

ROYAL CIVIL SERVICE COMMISSION
CIVIL SERVICE COMMON EXAMINATION (CSCE) 2010
EXAMINATION CATEGORY: TECHNICAL
PAPER II: GENERAL SUBJECT KNOWLEDGE -MEDICAL

Total marks 100

Time 90 minutes

1. Read the following instructions before you proceed to answer the questions.
2. The question paper is divided into two sections: A and B
3. Section A is multiple choice questions (70 marks). Choose the one BEST answer to the question.
4. Part 2 is short answer question (30 marks). Answer the question to the point.
5. Use separate sheet for all the answers.
6. Number of answer sheets attached

Section A: Multiple choice question (70 marks)

SELECT ONE MOST CORRECT OR APPROPRIATE ANSWER (1 mark each for every question)

1. All are common bacterial diseases of domestic animals except ...

- a) Anthrax
- b) Brucellosis
- c) Salmonellosis
- d) Foot and Mouth Disease

2. Eve is the female of.....

- a) Goat
- b) Sheep
- c) Donkey
- d) Horse

3. Beewax is obtained from..

- a) Apis Indica
- b) Apis Dorsata
- c) Apis Florea
- d) None of above

4. Fish Meat is better than other meat as it contains more..

- a) Carbohydrate
- b) Fats
- c) Proteins
- d) Water

5. Ability of an organism to ward off infection is called.....

- a) Resistance
- b) Pathogenicity
- c) Infection
- d) Virulence

6. Which of the following cells are involved in the defense mechanism of the body?

- a) Lymphocytes
- b) Neutrophils
- c) Macrophages
- d) All of above

7. Sexually transmitted diseases in Humans are ...

- a) Syphilis
- b) Chancroid
- c) Gonorrhoea
- d) All of the above

8. All are non-communicable diseases except....

a) Hypertension

b) Diabetes mellitus

c) Tuberculosis

d) Gout

9. When the stems of a plant are modified into green flattened structures and leaves are modified into spines, it is called as..

a) Phyllode

b) Cladode

c) Bulbil

d) Phylloclad

10. In a plant, the Bud that grows at the apex of a stem or branch is called as

a) Axillary bud

b) Terminal bud

c) Accessory Bud

d) Adventitious bud

11. The storage root in a carrot is a modified.....

a) Tap root

b) Adventitious root

c) Stem

d) Leaf

12. The stem of a plant grows directly from.....

- a) Cotyledons
- b) Radicle
- c) Integuments
- d) Plumule

13. If a cell swells after being placed in a solution then the solution is.....

- a) Neutral Solution
- b) Hypertonic solution
- c) Hypotonic solution
- d) Isotonic solution

14. When a cell is fully turgid, which of the following pressure will be zero.....

- a) Suction pressure
- b) Wall pressure
- c) Osmotic pressure
- d) Turgor pressure

15. The distribution of stomata per unit area of leaf and their size affects the rate of

- a) Absorption
- b) Respiration
- c) Transpiration
- d) Guttation

16. Where would you find pseudo-stratified columnar epithelium?

- a) Mouth
- b) Epidermis
- c) Kidneys
- d) Trachea

17. The inner surface of large intestine is lined with ...

- a) Muscular Tissue
- b) Glandular Epithelium
- c) Dermis
- d) Cuticle

18. The alveoli of mammalian lungs are lined with.....

- a) Simple Cuboidal Epithelium
- b) Ciliated columnar epithelium
- c) Simple squamous epithelium
- d) Ciliated cuboidal epithelium

19. The serous membrane covering the lung is called ...

- a) Pleura
- b) Peritoneum
- c) Pericardium
- d) Serosa

20. The noble gases that is used in lasers for medical use are....

- a) Helium and Neon
- b) Neon and Argon
- c) Helium, Neon and Argon
- d) Neon, Argon and Krypton

