BRAC UNIVERSITY (Sample Questions)
Undergraduate Programs
Admission Test

Read the admission instruction to identify the sections relevant to you. The sample questions indicate the pattern not the difficulty level of the questions that will appear in the admission test.

The test consists of **FIVE SECTIONS. Section A, Section C, Section D and Section E contain MCQs. Section B** contains **a question on English composition**.

SECTIONS	QUESTION TYPE	NO. OF QUESTIONS	TOTAL MARKS
A. ENGLISH LANGUAGE	MCQ	25	25
B. ENGLISH COMPOSITION	WRITTEN	1	40
C. LOGICAL REASONING	MCQ	8	24
D. MATHEMATICS	MCQ	15	30
E. HIGHER MATHEMATICS	MCQ	10	20

For SECTIONS A, C, D and E give all your answers on the first page of the Answer Booklet by filling in the spaces on the answer letter of your choice, using a ballpoint or fountain pen. **Filling more than one space will be considered a wrong answer.**

Example: If the correct answer for a question is A, your answer booklet should be marked as shown below:

Sample answer:

For SECTION B, write your answer in the space provided on the second page of the Answer Booklet, using a ballpoint or fountain pen.

SAMPLE QUESTIONS:
SECTION-A: ENGLISH LANGUAGE

Complete the sentences using the options given below. Select the best option

1. Work should be a meaningful and _____part of one's life.

(A) interested   (B) productive   (C) exported   (D) sufficient

2. The concert was _____ by an hour.

(A) cancelled   (B) delayed   (C) postponed   (D) presented

Reading Comprehension
There are two groups of the people who have difficulty in writing – those who cannot write at all, and those who have to, often for a living. In between there is a huge middle-ground that forms the core of the audience for "Write On". This group can be broken down into two sections. The first comprises those who can write a bit but feel they have nothing to say and therefore rarely write anything. The other group has lots to say but has no clear idea about how to write it down and so does not bother either.
So, how does a television program encourage first-time writers? One of the best methods of getting people to write anything down is to encourage them to talk about themselves. When they talk about their own

experiences the words come rushing out. The talker is freed from the worries of correct spelling and grammar – that can come later.

Many people have reacted enthusiastically to the possibility of a television series designed to encourage and improve writing skills. They include students who attend classes and teachers and volunteer tutors who hold them. And there has been enthusiasm too from those who would like to improve those writing tasks that they are often required to do in their daily lives. This television series is intended for all these groups; the students who want guidance and encouragement, the tutors who would like more ideas to help the students, the rest of us who just want to be better at writing.

Some people do not write because

(A) they are not sure how to   (B) they never say anything   (C) they can only write a little
(D) they talk too much

SECTION- B: ENGLISH COMPOSITION

Write a composition, not exceeding 200 words, expressing your opinion about the topic below.

Students in the secondary level of Bangladesh must learn two more languages (such as Arabic, Chinese, French, etc.,) other than Bengali and English, to get high level jobs in overseas countries. Give your opinions regarding this.

SECTION- C: LOGICAL REASONING

1. First statement: Mariam said, "Asma and I both have cats."
Second statement: Asma said, "I don't have a cat."
Third statement: Mariam always tells the truth, but Asma sometimes lies.
If the above three statements are true, which of the following statements must also be true?

I. Asma has a cat.   II. Mariam has a cat.   III. Asma is lying.

(A) II only   (B) I and II only   (C) I, II, and III   (D) III only   (E) None

2. First statement: A fruit basket contains more apples than lemons.
Second statement: There are more lemons in the basket than there are oranges.
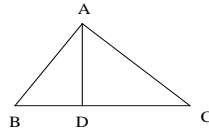Third statement: The basket contains more apples than oranges.
If the first two statements are true, the third statement is

(A) true   (B) false   (C) uncertain

SECTION- D: MATHEMATICS

1. In the following figure BD=4cm, DC=25 cm. The line AD is perpendicular to BC and AD=10 cm. Find ∠BAC. (নীচের চিত্রে BD= ৪ সেমিঃ, CD= ২৫ সেমিঃ। AD সরলরেখা BC সরলরেখার ওপর লম্ব এবং AD= ১০ সেমিঃ। কোণ <BAC এর মান কত?)

(A) 90^C (B) 60^C (C) 100^0 (D) 115^0 (E) 30^C

2. In 1985 the population of town A and town B were the same. From 1985 to 1995 the population of town A increased by 60% while the population of town B decreased by 60. What percentage of the population of town A was the population of town B in 1995? (১৯৮৫ সালে শহর A এবং শহর B এর লোকসংখ্যা সমান ছিল। ১৯৮৫-৯৫ এই সময়ের মধ্যে শহর A এর লোকসংখ্যা বৃদ্ধি পায় ৬০ % এবং শহর B এর লোকসংখ্যা হ্রাস পায় ৬০ %। ১৯৯৫ সালে শহর A এর লোকসংখ্যা B এর শতকরা কত ভাগ?)

(A) 60   (B) 75   (C) 25   (D) 45   (E) 30

SECTION- E: HIGHER MATHEMATICS

1. A cube four cm on each side is painted blue and cut into 64 one cm cubes. How many one-cm cubes are painted blue on exactly two faces? (৪ সেমি দৈর্ঘ্যের ধারবিশিষ্ট একটি ঘনকের চারপাশে নীল রং দিয়ে সেটিকে কর্তন করে সমান ৬৪ টি ছোট ঘনকে ভাগ করা হল। ১ সেমি দৈর্ঘ্যের ধারবিশিষ্ট ছোট ঘনকের কতগুলোর শুধুমাত্র দু'টি তল নীল রংবিশিষ্ট হবে?)

(A) 8   (B) 12   (C) 16   (D) 24   (E) 32

2. What is the probability of getting 80% or more of the questions correct on a 10-question true-false exam merely by guessing? (একটি পরীক্ষায় ১০ টি বাক্য আছে। কোন বাক্য সত্য হলে 'সত্য' এবং মিথ্যা হলে 'মিথ্যা' লিখতে হয়। শুধুমাত্র আন্দাজ করে ৮০% বা তার চেয়ে বেশি সঠিক উত্তর দেবার সম্ভাব্যতা কত?)

(A) $\frac{1}{16}$ (B) $\frac{5}{32}$ (C) $\frac{3}{16}$ (D) $\frac{7}{32}$ (E) $\frac{7}{128}$

3. Express in radians the period of the graph of the equation $y = \frac{1}{3}(cos^2x - sin^2x)$. ($y = \frac{1}{3}(cos^2x - sin^2x)$ সমীকরণটির লেখচিত্র থেকে পর্যায় নির্ণয় করে রেডিয়ান এককে রূপান্তরিত কর।)

(A) $\frac{\pi}{2}$ (B) π (C) $\frac{3\pi}{2}$ (D) 2π (E) 3π

4. If $x = 1 - e^t$ and $y = 1 + e^{-t}$, find y in terms of x. (যদি $x = 1 - e^t$ এবং $y = 1 + e^{-t}$ হয়, তবে y কে x দ্বারা প্রকাশ কর।)

(A) $y = x$ (B) $y = 1 - x$ (C) $y = \frac{x-1}{x}$ (D) $y = \frac{x}{x+1}$ (E) $y = \frac{2-x}{1-x}$