

Beaconhouse National University SCHOOL OF COMPUTER AND IT

SAMPLE FOR ADMISSION TEST 2025

DIVO		
		BS-Computer Science
		BS-Artificial Intelligence
		BS-Software Engineering
Name:		Signature
Applicant ID)_	July 2025

IMPORTANT INFORMATION FOR CANDIDATES

- The objective of the Admission Test is to determine the aptitude of candidates for BS Computer Science, BS Artificial Intelligence, and BS Software Engineering with **premedical** background. For those who qualify the test, the merit for admission will be determined on the basis of their previous academic record.
- The Test consists of THREE sections i.e. Section I (IQ & General Knowledge), Section II (Science) and Section III (English). The test is structured as Multiple-Choice questions and you have to record the correct answer on the provided answer sheet.
- 3. The duration of the Test is 1 hour 30 min divided as follows: Section I (30 min), Section II (30 min) and Section III(30 min).
- **4.** Candidates should note the following instructions for taking the Test:
 - a. Read each question carefully before answering it. Work out the solution and record your answer on the Answer Sheet against the question number. **Answers written on Test Booklet will not be accepted.** Use the blank pages/margins of the Test Booklet for rough work.
 - b. All answers should be written with ball pen. Answers written with lead pencil will not be accepted.
 - c. If you finish answering questions in a section before the allowed time, check your work on the attempted section only. Do not refer to the other section of the Test. Failure to follow this instruction will result in your disqualification.
 - d. There is no negative marking i.e. no mark will be deducted for a wrong answer or for not answering a question.
 - e. Use of **calculators is allowed**. Mobile phones must be switched off during the test. Do not bring anything to the test center except the **Admit Slip** and **Pens/Ball pens** and a **Calculator**
- 5. Answer key of Sample Test Paper is provided at the end

SYLLABUS FOR ADMISSION TEST

SECTION I – IQ/GEN. KNOWLEDGE (30 min, 30 questions, 30 marks)

Test of logical reasoning, understanding relationship between sets of words and figures, Sequences of numbers and alphabets, Puzzles and problem solving.

General Knowledge about history, geography, everyday science and current affairs.

SECTION II Science (30 min, 30 questions, 30 marks)

Basic concepts from Physics, Chemistry, Biology and Mathematics

SECTION III - English (30 min, 25 questions, 25 marks)

Sentence completion, Synonyms/Antonyms, Word-pair comparisons. Reading Comprehension

SECTION I (IQ/GENERAL KNOWLEDGE)

No. of Questions: 30 Time Allowed: 30 minutes

1. What comes next in the series?

2 1 0.5 0.25

Options

2. What number is next in the series? 21 13

21 17 21

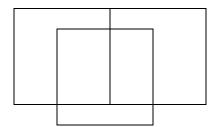
21 21 '

Options

3. Which figure is next in the sequence?

Options

4. How many squares and rectangles are in the figure below?



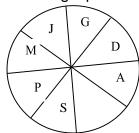
Options

5. What is the next figure in the sequence?

Options

1 1 1 1 1 1 1

6. Find the missing alphabet:

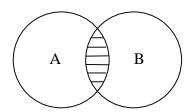


Options

7. A cheque has the amount written on it as "Rupees One Ninety Nine Thousand Nine Only" Write this amount in numbers.

Options

8. In the figure below, if circle A is VARIABLE and circle B is VENTURE, what is the shaded area?



Options

9. Complete the analogy

Zoo is to animals as Aquarium is to_____.

Options

- **10.** What is greater: one-half of 1/3 OR one-third of 1/2? **Options**
- **11.** Which one of these words comes first in a dictionary: PIECE, PEACE or PIERCE?