21. In the metallurgy of Iron, when Limestone is added to the blast furnace, the calcium ion ends up in..

- a) Slag
- b) Gangue
- c) Metallic Calcium
- d) Calcium Carbonate

22. The metal used as catalyst in the Hydrogenation of Oil is

- a) Iron
- b) Nickel
- c) Cobalt
- d) Copper

23. Concentrated Sulphuric Acid changes cane sugar to

- a) Carbon
- b) Carbon-dioxide
- b) Carbon mono-oxide
- d) Oxalic Acid

24. Prolusite is a mineral that contain..

- a) Silver
- b) Manganese
- c) Chromium
- d) Zinc

25. Ethanal can be made from Ethanol by...

- a) Oxidation
- b) Reduction
- c) Hydration
- d) Dehydration

26. Rutherford's scattering experiment is related to the size of..

- a) Nucleus
- b) Atom
- c) Electron
- d) Neutron

27. Barium is obtained by the reduction of its oxide with..

- a) Carbon
- b) Sodium
- b) Magnesium
- d) Aluminum

28. The hardest of all alkali metal is..

- a) Lithium
- b) Sodium
- c) Potassium
- d) Calcium

29. The electromagnetic radiation with maximum wavelength is

- a) Ultraviolet rays
- b) Radio wave
- c) X-Rays
- d) Infrared

30. Movement of colloid particles under the influence of an electric current is known as..

- a) Electrophoresis
- b) electro-osmosis
- c) Electro dialysis
- d) Brownian movement

31. Lead pencils contains

- a) Lead
- b) Lead sulphate
- c) Graphite
- d) Lead and Carbon

32. Sebum is secreted by ...

- a) Sweat gland
- b) Mucous gland
- c) Sebaceous gland
- d) Cardiac gland

33. Endometrium is the innermost layer of

- a) Blood vessels
- b) Uterus
- c) Bones
- d) Intestine

34. Mast cells are found in ..

- a) Adipose Tissue
- b) Areolar Tissue
- c) Fibrous Tissue
- d) Muscles

35. When concentrated Sulphuric Acid is added to a small amount of salt in a test tube, a colorless gas is evolved with pungent smell. The inference is ...

- a) Chloride may be present in the salt
- b) Presence of Chloride in the salt is confirmed
- c) Nitrate may be present in the salt
- d) Presence of nitrate in the salt is confirmed

36. A catalyst is a substance which ...

- a) Increases the equilibrium concentration of the product
- b) Changes the equilibrium constant of the reaction
- c) Shortens the time to reach equilibrium
- d) Supplies energy to the reaction

37. Faraday's Laws of Electrolysis are related to....

- a) Atomic Numbers of the Ions discharged
- b) Moles of Ions discharged
- c) Equivalent weights of Ions discharged
- d) Moles and equivalent Weights of Ions discharged

38. When an electric current is passed through an aqueous solution of Sodium Chloride.

- a) The pH of the solution progressively decreases
- b) The pH of the solution progressively increases
- c) The pH does not change
- d) A change in pH can be predicted only if the concentration the solution and the strength of the current are known.

39. Sucrose is found in:

- a) Sugar cane
- b) Starch
- c) Honey
- d) Orange

40. Pepsin is an example of:

- a) Enzyme
- b) Hormone
- c) Nutrient
- d) Vitamin

41. Islets of langerhans is found in.....

- a) Ovary
- b) Liver
- c) Pancreas
- d) Spleen

42. Bilirubin is found in:

- a) Blood
- b) Bile
- c) Saliva
- d) Pancreatic juice

43. Glycogen is stored in:

- a) Liver and muscles
- b) Liver only
- c) Muscle only
- d) Pancreas

44. Amino acids that can be synthesized in the body are:

- a) Non essential amino acids
- b) Essential amino acids
- c) Active amino acids
- d) In-active amino acid

45. Carbon dioxide is carried in the blood in the form of:

- a) Sodium bicarbonate
- b) Sodium carbonate
- c) Potassium carbonate
- d) Magnesium bi-carbonate

