHUTAN CIVIL SERVICE EXAMINATION (BCSE) 2012  
EXAMINATION CATEGORY: TECHNICAL**

**PAPER II: GENERAL SUBJECT KNOWLEDGE for BIO SCIENCE GROUP**

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**Date** : 13 October 2012  
**Total Marks** : 100  
**Examination Time** : 90 minutes (1.5 hours)  
**Reading Time** : 15 minutes (prior to examination time)

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**READ THE FOLLOWING INSTRUCTIONS CAREFULLY:**

- You have 15 minutes (prior to writing time) to read the instructions, clarify doubts, make sure that you have all the pages, and check for any printing errors. DO NOT write during this time.
- This paper consists of **TWO Parts – Part I and Part II. All questions are compulsory.**
  - ✓ **Part I** consists of **70 Multiple Choice Questions** of 1 (one) mark each; and
  - ✓ **Part II** consists of **10 Short Answer Questions** of 3 (three) marks each.
- While answering the multiple choice questions, write only the letter of the correct answer chosen against the question number, clearly and legibly. E.g. 71(c). Any double writing or smudgy answers shall not be evaluated.
- All answers must be written in the answer booklet provided to you. You will not be given any marks for answers written other than in the answer booklet. Ask for additional answer booklets if required.
- Ensure that you write your roll number in the space provided in the answer booklet. In case you take additional answer booklet, make sure that you write your roll number in the additional answer booklet as well.
- This paper has 14 (fourteen) printed pages including this cover page.

**PART I : MULTIPLE CHOICE QUESTIONS**

**Choose the correct answer and write down the letter of the correct answer chosen in the Answer Sheet against the question number. E.g. 71(c). Each question carries ONE mark.**

1. The basic unit of life is:

- a) Genes
- b) Cells
- c) Gametes
- d) Tissues

2. The main gases in “green house emissions” are:

- a) CO<sub>2</sub>, N, O<sub>2</sub>
- b) CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O
- c) CH<sub>4</sub>, N<sub>2</sub>O, O<sub>2</sub>
- d) N<sub>2</sub>O, O<sub>2</sub>, CO<sub>2</sub>

3. Which one of the following is known as the “power house” of the cell?

- a) Golgi body
- b) Mitochondrion
- c) Ribosome
- d) None of these

4. Respiration consists of a series of reactions resulting in a step-wise degradation of:

- a) Glucose to Pyruvic Acid and Hydrogen
- b) Glucose to Carbon Dioxide and Water
- c) Glucose to Ethanol and Carbon Dioxide
- d) None of the above

5. Which one of the following acid is the strongest?

- a) pH 1.1
- b) pH 2.3
- c) pH 6.2
- d) pH 0.5

6. Molecules that have the same number of atoms and the same number of electron are called:

- a) Isotopes
- b) Isotones
- c) Iso-electronics
- d) Isosters

