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WRITTEN TEST

Test Booklet No.

PHARMACY

Name of Applicant Answer Sheet No.

Application ID : Signature of Applicant :

Date of Examination: Signature of the Invigilator(s)

1.

Time of Examination : 2.

Duration : 1 Hour]

[Maximum Marks : 50

IMPORTANT INSTRUCTIONS

- (i) The question paper is in the form of Test-Booklet containing **50 (Fifty)** questions. All questions are compulsory. Each question carries four answers marked (A), (B), (C) and (D), out of which only one is correct.
- (ii) On receipt of the Test-Booklet (Question Paper), the candidate should immediately check it and ensure that it contains all the pages, i.e., **50** questions. Discrepancy, if any, should be reported by the candidate to the invigilator immediately after receiving the Test-Booklet.
- (iii) A separate Answer-Sheet is provided with the Test-Booklet/Question Paper. On this sheet there are **50** rows containing four circles each. One row pertains to one question.
- (iv) The candidate should write his/her Application number at the places provided on the cover page of the Test-Booklet/Question Paper and on the Answer-Sheet and **NOWHERE ELSE**.
- (v) No second Test-Booklet/Question Paper and Answer-Sheet will be given to a candidate. The candidates are advised to be careful in handling it and writing the answer on the Answer-Sheet.
- (vi) For every correct answer of the question **One (1) mark will be awarded**. For every unattempted question, Zero (0) mark shall be awarded. **There is no Negative Marking**.
- (vii) Marking shall be done only on the basis of answers responded on the Answer-Sheet.
- (viii) To mark the answer on the Answer-Sheet, candidate should **darken** the appropriate circle in the row of each question with Blue or Black pen.
- (ix) For each question only **one** circle should be **darkened** as a mark of the answer adopted by the candidate. If more than one circle for the question are found darkened or with one black circle any other circle carries any mark, the question will be treated as cancelled.
- (x) The candidates should not remove any paper from the Test-Booklet/Question Paper. Attempting to remove any paper shall be liable to be punished for use of unfair means.
- (xi) Rough work may be done on the blank space provided in the Test-Booklet/Question Paper only.
- (xii) *Mobile phones (even in Switch-off mode) and such other communication/programmable devices are not allowed inside the examination hall.*
- (xiii) No candidate shall be permitted to leave the examination hall before the expiry of the time.

DO NOT OPEN THIS QUESTION BOOKLET UNTIL ASKED TO DO SO.

1. Due to deformation of compound due to attached some other functional group it is example of
 - (A) Red shift
 - (B) Blue shift
 - (C) Hyperchromic shift
 - (D) Hypochromic shift

2. Sample cell shape is
 - (A) Cylindrical
 - (B) Quadrangular
 - (C) Both (A) & (B)
 - (D) None of these

3. During first rotation of chopper radiation beam is transmit through
 - (A) Sample cell
 - (B) Refernce cell
 - (C) Both (A) & (B)
 - (D) None of these

4. Which fuel is produced 3300-3400 temperature
 - (A) Acetylene + Air
 - (B) Acetylene + Oxygen
 - (C) Acetylene + Nitrous oxide
 - (D) Hydrogen + Air

5. Intermediate sized unilamellar vesicles are prepared by
 - (A) Sonication
 - (B) High pressure extrusion technique
 - (C) Detergent dialysis
 - (D) Both (B) and (C)

6. How many layers are seen in monolithic TDDS design?
 - (A) 4
 - (B) 3
 - (C) 5
 - (D) 2

7. Kaoru Ishikawa is best known for the development of quality tools called diagrams
- (A) Cause and effect
 - (B) Fishbone
 - (C) Ishikawa
 - (D) All the above
8. Powders show which of the following drug release
- (A) Zero order release
 - (B) First order release
 - (C) Hixson-crowell cube root law
 - (D) Korsmeyer-peppas model
9. If the MSE of an ANOVA for six treatment groups is known, you can compute
- (A) df_1
 - (B) the standard deviation of each treatment group
 - (C) the pooled standard deviation
 - (D) Both (B) and (C)
10. Variation approval timeline for II type of variation as per EU guidelines is
- (A) 30-90 days
 - (B) 150-180 days
 - (C) 210 days
 - (D) 120 days
11. List of approved drugs and their associated IPR is available in
- (A) Pink book
 - (B) Orange book
 - (C) Red book
 - (D) Black book
12. In 3D QSAR, red regions indicate favourable points for
- (A) bulky groups
 - (B) smaller groups
 - (C) electron-rich groups
 - (D) electron-deficient groups

