

AIR UNIVERSITY

ISLAMABAD CAMPUS

GUIDELINE FOR SOLVING ENTRANCE TEST PAPER

- Bachelor of Business Administration (BBA-Honours)
- Bachelor of Electrical Engineering
- Bachelor of Mechanical Engineering
- Bachelor of Mechatronics Engineering
- Bachelor of Science in Computer Science
- Bachelor of Science in Economics and Finance
- Master of Business Administration (MBA) 1-1/2 Years
- Master of Business Administration (MBA) 3-1/2 Years
- Master of Science in Management Sciences
- MS/MPhil in Linguistics and Literature



ISLAMABAD CAMPUS

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1. The Student has to identify correct answers to 100 multiple choice questions in two hours time. The following guidelines must be read carefully in order to save time during the test.
2. You will be provided an examination paper containing 100 multiple choice questions on the subjects specified above and a single-leaf computerized answer sheet. You are to bring along a lead pencil, an eraser and a sharpener. The question paper, the answer sheet and the Admit Card are to be returned to the invigilator at the end of the examination. Sample questions are provided at the end of guidelines.

How to fill your Admit Card Number

3. A space is provided, labeled Admit Card No., at the top of the answer sheet. Fill your Admit Card number in this space. Given below is the method for filling the Admit Card Number; say your card number is 10324. In the Admit Card No.' table, five columns represent the five digits. The first digit of your five-digit Admit Card number is 1, therefore, in the first column from left, fill in the box numbered 1 as shown below. The second digit in your admit card number is 0; therefore, you should fill box numbered 0 in the second column. Likewise, you should fill corresponding boxes in respective columns for digit 3, 2 and 4.

Admit Card No.

0	0	0	0	0
☐	☒	☐	☐	☐
1	1	1	1	1
☒	☐	☐	☐	☐
2	2	2	2	2
☐	☐	☐	☒	☐
3	3	3	3	3
☐	☐	☒	☐	☐
4	4	4	4	4
☐	☐	☐	☐	☒
5	5	5	5	5
☐	☐	☐	☐	☐
6	6	6	6	6
☐	☐	☐	☐	☐
7	7	7	7	7
☐	☐	☐	☐	☐
8	8	8	8	8
☐	☐	☐	☐	☐
9	9	9	9	9
☐	☐	☐	☐	☐

Areas of Testing

4.
 - Engineering Course:** The paper for Computer Science and all Engineering disciplines i.e. Electrical, Mechanical and Mechatronics will be same. It will have three sections, covering subject of English, Mathematics and Physics.
 - MSMG/MT/MBA/BBA Courses:** The papers for MBA and BBA Candidates are similar in structure; however, they differ in degree of difficulty. Both papers have four Sections i.e. English, Arithmetic, Algebra and Geometry.
 - BS Economics & Finance:** The paper for BS Economics & Finance will have five sections, covering subject of English, Arithmetic, Algebra Geometry and General Economics Awareness.
 - MS/MPhil Linguistics & Literature:** English (Page No.7).

How to Answer a Question

5. Each question has maximum of four choices. If you think choice C is the correct answer to question number 3; fill box C as shown below;

	A	B	C	D
1	☐	☐	☐	☐
	A	B	C	D
2	☐	☐	☐	☐
	A	B	C	D
3	☐	☐	☒	☐
	A	B	C	D
4	☐	☐	☐	☐
	A	B	C	D
5	☐	☐	☐	☐

How to Change an Answer

6. After filling box C in the above example, if you think that choice B is correct answer instead of choice C, first erase box C completely, and then fill in box B as Shown below:

A	B	C	D
☐	☒	☐	☐

7. Please ensure that no mark is left in box C when you erase it, otherwise the correct answer will be disregarded.

SAMPLE QUESTIONS

ENGLISH

8. Read the following two passages. Each is followed by several questions about it. Choose the best answer for each question.

Passage No. 1.

“While most desert animals will drink water if confronted with it, for many of them the opportunity never comes. Yet all living things must have water, or they will expire. The herbivores find it in desert plants. The carnivores slake their thirst with the flesh and blood of living prey. One of the most remarkable adjustments, however, has been made by the tiny kangaroo rat, who not only lives without drinking but also subsists on a diet of dry seeds containing about 5% free water. Like other animals, the kangaroo rat has the ability to manufacture water in its body by a metabolic conversion of carbohydrates. But it is notable for the parsimony with which it conserves its small supply by every possible means, expending only minuscule amounts in its excreta and through evaporation from its respiratory tract.”

- Q.1. What is the main idea of this passage?
- A. The kangaroo rat is uniquely suited to desert life.
 - B. Animals need water to exist in the desert.
 - C. Herbivores and carnivores live together in the desert.