Options

12. Which is the odd one out? Cycling, Fencing, Boxing, Wrestling, Hockey

Options

13. What is the figure shown below called?



Options

14. Majid runs faster than Saleem, Jamil runs faster than Majid, Haroon runs faster than Saleem. Who runs the fastest??

Options

15. If 17th June is a Monday, what day it will be on 17th July?

Options

16. What is measured by a BAROMETER?

Options

17. Who was Galileo?

Options

18. Which country's cricket team is called PROTEAS?

Options

19. What does the acronym SNGPL stands for?

Options

20. The highest civil award of Pakistan is **Nishan i Pakistan**, what is the second highest civil award of Pakistan?

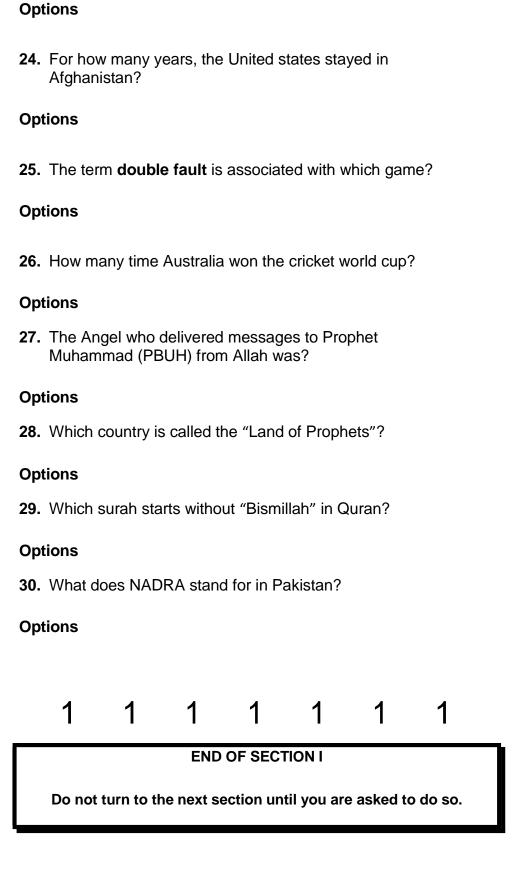
Options

21. Sun consists of 70% of which gas?

Options

22. International youth day is observed every year on?

Options



23. Which game is called 'Game of Kings'?

2 2 2 2 2 2 2

Section II (Science)

No. of Questions: 30 Time Allowed: 30 min

The sample contains only 20 questions

1. What is the life span of Red Blood Cells in days?

Options

2. What is the most abundant element in the universe?

Options

Which molecule carries the genetic code?Options

4. Who is known as Father of modern genetics?

Options

5. What is the name of the largest part of the human brain?

Options

6. Diamond is an allotropic form of ______.

Options

7. Persons having which blood group are considered to be universal recipients?

Options

8. Which is the largest gland in the human body?

Options

2 2 2 2 2 2 2

9. What is the functional unit of DNA?

Options

10. What is the name of a group of similar cells that perform a specific function?

Options

11. What was discovered by Robert Hooke?

Options

12. What type of reaction is represented by the equation: $Zn + 2HCI \rightarrow ZnCI_2 + H_2$?

Options

13. What is the pH of a neutral solution?

Options

14. Which law of motion is also called law of Inertia?

Options

15. What is the velocity of sound in vacuum?

Options

16. What is the molar mass of CO₂? (Atomic masses: C=12, O=16)?

Options

17. What is the mean of the numbers 3, 5, 7, 9, and 11?

Options

2 2 2 2 2 2 2

18. What is another name for wind pipe in humans?

Options

19. If a = -2 and b = 3, what is the value of $-3a^2b$?

Options

20. 25% of A is 75. What is the value of A?

Options

END OF SECTION II

Do not turn to the previous section

SECTION III (English)

No. of Questions: 25 Time Allowed: 30 min

The sample contains only 16 questions

n Que	estions 1 to 4, selec	t the word which best fills in the bla	ank. (4 marks)
1.	"The army has	the brunt of the insurgents	s' attack.
	A. bearB. bearingC. bornD. borne		
2.	Controlling the intended intended into the conference of the control of the contr	ake of fatty foods mayort.	_you reduce
	A. be helpB. helpC. helpedD. helping		
3.		er government may water needed for growth acceleration an	
	A. down B. in C. out D. up		
4.		ers may use more fertilizers than r t only the crop but the animals or h	
	A. controllingB. damagingC. prohibitingD. specifying		
	-	5 to 7, two capitalized words are , followed by four pair of words	_

From the lettered choices, select the one pair which has the same

relationship as the capitalized word pair (3 marks)

5. LITTLE : BIG

A. easy : simple
B. quiet : loud
C. good : better
D. plain : ugly

6. WRITER : NOVELIST

A. scientist : astronomerB. teacher : studentC. physician : patientD. poet : researcher

7. ERROR: CORRECT

A. claim : accept
B. blot : obliterate
C. justice : deny
D. mistake : rectify

- **8.** Select the word that has been spelt <u>in-correctly</u>:
 - A. rectify
 - B. sewere
 - C. access
 - D. recommend
- 9. Select the word which means nearly the opposite of INADVERTENT
 - A. accidental
 - B. deliberate
 - C. thoughtless
 - D. unintentional
- 10. Select the word which means nearly the same as SECLUSION
 - A. association
 - B. company
 - C. sociality
 - D. isolation

READING COMPREHENSION

PASSAGE: Read the passage and then answer questions 11 to 16.

Vietnam's Confucian lineage means education is something of a national obsession, but experts say schools are failing students, leaving parents desperate to get their children into western institutions that will give them the qualifications they need to find employment.

Some 20,000 Vietnamese now study in Australia, 16,500 in the United States and 5,000 in the UK — small but significant numbers from a communist country where only the elite have traditionally had access to foreign education. Yet despite the increased exodus, foreign universities still remain out of reach for most families in Vietnam, where average per capita income is just over \$1,500.

Vietnam's state education does score well in some indices — the country ranked 17th out of 65 for mathematics and science, according to the Program for International Student Assessment (PISA) chart, ahead of many wealthy western countries, including the US. But top officials have warned these test results do not accurately reflect the quality of overall education in a nation where central control has cramped policy innovation.