13. The corneometer CM825 instrument is used to determine
- Hydration level of the skin surface
 - Hardness of skin surface
 - Hairs on skin surface
 - None of the above
14. How do you calculate the ideal body weight for men?
- 50 kg \pm 1 kg/2.5 cm above or below 150 cm in height
 - 45 kg \pm 1 kg/2.5 cm above or below 150 cm in height
 - 40 kg \pm 1 kg/2.5 cm above or below 150 cm in height
 - 35 kg \pm 1 kg/2.5 cm above or below 150 cm in height
15. A girl with age 21 has height 240 cm, weight 55 kg, serum creatinine of 0.8 mg will have creatinine clearance
- 80 ml/min
 - 90 ml/min
 - 96.25 ml/min
 - 85 ml/min
16. In the equation $\log C = \log C_0 - Kt/2.303$, what does C_0 stand for
- plasma drug concentration after 60 min of iv injection
 - plasma drug concentration after 15 min of iv injection
 - plasma drug concentration after 30 min of iv injection
 - plasma drug concentration immediately after iv injection
17. Which of the following diols exist as a pair of enantiomers?
- cis-1,3-cyclohexanediol
 - trans-1,3-cyclohexanediol
 - cis-1,4-cyclohexanediol
 - trans-1,4-cyclohexanediol
18. In competitive inhibition, what happens to V_{max} and K_m if $[I] = K_i$?
- Lowers to 0.5 V_{max} and 0.5 K_m
 - V_{max} is unchanged and K_m increases 2 K_m
 - Lowers to 0.5 V_{max} and K_m remains unchanged
 - Lowers to 0.67 V_{max} and K_m increases to 2 K_m

- 19.** Among the following, the amino acid which is basic in nature is:
- (A) Asparagine
 - (B) Tyrosine
 - (C) Arginine
 - (D) Leucine
- 20.** For a person weighing 70 kg the minimal volume (in ml) of a fatal dose of a
- (A) 5.6
 - (B) 3.9
 - (C) 0.8
 - (D) 0.4
- 21.** What are the different type of clinical trials according to the US National Institutes of Health?
- (A) 6
 - (B) 5
 - (C) 4
 - (D) 3
- 22.** Kefauver-Harris amendments to the FD & C Act comes in
- (A) 1956
 - (B) 1968
 - (C) 1972
 - (D) 1962
- 23.** In which of the following scales of measurements ranking of observations is not possible?
- (A) Nominal
 - (B) Ordinal
 - (C) Interval
 - (D) Ratio
- 24.** Which of the following relates mainly to the issue of causality?
- (A) Measurement validity
 - (B) Construct validity
 - (C) Internal Validity
 - (D) External validity

25. Small amount of starch, that is not digested in small intestine is called
- (A) Modified starch
 - (B) Gelatinized starch
 - (C) Resistant starch
 - (D) dextrified starch
26. In which of the following research methods, process of hypothesis testing optimally safeguards the role of extraneous variables?
- (A) Expost facto method
 - (B) Experimental method
 - (C) Historical method
 - (D) Descriptive survey method
27. According to FSSAI rules, class II preservatives includes:
- (A) Acetic acid
 - (B) Dextrose
 - (C) Nicin
 - (D) Glucose
28. Which of the following is/are true about potassium bromate?
- 1. Potassium bromate is a category 2B carcinogen.
 - 2. Potassium bromate increases dough strength, leading to higher rising and uniform finish to baked products.
 - 3. Food safety standards authority of India (FSSAI) permits them up to 50 parts per million.
- (A) 1, 3
 - (B) 1, 2
 - (C) 2, 3
 - (D) All of the above
29. Which of the following about mRNA stability is not correct?
- (A) Regulation of mRNA stability is a way of regulating gene expression
 - (B) Prokaryotic mRNAs have a half life of only a few minutes
 - (C) Histone mRNAs have especially long poly-A tails and are stable
 - (D) It is thought that poly-A tails stabilize eukaryotic mRNAs
30. Which of the following is not a G-protein coupled receptor?
- (A) Glycine receptor
 - (B) Adrenergic receptor
 - (C) Glutamate receptor
 - (D) Muscarinic receptor

