Time: 3 hours **Marks:75**

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

1	Study of local people's interaction with the natural environment, including subdisciplines such as ethnobiology, ethnobotany, ethnoentomology and ethnozoology	a	Ethnopharmacology
		b	Bioprospecting
		c	Ethnoecology
		d	Ethnobotany
2	Interdisciplinary scientific exploration of biologically active agents traditionally employed or observed by man --- is	a	Ethnopharmacology
		b	Bioprospecting
		c	Ethnoecology
		d	Ethnoentamology
3	Chromatogrphic analysis of *Emblica officianalis* involves ---- as marker compound	a	Gallic acid
		b	Catechin
		c	Rutin
		d	Forskolin
4	Replacement with substandard drug is……type of Adulteration	a	Spoilage
		b	Inferiority
		c	Admixture
		d	Adulteration
5	In which of the following the mucosal lesions are caused by the accumulation of acidic gastric juice in the stomach	a	Swimming Stress Ulcer
		b	Pylorous ligation
		c	NSAID induced ulcers
		d	Histamine-induced Gastric Ulcer
6	Which of the following is Not in vitro evaluation technique for anticancer drug	a	Human xenografts models
		b	Tetrazolium salt assay
		c	3H-thymidine uptake
		d	Sulphordamine B assay
7	Instrument used for measurement of rat paw volume	a	Plethysmometer
		b	Oxymeter
		c	Haematometer
		d	Clinical analyser
8	Which dye is excluded by live cells in cell viability test	a	Trypan blue
		b	MTT
		c	DPPH
		d	Thiamidine

X1132YEAAB8CX1132YEAAB8CX1132YEAAB8CX1132YEAAB8C

9	Aflatoxins have	a	Lignin
		b	a bifuran ring fused to a coumarin nucleus with a pentenone ring
		c	Pentacyclic peptide
		d	Triterpenoid
10	As per WHO, the intake of residues from herbal materials should account for ----- --of total intake from all sources, including food and drinking-water.	a	no more than 0.25%
		b	no more than 0.5%
		c	no more than 0.75%
		d	no more than 1%
11	Generally, the bactericidal effect is obtained with a lethality percentage of 90% for 6 h, which is equivalent to -------% of lethality for 24 h	a	99.9
		b	90
		c	95
		d	97
12	Use of piperine in ayurvedic medicine is mainly to enhance the activity of drug through---	a	Induction of CYP enzyme
		b	Inhibition of CYP enzymes
		c	Absorption of drug
		d	Distribution of drug
13	Toxicant used for induction of hepatotoxicity is ----	a	Thioacetamide / Rifampicin
		b	Streptozotocin
		c	MTT
		d	DPPH
14	Area of excision wound on day 0 is 500 mm^2 and on day 4 the area is observed to be 350 mm^2. What is the % of healing of the wound	a	30
		b	70
		c	25
		d	75
15	Which of the following is used for treatment of Glaucoma ?	a	*Coleus forskholi*
		b	*Curcuma longa*
		c	*Andrographis paniculata*
		d	*Psoralea coryfolia*
16	The amount or concentration of specific heavy metals is carried out by	a	Atomic Absorption Spectroscopy
		b	Fluorescence Spectroscopy
		c	UV spectroscopy
		d	FTIR spectroscopy
17	Residual solvent analysis for herbal extracts is carried out by	a	HPLC
		b	HPTLC
		c	Gas Chromatography
		d	UV spectroscopy
18	Which of the following is NOT an agrochemical residue	a	insecticides;
		b	fungicides and nematocides;

X1132YEAAB8CX1132YEAAB8CX1132YEAAB8CX1132YEAAB8C

		c	herbicides
		d	Mycotoxins
19	Digestion of DNA with restriction enzymes, which cut DNA at precise locations, separating the fragments by gel electrophoresis is ---	a	Restriction Fragment Length Polymorphism (RFLP)
		b	Random amplifi ed polymorphic DNA (RAPD)
		c	DNA amplifi cation fi ngerprinting (DAF)
		d	Amplifi ed Fragment Length Polymorphism (AFLP)
20	Psoralen is ---	a	Comarin
		b	Furanocoumarin
		c	Flavonoid
		d	Xanthone

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

a. Discuss Analytical Profile for *Curcumima longa* and *Embellica officianalis*
b. Discuss any two models of evaluation of Wound healing activity
c. Define Reverse Pharmacology and Bioprospecting. Discuss merits and demerits of Bioprospecting.

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

I. Discuss Molecular identification of plant drugs.
II. Enlist various models for evaluation of antioxidant activity and explain any one in detail
III. Give the analytical profiles for *Andrographis panniculata*
IV. Write a note on acute oral toxicity evaluation of herbal drugs
V. Discuss pharmacokinetic and pharmacodynamic issues related to herbal drugs
VI. Explain with suitable example role of Ethnopharmacology in for drug evaluation.
VII. Explain significance of Heavy metals and phytotoxins in herbal drug evaluation.
VIII. Compare regulations of herbal and conventional drugs
IX. Explain evaluation techniques for evaluation of cardioprotective or anti-inflammatory activity .

****

X1132YEAAB8CX1132YEAAB8CX1132YEAAB8CX1132YEAAB8C