

Beaconhouse National University SCHOOL OF COMPUTER AND IT

SAMPLE FOR ADMISSION TEST 2025

	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 **PreEngineering** 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 (Mathematics) 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 Mathematics (30 min, 30 questions, 30 marks)

Fractions, Decimals, Ratio and proportion, Word problems, Percentages, Problem solving using algebra, Basic geometry, Basic Calculus

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

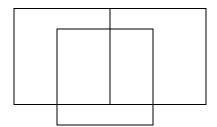
21 21 '

Options

3. Which figure is next in the sequence?

Options

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



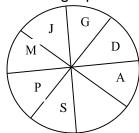
Options

5. What is the next figure in the sequence?

Options

1 1 1 1 1 1 1

6. Find the missing alphabet:

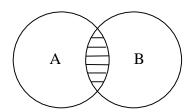


Options

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?

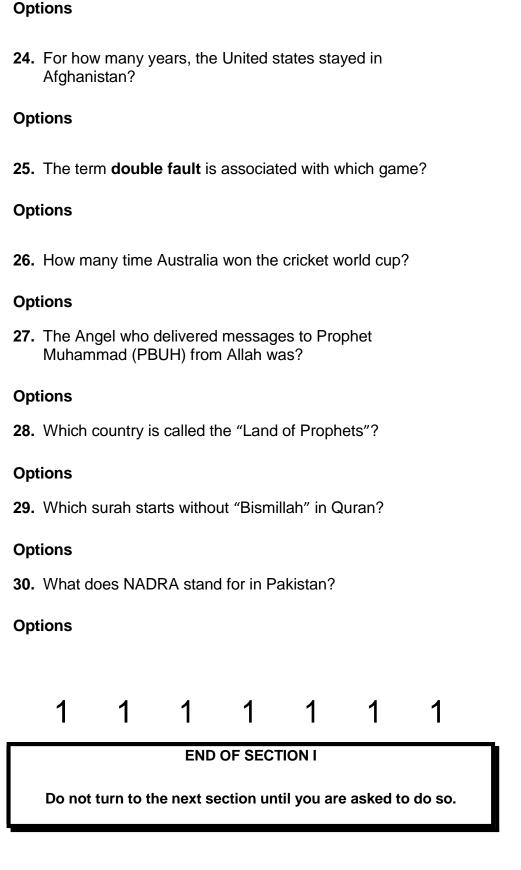
Options

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'?

Section II (Mathematics)

No. of Questions: 30 Time Allowed: 30 min

The sample contains only 20 questions

1. What percentage is 0.001 of 0.05?

Options

2. In a certain school, 40% of all students are 8 years old or younger. The number of the remaining students is 120. How many students are 8 years old or younger?

Options

3. What is $7\frac{1}{4} \div 3\frac{3}{8}$. Give your answer in mixed fraction.

Options

4. The Google map of a housing scheme is displayed on a scale of 500:1. If a square on the map has area of 16 sq cm, what is the actual area (on the ground) in square meters?

Options

5. A car washer can wash 8 cars in 18 minutes. At this rate how many cars he can wash in 4 hours and 12 minutes?

Options

6. If 30 shirts are sold for Rs. 6,000 at a profit of 7.5%. What was the cost price of each shirt?

Options

7. The applicants to a college increased by 20% from 2010 to 2011. If the number of applicants in 2011 were 960, how many applicants were there in 2010?

Options

8. If 0.000005893 is expressed in the form 5.893×10^{n} , what is the value of n?

Options

2 2 2 2 2 2

9. Mr. Saleem found that his monthly expenses are as follows:

Rent and Utilities: 35% Food: 25% Clothing: 5% Misc: 15% Vehicle: 20%

If he spends Rs. 5,000 on Food, how much does he spend on his Clothing?

Options

10. Arrange the following numbers in ascending order of magnitude.

3/5, 0.15, 7/8, 0.45, 17/19

Options

11. Find the value of the expression $\frac{1}{3+\sqrt{3}} + \frac{1}{\sqrt{3}-3} = \frac{2}{3}$

Options

12. In an election, a total of 120,000 votes were cast for two opposing candidates, Mr. A and Mr. B. If Mr. A won the election in ratio 5:3, how many votes were cast for him?

Options

13. A room has dimensions Length = 12 feet, Breadth = 8 feet, Height= 6 feet. Find the cost of painting the room (four walls and ceiling) at cost of Rs. 5 per square foot. Assume area of doors and windows of the room is 60 square feet which is not to be painted.

Options

14. If $(j \div k) = 24$ and $k = (2 \div 7)$, what is the value of $(1 \div 3 j)$?

Options

15. A parent rewards a child with Rs. 10 for a correctly solved problem and fines him Rs. 2 for an incorrectly solved problem. If the child gets Rs. 80 after 50 problems, how many problems did he solve correctly?

Options

2 2 2 2 2 2 2

16. What is the radius of a circle that has a circumference of 3.14 centimeter?

Options

17. A packet contained 450 chocolates. 60% of these were distributed among children. How many chocolates remained in the packet?

Options

18. The volume of a cylinder is 440cm² and the height is 35cm. Find the radius of the cylinder of a base.

Options

19. If the average (mean value) of a, b, c, 5, and 6 is 6, what is the average of a, b, c, and 13?

Options

- **20.** Let x = 1, y = 1, z = 1. Perform the following sequence of steps.
 - 1. Add 5 to x
 - 2. If x is less than 10, add 3 to z, otherwise add 3 to y
 - 3. If y is less than 4 repeat from step 1
 - 4. Stop.

What are the final values of x, y and z?

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 intestinal discomfo	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	ON I (IQ/ GEN KNOWLEDGE)
Question	Answer
Number	
1	0.125
2	25
3	
4	7
5	
	\$
6	V
7	
	199,009
8 9	VER (or its permutations) 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	2 %
2	80

3	$2\frac{4}{27}$
4	400 sq meters
5	112 cars
6	Approx Rs. 186 per shirt
7	800 applicants
8	- 6
9	Rs. 1000
10	0.15, 0.45, 3/5, 7/8, 17/19
11	-0.577 0R -1/√3
12	75,000 votes
13	Rs. 1380
14	7/144 OR 0.0486
15	15 questions
16	0.5cm
17	180
18	2cm
19	8
20	X=11, y=4, z=4
S	ECTION III (ENGLISH)
Question	Answer
Number	
1	D
2	
	В
3	A
3 4	A B
5	A B B
5 6	A B B A
5 6 7	A B B A D
5 6 7 8	A B B A D B
5 6 7 8 9	A B B A D B B B B
5 6 7 8 9 10	A B B A D B B D
5 6 7 8 9 10 11	A B B A D B B D C
5 6 7 8 9 10 11	A B B B C C C
5 6 7 8 9 10 11 12 13	A B B A D D B B D C C C B
5 6 7 8 9 10 11 12 13	A B B B A D B B C C C B B B
5 6 7 8 9 10 11 12 13	A B B A D D B B D C C C B