46. Breathing centre that controls normal breathing in mammals lies in:

- a) Cerebellum
- b) Cerebrum
- c) Mid-Brain
- d) Medulla-Oblongata

47. Foramen of Monoro is an aperture between:

- a) Brain and spinal cord
- b) Third and forth ventricle
- c) Lateral and third ventricle
- d) none of above

48. When sympathetic nerve supply to the heart is completely cut off, the heart beat will:

- a) Show no change
- b) Increase
- c) Decrease
- d) Non of the above

49. Increase in blood pressure and heart rate is caused by:

- a) Adrenaline
- b) Thyroid
- c) Secretin
- d) Gastrin

50. Magnetic field can be produced by

- a) Moving charge only
- b) Change in electric field only
- c) Non of them
- d) a and b

51. If a beta particle is emitted from a radioactive substance, then its atomic number:

- a) Increase by one unit
- b) Decrease by one unit
- c) Increase by two units
- d) Decrease by two units

52. Which of the following is not a fundamental particle?

- a) Proton
- b) Neutron
- c) Meson
- d) Alpha particle

53. The resistance of a straight conductor does not depend on its:

- a) Temperature
- b) Length
- c) Material
- d) Shape of cross section

54. The angle between the magnetic meridian and geographic meridian is known as:

- a) Magnetic dip
- b) Magnetic declination
- c) Magnetic movement
- d) Magnetic field strength

55. Of the following, the most suitable material for making electro magnets is:

- a) Soft iron
- b) Steel
- c) Copper
- d) Nickel

Q.No. 56 is missing

57. The working of a dynamo is based on:

- a) Magnetic effect of current
- b) Heating effect of current
- c) Chemical effect of current
- d) Electromagnetic induction

58. The refractive index of a glass prism depends upon:

- a) The angle of prism
- b) The angle of deviation of light ray
- c) The color of incident light
- d) The intensity of incident light

59. The compound microscope was invented by

- a) Romer
- b) Galileo
- c) Focault
- d) Fizeau

60. Candela is the unit of:

- a) Acoustic intensity
- b) Electric intensity
- c) Luminous intensity
- d) Magnetic intensity

61. The energy which an electron acquires when accelerated through a potential difference of one volt is called:

- a) One joule
- b) One electron volt
- c) One erg
- d) One watt

62. A photon is:

- a) a quantum of radiation
- b) a quantum of matter
- c) a positively charged particle
- d) a negatively charged particle

63. In which region of the electro magnetic spectrum does the Lyman series of hydrogen lie:

- a) Ultraviolet
- b) Infra-red
- c) Visible
- d) X-ray

64. As the speed of an electric fan increases, the current:

- a) Increase
- b) Decreases
- c) Remains the same
- d) becomes maximum when speed is maximum

65. Heat radiations are:

- a) Gamma rays
- b) Microwaves
- c) Infra-red radiations
- d) Radio waves

66. When is World AIDS day observed?

- a) 23rd March
- b) 1st April
- c) 1st December
- d) 11th November

67. Tuberculosis is disease caused by:

- a) Virus
- b) Bacteria
- c) Arthropods
- d) Non of the above

68. HIV/AIDS can be transmitted through:

- a) Blood
- b) Breast milk
- c) Body fluids
- d) All of the above

69. Condom is used for:

- a) Contraception
- b) Prevention of HIV/AIDS
- c) Prevention of sexually transmitted diseases
- d) All of the above

70. World TB day is observed on:

- a) 24th March
- b) 21st April
- c) 1st December
- d) 29th October

Section B: Short questions

Answer ALL the questions in brief on separate sheets. (3 marks for each question)

Q.1 How many moles of Sulphur atoms and oxygen atoms are present in one mole each of H_2SO_4 , H_2SO_3 and SO_2 ?

Q 2: What is Electroplating?

Q3. What is Sericulture?

Q4. Define Immunity?

Q5. Define Health as per the World Health Organization (WHO) definition?

Q6. Define Diffusion?

Q7. Define Osmotic Pressure?

Q8. Define Turgor pressure?

Q 9. What is the role of Hemoglobin in respiration?

Q10. What is Spermatogenesis?

.....GOOD LUCK.....