"We have to be honest and admit that if fully assessed, Vietnamese students' capacity is still poor," Nguyen Vinh Hien, deputy minister of education and training was quoted in Tuoi Tre newspaper in 2013.

Four decades after the end of the Vietnam War in 1975, officials have yet to fully reform an education sector, which critics say still works to promote the Party rather than create skilled workers. Authorities have kept in place a system heavy on rote learning, regurgitation of facts to pass exams, and obedience to authority — with little room for critical thinking.

Students rely on outdated, leaden textbooks, cheating is routine in exams while underpaid teachers are renowned for withholding chunks of the syllabus to instead impart in private classes they can charge for.

"University education is so bad. Textbooks are full of unnecessary, tedious theory," former education minister Pham Minh Hac told AFP, warning that the books were so information-heavy they turned students off studying.

During and immediately after Vietnam's annual high-school graduation exams in the summer there are always multiple complaints to the ministry of education of cheating by students. In June 2014, well-known education activist, teacher Do Viet Khoa posted on his Facebook page video clips of students copying during Literature and History exams at a high school in northern Hoa Binh province. According to Khoa, exam supervisors deliberately left the exam rooms, allowing the examinees to freely copy from already prepared papers and discuss the exams among themselves, VietnamNet news site said. Such clips routinely go viral and prompt widespread concern among parents, but authorities rarely — if ever — take action.

As a result of these shortcomings, Vietnamese state schools and universities are not producing graduates companies want to hire — some 147,000 postgraduates

could not find work this year, according to official statistics. "These graduates can't meet the demands of the labour market," Hac said, blaming the school system for "teaching knowledge not wisdom". Instead staff for management positions are often imported — from Korea, China and the US.

With very few top-quality private schools in Vietnam, escaping the dysfunctional state education system is a priority for the better off. "They have changed a lot in their thoughts, their lifestyle, their performance, behavior and viewpoints," businessman Nguyen Quang Thinh said of his two sons studying in the US at a cost of \$40,000 a year. Lu Thi Hong Nham, director of study abroad consultancy firm Duc Anh added: "Many students were fed up when studying inside the country, but overseas they gained very good results."

Unless communist Vietnam is prepared to let the education system be run by experts not politicians, things are not going to change, renowned teaching expert Pham Toan warned. "You can do nothing... when education is in the communist party's resolution," he said, referring to a paper passed in 2013 that calls for a "comprehensive renovation" of the education system, without specifying changes.

- **11.** Approximately, how many Vietnamese students are studying abroad?
 - A. 20,000
 - B. 30,000
 - C. 40,000
 - D. 50,000
- **12.** What is Vietnamese parents' concern regarding their children's education:
 - A. children are not taught about Confucian ideology
 - B. education in Vietnam is expensive
 - C. children are unable to find jobs after their education
 - D. scholarships are not available for foreign education
- **13.** The passage lists a number of facts about Vietnamese education system. One of these is encouraging. Identify it.
 - A. Underpaid teachers
 - B. Vietnamese students ranked 17th
 - C. obedience to authority
 - D. books are information heavy
- **14.** What is the meaning of the word "exodus" used in the second paragraph?
 - A. attraction
 - B. departure
 - C. feasibility
 - D. exposure

- **15.** According to the passage, the remedy for the educational problems of Vietnam lies in:
 - A. Change of communist regime
 - B. Better pay for teachers
 - C. Giving teachers charge of education
 - D. Strict punishment for cheating
- **16.** A suitable heading of the passage can be:
 - A. Quality of Education in Vietnam
 - B. Vietnam: A haven for cheats
 - C. Corruption in Vietnam
 - D. Education Policies of Vietnam

ANSWER KEY FOR SAMPLE TEST PAPER 2025

SECTION	SECTION I (IQ/ GEN KNOWLEDGE)				
Question	Answer				
Number					
1	0.125				
2	25				
3					
4	7				
5	S				
	♥				
6	V				
7	199,009				
8	VER (or its permutations)				
9	fish				
10	Both are equal				
11	PEACE				
12	Hockey				
13	hexagon				
14	Jamil				
15	Wednesday				
16	pressure				
17	Astronomer or Scientist				
18	South Africa				
19	Sui Northern Gas Pipelines Limited				
20	Hilal e Pakistan				
21	Hydrogen				
22	12 th August				
23	Chess				
24	20 years				
25	Tennis				
26	6 times				
27	Jibrael (A.S)				
28	Palestine				
29	Al Toba				
30	National Database and				
	Registration Authority				
	SECTION II (Science)				
Question	Answer				
Number					
1	120 days				
2	Hydrogen				

3	DNA
4	Gregor Mendel
5	Cerebrum
6	Carbon
7	AB+
8	Liver
9	Gene
10	Tissue
11	Cell
12	Single displacement
13	7
14	1st Law
15	zero
16	44 g/mol
17	7
18	Trachea
19	-36
20	300
S	ECTION III (ENGLISH)
Question	Answer
Number	
1	D
2	В
3 4	A
	В
5	В
6	A
7	D
8	В
9	В
10	D
11	С
12	С
13	В
14	В
15	С
16	A