

KHYBER PAKHTUNKHWA, PUBLIC SERVICE COMMISSION

COMPETITIVE EXAMINATION FOR THE POSTS OF PROVINCIAL MANAGEMENT SERVICES (BPS-17)

General Knowledge (Every Day Science)

Time Allowed: 3 Hours

MAX. MARKS: 100

Note: Attempt any **Five** questions. All questions carry equal marks.

Q. 1 (a) Write note on the following: (5x2)

(i) Green house effect (ii) Capacitors

(b) Choose the correct answer (01marks each)

(i) Water is used as coolant in the radiator of a car because it has

a) high density b) low density c) specific heat d) low boiling point

(ii) Energy stored in compressed spring is

a) Kinetic energy b) Potential energy c) Magnetic energy d) Electrical energy

(iii) Which of the principle is used in solar pannels

a) Photoelectric effect b) Compton effect c) Coulombs law d) Weins law

(iv) Which of the following is temporary memory of computer

a) ROM b) RAM c) Hard drive d) Mother board

(v) Vaccination against polio virus can be done

a) Incubation period b) When no exposure occur previously c) When disease has occurred already d) Both b and c

(vi) Which was landed on the surface of Mars

a) Appalo 1 b) Appalo 2 c) Newhorizon d) Pathfinder

(vii) The commonest physical health hazard in most industries is

a) Noise b) Heat c) Ionization radiations d) Humidity

(viii) A pottery industry worker developed symptoms of tuberculosis. The likely condition which resulted in tuberculosis was

a) Anthracosis b) Begassosis c) Silicosis d) Asbestosis

(ix) To improve the health of nation "The Millennium Developmental Goals" are mainly focused on

a) Women education b) Fertility regulation c) Health system research d) Non of these

(x) Which of the following is a hormone

a) Pepsin b) Lipase c) Adrenaline d) Saliva

Q. 2. Differentiate between the following: (04 marks each)

(a) CNG and LNG (b) Microwaves and radio waves (c) Malaria and cholera (d) Corrosion and erosion (e) Alternating current and direct current

Q. 3 (a) What is Dengue fever? How does it spread? Describe its history and remedial measures. (10 marks)

(b) Discuss the causes of Earthquakes, its prediction and management programs to combat with them. (10 marks)

Q. 4 (a) What are steroids? Explain their uses and misuses. (10 marks)

(b) What is soil salinity? How does it effect the production of crops and sustenance of forests? (10 marks)

Q. 5 Write note on any four of the following: (05 marks each)

(a) Fog and smog (b) Cloning (c) Deforestation and aforestation (d) Systolic and diastolic blood pressure (e) Step down transformer

Q. 6 (a) What are narcotics? How narcotics are affecting the young generation? Give general tests for any one narcotic. (10 marks)

(b) Differentiate between ceramics and organic polymers. Discuss the manufacturing and use of ceramics as thermisters and super conductors. (10 marks)

Q. 7 (a) What are pesticides? Classify pesticides with examples. How do they enhance the water pollution? (10 marks)

(b) Differentiate between fission and fusion reactions. What type of reactions are occurring on the surface of sun? (10 marks)