- D. Animals' metabolic systems are complex.
- Q.2. Which of the following is NOT a source of water for the desert animals?
- A. Desert plants
 - B. Metabolic conversion of carbohydrates in the body.
 - C. The blood of other animals
 - D. Streams.
- Q.3. The word it in line 3 refers to
- A. a living things
 - B. the desert.
 - C. the opportunity
 - D. water

Passage No. II

..... omitted

Chose one word or phrase that best keeps the meanings of the original sentence if it is substituted for the underlined word or phrase.

Q.4. Samuel Morse's most important contribution to the telegraph was a notched rod which would operate the lines of the sending device.

- A. Receiver.
- B. Microphone.
- C. Matrix.
- D. Mechanism.

Chose one word or phrase that best complete the sentence.

Q.5. Life of Benjamin Franklin; a practical man _____ many stories have been told, was unusually productive.

- A. of.
- B. about whom
- C. about
- D. of which

MATHEMATICS

Q.6. If matrix $A = \begin{bmatrix} 1 & -2 & 3 \\ -2 & 3 & 1 \\ 4 & -3 & 2 \end{bmatrix}$, the determinant $|A| =$

- A. 25,
- B. -25,
- C. -10,
- D. -8.

Q.7. When two coins are tossed simultaneously, sample space of the event is:

- A. $\{(H,H), (H, T), (T, H), (T, T)\}$,
- B. $\{(H,H), (T, T)\}$,
- C. $\{(H,T), (T, T)\}$,

- D. $\{(H,H)\}$,
- Q. 8. The point on a curve where the derivative $\frac{dy}{dx} = 0$ is called
- A. Maximum Point,
 - B. Minimum Point,
 - C. Critical Point,
 - D. None of these.

PHYSICS

- Q.9. A man walks from point A to B at an average speed of 1.0 m/s and immediately returns at an average speed of 1.5 ms^{-1} . What is the average speed for the round trip?
- A. 0.33 m/s
 - B. 1.20 m/s
 - C. 1.25 m/s
 - D. 2.50 m/s
- Q.10. A net force of 10 N accelerates object to 5.0 m/s^2 . What net force would be required to accelerate the same object 1.0 m/s^2 ?
- A. 1.0 N
 - B. 2.0 N
 - C. 5.0 N
 - D. 50 N
- Q.11. The product of mass and velocity is called.
- A. Acceleration,
 - B. Moment Arm,
 - C. Negative Acceleration,
 - D. Momentum

ARITHMETIC

- Q.12. A certain rectangle has a perimeter of 54. If the ratio of the length of the rectangle to the width is 5 to 4, what is the length of the rectangle?
- A. 30
 - B. 27
 - C. 24
 - D. 15
- Q.13. Mrs. Ahmed receives a salary raise from Rs. 25000/- to Rs. 27500/- Find the percentage of increase.
- A. 90
 - B. 10
 - C. 11
 - D. 24
- Q.14. Tickets for a US lottery cost \$45 for overseas participants and \$30 for the locals. If tickets were sold for a total \$ 12,000, how many tickets were sold to the locals?
- A. 150
 - B. 350
 - C. 250

D. 650

ALGEBRA

Q.15. Each of 'x' cartons contains 'y' boxes. Each box contains 'z' marbles. How many marbles are there in all?

- | | |
|-----------|-----------|
| a) xyz | b) yz/x |
| c) xy/z | d) xz/y |

Q.16. If $x^2 + y^2 = 9$ and $(x-y)^2 = 3$, what is the value of xy ?

- | | |
|-------|------|
| a) 16 | b) 9 |
| c) 6 | c) 3 |

Q.17. If $2^a = x$ and $2^b = y$, then $xy = ?$

- | | |
|--------------|--------------|
| a) 9^{a+b} | b) 2^{ab} |
| c) 4^{a+b} | d) 2^{a+b} |

GEOMETRY

Q.18. Distance of a point (2,1) from a line $x+y+1=0$ is?

- | | |
|-----------------|-----------------|
| a) $1/\sqrt{2}$ | b) $2/\sqrt{2}$ |
| c) $3/\sqrt{2}$ | d) $4/\sqrt{2}$ |

Q.19. If the sum of the edges of a square is 48 inches, then the area of the square is?

- | | |
|-------|--------|
| a) 96 | b) 144 |
| c) 64 | d) 12 |

Q.20. A square and a triangle have equal areas. If one side of the square and the base of the triangle have length 'b', what is the relationship between 'b' and the altitude 'h' of the triangle?

