

Kalyani Mahavidyalaya
Part-III Honoures Test Examination-2017
Molecular Biology & Biotechnology
Paper - IX

Fullmarks-50

Time – 2hrs

1. Answer any ten.

1 x 10 = 10

- a) ICSI is Inter Cell Sperm Injection. (T/F)
- b) GATT is General Agreements on Trade and Tariff. (T/F)
- c) What is process patent?
- d) What is DMEM?
- e) Which function does the Ri plasmid perform?
- f) Germplasm bank is In Situ conservation. (T/F)
- g) For successful IVF result HCG level is measured. (T/F)
- h) What is the role of *E. coli* as bio indicator?
- i) In which stage of tissue culture activated charcoal is used?
- j) Bharatpur bird park is a type of sanctuary. (T/F)
- k) What is Trypan blue?
- l) What is secondary cell culture?

2. Answer any ten.

2 x 10 = 20

- a) What is product patent and national patent?
- b) Write down the role of H_2CO_3 in ATC medium.
- c) What is bio diversity hot spot region?
- d) What are ovum collection and embryo transfer?
- e) What do you mean by somatic and germ line gene therapy?
- f) Why discoveries are not patentable?
- g) What is plasmid disarming? Give an example.
- h) What are opines?
- i) What is the role of pH indicator in animal tissue culture media?
- j) What are copyright and royalty?
- k) Why Phase contrast microscope is used in animal tissue culture practise?
- l) What is Alpha and Beta diversity.

3. Write down any four

5 x 4 = 20

- i) What are the criterias for patenting – discuss. What is International patent? 4+1 = 5
- ii) What do you mean by primary culture and primary cell line? What are adhering and non adhering cells? What is suspension culture? 2 + 2 + 1 = 5
- iii) What is the role of Glucose oxidase in blood glucose measurement? Give an example of a biosphere reserve forest? 4 + 1 = 5
- iv) What is male sterility? What is surrogate mother? What are the applications of gene therapy? 1 + 2 + 2 = 5
- v) What is crown gall disease? What is the role of Vir genes? What is acetosyringone? 1 + 2 + 2 = 5