Time: 3hrs **Marks: 75**

Q. 1 Attempt all multiple-choice questions (MCQ) **20M**

Sr No	Questions		Options
1	The exploration, extraction and screening of biological diversity and indigenous knowledge for commercially valuable genetic and biochemical resources	a	Biodiversity prospecting
		b	Ethnopharmacology
		c	Reverse pharmacology
		d	Metabolomics
2	Studies that describe local people's interaction with the natural environment	a	Ethnoecology
		b	Ethnoentamology
		c	Ethnobotany
		d	Ethnozoology
3	When a part of same plant which is devoid of therapeutic action is mixed, it is referred as	a	Admixture
		b	Sophistication
		c	Inferiority
		d	Spoilage
4	RAPD in DNA fingerprinting refers to ---	a	Randomly Amplified Polymorphic DNA
		b	Randomly Associated Polymorphic DNA
		c	Regularly Amplified Polymorphic DNA
		d	Randomly Amplified Polymeric DNA
5	Marker compound utilized for standardization of *Embelica officianalis* is ----	a	Boswellic acid
		b	Gallic acid
		c	Commiphoric acid
		d	Abeitic acid
6	Pieces of amber coloured glass in colophony is an example of	a	Harmful adulteration
		b	Substitution type adulteration
		c	Adulteration of inferior quality
		d	Substitution of substandard variety

7	Limit for lead content in herbal drugs in India	a	10 ppm
		b	5 ppm
		c	3 ppm
		d	2 ppm
8	Use of piperine in ayurvedic medicine is mainly to enhance the activity of drug through	a	Inhibition of CYP enzymes
		b	Induction of CYP enzyme
		c	Absorption of drug
		d	Distribution of drug
9	MTT gets converted to ------ by live cells and yield purple colour	a	Farmazan
		b	Trypan blue
		c	Crystal Voilet
		d	Methylene blue
10	In DPPH assay the loss of violet colour is due to	a	Reduction of DPPH
		b	Oxidation of DPPH
		c	Hydrolysis of DPPH
		d	Complexation of DPPH with reagents
11	Which of the following is not Irreversible beta cytotoxic agent induce diabetes	a	Alloxan
		b	Steptozocin
		c	Vacor
		d	Azide
12	Which of the following is used for induction of cardiotoxicity	a	isoproterenol
		b	Carbon tetrachloride
		c	Thioacetamide
		d	Paracetamol
13	ACE inhibitors are known to react with	a	Capsicum
		b	onion
		c	Garlic
		d	Green tea
14	Myocardial infarction leads to increase in levels of	a	Lactate dehydrogenase
		b	Bilirubin
		c	Proteins
		d	Caspase

15	The ASU drugs are manufactured in accordance with the formula as per defined in ……	a	section 3 (a) DCA
		b	section 2 (a) DCA
		c	section 3 (b) DCA
		d	section 2 (b) DCA
16	Area of excision wound on day 0 is 500 mm^2 and on day 4 the area is observed to be 330 mm^2. What is the % of healing of the wound	a	34%
		b	43%
		c	66%
		d	57%
17	Clove & Heparin when consumed together	a	May cause increase in bleeding time
		b	May increase blood pressure
		c	May cause decrease in bleeding time
		d	May cause Renal toxicity
18	Andrographoid is a	a	Labdane diterpenoid
		b	Triterpenoid
		c	Monoterpenoid
		d	Meroterpenoid
19	In case of evaluation of antiulcer activity 8 animals were given aspirin. The ulcer scores were observed to be 3,4,2,3,3,4,5,2. What is the ulcer index?	a	1.25
		b	2.25
		c	3.25
		d	4.25
20	Green tea , high is tannins should be avoided with	a	Antibiotics
		b	Codiene
		c	Antioxidants
		d	Catechin

Q 2. Attempt <u>any two</u> question **20M**

a. Discuss Analytical Profile for *Andrographis panniculata* and *Emblica officianalis*
b. Enlist models for evaluation of antiulcer activity and discuss any two in detail
c. Discuss evaluation of Foreign matter, microbial load and pesticides in herbal drugs

Q 3. Attempt <u>any seven</u> questions **35M**

I. write a note on DNA finger printing techniques for identification of drugs of natural origin
II. Explain the following terms and their impact in traditional Medicine
    a. Bioprospecting
    b. Ethnopharmacology
III. Write a note on Pharmacodynamic and Pharmacokinetic issues of herbal drugs
IV. Give significance of antioxidant activity and explain any one method for evaluation of the same
V. Explain any one in-vivo model for evaluation of anticancer activity
VI. Explain Acute toxicity evaluation as per OECD guidelines
VII. Explain Reverse Pharmacology and its significance in drug discovery
VIII. Explain any one model for evaluation of anti-inflammatory activity
IX. Explain two methods for evaluation of radical scavenging activity

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