Time: 3 Hours   **Marks: 75**

Q. No. 1: Multiple Choice Questions

20M

1) IAEC stands for   1
   a) Institute Animal Ethics Committee
   b) Institute Animal Economic Committee
   c) Institute Animal Ethics Co-0peration
   d) Ingenious Animal Ethics Committee

2) OECD guideline No 402 is for   1
   a) Acute Dermal Toxicity
   b) Acute inhalation toxicity
   c) Acute Oral Toxicity
   d) Sub chronic Toxicity

3) During surgical procedures, Animals need no noise and warmth   1
   with temperature ------ To Avoid hypothermia
   a) 30-32°C
   b) 37-40°C
   c) 35-37°C
   d) 25- 30°C

4) Which Spasmogen are induced in Transgenic models for Asthma   1
   studies
   a) Acetylecholine
   b) Mectacholine
   c) Imdomethacin
   d) Onco mouse

5) Bioassay of oxytocin is performed on   1
   a) Guinea pig ileum
   b) Rat Uterus
   c) Frog Heart
   d) Rabbit eye

6) Zebrafish is used as non-mammalian model for screening of   1
   a) Anti-Parkinson's
   b) Anti-Alzheimer's
   c) Hypertensives
   d) Diuretics

7) ----can be used to study effects of pyrogen in Parenterals   1
   a) Rat
   b) Mice
   c) Rabbit
   d) Pigs

8) IN MES Method ------electric current is passed for Mice   1
   a) 30 mA
   b) 100 mA
   c) 200 mA
   d) 1000 mA

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9) Elevated Plus maze is mostly employed for animal model for---   1
   a) Anti-Anxiety
   b) Skeletal Muscle relaxant
   c) Analgesics
   d) Epilepsy

10) Maximum volume of drug can be injected by intramuscular route   1
   is
   a) <0.01ml/kg
   b) >0.05ml/kg
   c) <0.05ml/kg
   d) 1ml/kg

11) ---Used to develop thrombosis in experimental animal for   1
   coagulation
   a) Wire coil
   b) Thread
   c) Oxygenators
   d) All of above

12) Pancreatectomy animal model is used to study of -------   1
   a) Type I Diabetes
   b) Type II Diabetes
   c) Sympatholytic
   d) Parasympatholytics

13) In silico techniques are used to predict activity of test with----   1
   a) Testing animal models
   b) Computer simulated targets
   c) Isolated tissues
   d) Transgenic animals

14) ---is a Physical method for screening of anti-ulcer drugs   1
   a) Indomethacin induced gastric ulcer
   b) Ethanol induced gastric ulcer
   c) Acetic acid induced gastric ulcer
   d) Pylorus ligation induced gastric ulcer

15) Angel of injection for intra venous route is   1
   a) 90°
   b) 45°
   c) 25°
   d) 10°

16) Survey is a ……………. Study   1
   a) Descriptive
   b) Fact finding
   c) Analytical
   d) Systematic

17) Which animal can be used to test Mitotics   1
   a) Rat
   b) Mice
   c) Rabbit
   d) Pigs

18) Which of the following is non-parametric method of data analysis   1
  a) Mann-Whitney test
  b) T test
  c) ANOVA
  d) SEM

19) -----is a statistical analysis of used to compare means between three   1
   or more groups
  a) ANOVA
  b) Quantitative analysis
  c) Survey
  d) Randomization

20) Data describes quality of something in a non-numerical format is   1
   called as
  a) Qualitative data
  b) Quantitative data
  c) Numerical quantity
  d) None of above

Q. No. 2: Answer any TWO of the following   20M

A. Enumerate methods to evaluate nootropics activity of an agent.
   Discuss one in vivo method
B. Enlist the methods to evaluate skeletal muscle relaxant activity.
   Discuss two in vivo method
C. List the various methods used in preclinical evaluation of anti-cancer
   agents. Discuss two in-vivo methods.

Q. No. 3: Answer any SEVEN of the following   35M

A. Discuss any two animal models for screening of Anti-Ulcer
   Activity

B. Explain any two pharmacological screening methods for
   Antiepileptics
C. Write a note on Dose selection and dose calculation for laboratory
   Animals
D. Define Euthanasia. Explain various methods of Euthanasia for
   different laboratory animals
E. Explain two preclinical screening methods for Type I Diabetes
F. Explain two pharmacological screening methods for Sympatholytic
   Activity
G. Explain two preclinical screening methods for Antiiflammatory
   Activity
H. Explain different methods for Euthansia for laboratory animals
 I. Describe one way ANOVA.

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