31. The effect of protein on an entire organism is described in
- (A) Phenotypic function
 - (B) Cellular function
 - (C) Molecular function
 - (D) Structural genomics
32. Conserved gene order can be termed as
- (A) Ortholog
 - (B) Synteny
 - (C) Paralog
 - (D) Microarray
33. The mechanism by which CBP activates transcription is?
- (A) CBP has DNA methyl transferase activity
 - (B) CBP has histone acetyl transferase activity
 - (C) CBP interacts with the basal transcription complex and has histone acetyl transferase activity
 - (D) CBP interacts with basal transcription complex
34. Entire parts of the following drugs are effective, except:
- (A) Ergot
 - (B) Belladonna
 - (C) Ephedra
 - (D) Clove
35. Is not the function of cell wall of the plant?
- (A) Protect the protoplast
 - (B) Provide mechanical support to the organ
 - (C) Check the rate of transpiration
 - (D) Give green colour to leaf
36. The term arillode means
- (A) Outgrowth from micropyle
 - (B) Stiff bristle like appendages
 - (C) Warty outgrowth
 - (D) Enlarged funicle
37. Which of the following is wrongly paired?
- (A) Nucleic acid-hydrogen bond
 - (B) Polysaccharide-glycosidic bond
 - (C) Proteins-peptide bond
 - (D) Phospholipids-phosphate linkage

38. Which histone molecule produces novel binding sites for protein component of the kinetochore?
- (A) H3
 - (B) H4
 - (C) H2A
 - (D) CENP-A
39. Iodex is the pain relief balm has the smell of
- (A) Methyl salicylate
 - (B) Ethyl salicylate
 - (C) Butyl salicylate
 - (D) Propyl salicylate
40. Which of the following is a character of ORF?
- (A) Non overlapping
 - (B) 3-nucleotide codons
 - (C) Contiguous
 - (D) Intron
41. Daily dose of aspirin is up to
- (A) 500 mg
 - (B) 1g
 - (C) 2 g in divided dose
 - (D) 4 g in divided dose
42. A resin animal origin
- (A) Benzoin
 - (B) Shellac
 - (C) Glycoresin
 - (D) Gumoleoresin
43. *Salomonella typhi* is sensitive to
- (A) Cephalexin
 - (B) Cephalothin
 - (C) Cephaloridine
 - (D) Cephrodine
44. The particle size of the dispersed solid in a suspension, levigation is used to
- (A) Reduce particle size
 - (B) Enhance viscosity
 - (C) Reduce viscosity
 - (D) Avoid bacterial growth

- 45.** GMP and GLP are
- (A) Mandatory regulations
 - (B) Legally valid regulations
 - (C) FDA guidelines
 - (D) Recommendatory guidelines
- 46.** Major acidic toxicants binds with the following plasma proteins
- (A) Alpha-1 acid glycoprotein
 - (B) Albumin
 - (C) Lipoprotein
 - (D) Globulin
- 47.** In which country is marketing authorization application (MAA) done?
- (A) India
 - (B) USA
 - (C) UK
 - (D) South Africa
- 48.** Tricyclic anti depressant should be avoided in which of the following conditions
- (A) Depressed patients with insomnia
 - (B) Closed angle glaucoma
 - (C) Diabetic peripheral neuropathy
 - (D) Nocturnal enuresis
- 49.** The sugar moiety of digitalis purpurea is
- (A) 2,6-deoxycellulose
 - (B) 2,6-deoxy glucose
 - (C) 2,6- deoxy rhamnose
 - (D) 2,6-deoxy galactose
- 50.** Licence for whole sale of drugs specified in schedule "C" and "C1" are issued in form:
- (A) 20A
 - (B) 20B
 - (C) 21B
 - (D) 22A

ROUGH WORK

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