- | | |
|--------------|-------------|
| a) $b/2 = h$ | b) $2b = h$ |
| c) $b = h$ | d) $b = 2h$ |

GENERAL ECONOMICS AWARENESS

Q.21. The Secretary General of United Nations is _____

- | | |
|-----------------|------------------|
| A. Barack Obama | B. Shahid Afridi |
| C. Ban Ki-Sun | D. Ban Ki-Moon |

Q.22. Chinese currency is _____

- | | |
|-----------|-----------------|
| A. Yuan | B. Renminbi |
| C. Dollar | D. Both A and B |

Q.23. One of the major exports of Pakistan is _____

- | | |
|---------|-----------|
| A. Iron | B. Cotton |
|---------|-----------|

C. Crude Oil

D. Onion

Q.24. State Bank of Pakistan started its operations from the year _____

A. 1974

B. 1948

C. 1952

D. 1947

For MS/MPhil Linguistics & Literature

Part A Comprehension (50 Marks)

Passage 1

(The actual passage having more questions will be more complex and lengthy than this one)

Read the following text, and answer the questions given at its end by ticking the best option:-

Pulp Friction

Every second, 1 hectare of the world's rainforest is destroyed. That's equivalent to two football fields. An area the size of New York City is lost every day. In a year, that adds up to 31 million hectares -- more than the land area of Poland. This alarming rate of destruction has serious consequences for the environment; scientists estimate, for example, that 137 species of plant, insect or animal become extinct every day due to logging. In British Columbia, where, since 1990, thirteen rainforest valleys have been clearcut, 142 species of salmon have already become extinct, and the habitats of grizzly bears, wolves and many other creatures are threatened. Logging, however, provides jobs, profits, taxes for the government and cheap products of all kinds for consumers, so the government is reluctant to restrict or control it.

Much of Canada's forestry production goes towards making pulp and paper. According to the Canadian Pulp and Paper Association, Canada supplies 34% of the world's wood pulp and 49% of its newsprint paper. If these paper products could be produced in some other way, Canadian forests could be preserved. Recently, a possible alternative way of producing paper has been suggested by agriculturalists and environmentalists: a plant called hemp.

1. The main idea of paragraph one is:

- ☐ Scientists are worried about New York City
- ☐ Logging is destroying the rainforests
- ☐ Governments make money from logging
- ☐ Salmon are an endangered species

2. How many species of salmon have become extinct in BC?

- ☐ 27
- ☐ 31
- ☐ 137
- ☐ 142

3. How much of the world's newsprint paper is supplied by Canada?

- ☐ 31%
- ☐ 49%
- ☐ 34%
- ☐ 19%

Passage 2

(The actual passage having more questions will be more complex and lengthy than this one)

Read the following text, and answer the questions given at its end by ticking the best option :-

Although teasing is an extremely common activity among children it has not been a frequent topic of research. In fact most of the sociolinguistic research on teasing has focused on adult-child interaction, where teasing has been found to serve a variety of social functions. For example, in cultures that are egalitarian teasing has been found to be a way to teach social norms and is often preferred to more authoritarian methods (Scieflin 1986). It is also seen as a way to enhance solidarity and strengthen social bonds through the shared enjoyment that participants experience (Eisenberg 1986). Some working-class parents view teasing as a way to teach children to defend themselves and control their hurt feelings (Heath 1983, Miller 1986). Miller (1986) also found that teasing activities teach children how to play with language and develop creative and novel responses. Finally a sociolinguistic study of teasing among adults found that teasing was often a mild and indirect type of reproof for overserious behavior such as bragging, complaining, and extolling

4. The lines you have just read recognize

- a) the representational function of teasing
- b) the semantics of teasing
- c) the interactional function of teasing
- d) the phonological developments of teasing

5. The given text

- a) recognizes different social speech communities and their teasing practices
- b) sees teasing as a human universal with the same conventions for all people
- c) argues teasing is inappropriate and has no educational function
- d) applies descriptive phonology to analyzing teasing practices

Part B. Linguistics & Literature (20 Marks)

(The actual section will have approx 20 questions.)

Choose the *best* answer to complete each statement.

6. The system of social rules that a speaker knows about using language is

- a) grammar
- b) morphology
- c) orthography
- d) pragmatics

7. The smallest distinctive sound units of a language are its

- a) words
- b) affixes
- c) phonemes
- d) morphemes

8. William Shakespeare was born in the year _____ :

- a) 1564
- b) 1544
- c) 1578
- d) 1582

Part C. Essay (30 Marks)

You are expected to write an expository essay on any given area of Linguistics / ELT / Literature.

WISH YOU BEST OF LUCK

