



GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY
MODEL EXAM PAPER FOR SELECTION TEST FOR CIVIL CANDIDATES
ENROLMENT FOR 39TH INTAKE
FACULTY OF ALLIED HEALTH SCIENCES
SUBJECT RELATED

Instructions:

Answer all questions.

Use the answer sheet given to you.

Mark an 'X' in the box representing the correct answer against the relevant question number.

There is only a single correct answer for each question. Avoid marking multiple answers.

BIOLOGY

1. Which one of the following organelles is involved in modifying and packaging of proteins?
 - A). Ribosomes.
 - B). Golgi complex.
 - C). Smooth endoplasmic reticulum.
 - D). Rough endoplasmic reticulum.

2. Energy currency of the human body is
 - A). ADP.
 - B). ATP.
 - C). NADH.
 - D). FADH.

3. Prokaryotic cells lack
 - A).plasma membranes.
 - B).DNA.
 - C).membrane bound organelles.
 - D).ribosomes.

4. The functional and structural unit of the kidney is
 - A). Bowman's capsule.
 - B). Nephron.
 - C). loop of Henle.
 - D). proximal convoluted tubule.

CHEMISTRY

5. Most electronegative element among the following is
- A). Sodium.
 - B). Bromine.
 - C). Francium.
 - D). Oxygen.
6. The metal used to recover copper from a solution of copper sulphate is
- A). Na.
 - B). Ag.
 - C). Hg.
 - D). Fe.
7. Which of the following gives the correct sequence of compounds to represent bond nature as polar covalent, ionic, and non-polar covalent respectively?
- A). SiO_2 , CaO , I_2 .
 - B). CaO , SiO_2 , I_2 .
 - C). I_2 , CaO , SiO_2 .
 - D). SiO_2 , I_2 , CaO .

PHYSICS

8. Which statement from the following **does not** describe a reaction at equilibrium?
- A). Forward and backward reactions occur at equal rates.
 - B). The system must be closed.
 - C). Equilibrium constant (K_c) increases as the reaction progresses.
 - D). Concentrations of reactants and products are constant.
9. A stone dropped from rest reaches the ground in 8 seconds. The distance travelled by the stone in the last second is
- A). 320 m.
 - B). 160 m.
 - C). 75 m.
 - D). 70 m.
10. A washing machine is operated with a motor of 320 W and the rotating disc of it has a moment of inertia 5 kgm^2 . Starting from rest, how long will it take to acquire a frequency of 240 rpm under the above power? ($\pi^2 = 10$)
- A). 3 s
 - B). 5 s
 - C). 8 s
 - D). 10 s