

W-128

Ph.D. Entrance Examination, 2024

PHARMACY

Maximum Marks : 50

Note : Each question carrying 2 marks.

Give correct answer of following :

Q. 1. Drug and Cosmetic Act 1940 and Rule 1945

contain the study of schedule :

- (a) A
- (b) D
- (c) X
- (d) P₅

Q. 2. The Narcotic Drugs and Psychotropic Substances

Act was passed in the year :

- (a) 1985
- (b) 1963
- (c) 1940
- (d) 1938

Q. 3. The enzyme responsible for converting pectin into peptic acid is :

- (a) Pentokinase
- (b) Protopectinase
- (c) Pectic methyl esterase
- (d) All of the above

Q. 4. The side effect of chloramphenicol is :

- (a) Dizziness
- (b) Headache
- (c) Bone marrow suppression
- (d) Immunity suppression

Q. 5. The emergency hormone is :

- (a) Cortisol
- (b) Growth hormone
- (c) Prolactin
- (d) Adrenaline

Q. 6. In patient taking moclobemide you will only administer :

- (a) Fluoxetine
- (b) Tramadol

(3)

- (c) Lithium
- (d) Aspirine

Q. 7. Haemodialysis would increase excretion of :

- (a) Tricyclics
- (b) Digoxin
- (c) Lithium
- (d) Benzodiazepines

Q. 8. Bacteria having clusters of flagella at both poles of cells are :

- (a) Amphitrichous
- (b) Monotrichous
- (c) Peritrichous
- (d) Lophotrichous

Q. 9. The first restriction endonuclease enzyme was :

- (a) Hind-II
- (b) Eco RI
- (c) Hae-III
- (d) Bam I

Q. 10. Which of the following is not an application PCR ?

(4)

- (a) Detection of genimutation
- (b) Molecular diagnosis
- (c) Gene amplification
- (d) Purification of isolated protein

Q. 11. The inherited kidney is :

- (a) End stage renal disease
- (b) Protein disease
- (c) Auto-immune kidney disease
- (d) Polycystic kidney disease

Q. 12. The most common type of incurable viral hepatitis in United State is :

- (a) Hepatitis A
- (b) Hepatitis B
- (c) Hepatitis C
- (d) Hepatitis D

Q. 13. An NMR spectrometer operates at 400 MHz frequency. If a proton resonates at 1560 Hz frequency then the chemical shift of proton is :

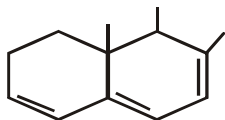
- (a) 3.9 ppm
- (b) 4.2 ppm

(5)

(c) 4.0 ppm

(d) 3.1 ppm

Q. 14. λ_{\max} for the following compound is :



(a) 273 nm

(b) 293 nm

(c) 303 nm

(d) 313 nm

Q. 15. ANA test measures :

(a) Antibodies that destroy bacteria

(b) Antibodies that destroy body cells

(c) Antibodies that destroy viruses

(d) Antibodies that destroy microorganism

Q. 16. Bragg's law is :

(a) $d \sin \theta = n\lambda$

(b) $2d \sin \theta = n\lambda$

(c) $2d n \sin \theta = \lambda$

(d) $d \sin \theta = 2n\lambda$

Q. 17. The active ingredient that forms froth when shaken with water :

W-128

P.T.O.

(6)

(a) Alkaloid

(b) Tannin

(c) Gum

(d) Saponin

Q. 18. If a manufacturing company does not adhere to cGMP regulations then :

(a) Any drug manufactured by such company will be considered 'adulterated'

(b) No action will be taken, if the drugs are safe

(c) The company will be closed instantly

(d) It means that there is necessarily something wrong with the drug

Q. 19. Which of the following enzyme deficiency leads to hemolytic anaemia ?

(a) Glucokinase

(b) Pyruvate kinase

(c) Phosphoglucomutase

(d) Phosphofructokinase

W-128

(7)

Q. 20. What does LTPD stands for :

- (a) Length Total Percent Defective
- (b) Length Tolerance Percent Defective
- (c) Lot Tolerance Percent Defective
- (d) Lot Testing Percent Defective

Q. 21. The ability of single cells to divide and produce all differentiated cells in the entity is :

- (a) Totipotency
- (b) Multipotency
- (c) Pluripotent
- (d) Unipotent

Q. 22. Which technique is used to measure hydrodynamic radius of macromolecules in solution ?

- (a) NMR
- (b) DLS
- (c) X-ray crystallography
- (d) Electrophoresis

Q. 23. The absorption of λ_{\max} 279 nm ($\Sigma = 15$) in the UV spectrum of acetone is due to :

(8)

- (a) $\pi \rightarrow \pi^*$ transition
- (b) $n \rightarrow \pi^*$ transition
- (c) $\sigma \rightarrow \sigma^*$ transition
- (d) $\pi \rightarrow \sigma^*$ transition

Q. 24. Which of the following poisons is a narcotic ?

- (a) Opium
- (b) Liquor
- (c) Hashish
- (d) Cannabis

Q. 25. Which factor is least likely to affect material selection for pharmaceutical plant construction ?

- (a) Regulatory approvals
 - (b) Cost
 - (c) Availability
 - (d) Weather pattern
-