DG-3144

B. Sc. (Microbiology) (Sem. - V) Examination
March/April – 2016
IDS - Instrumentation & Techniques

Time : 2 Hours] [Total Marks : 50

Instructions :

(1) Fill up strictly the details of signs on your answer book.

Name of the Examination :

B. SC. (MICROBIOLOGY) (SEM. - 5)

Name of the Subject :

IDS-Instrumentation & Techniques

Subject Code No. : 3 1 4 4

Student’s Signature

(2) Figures to the right indicate full marks of the question.

(3) Draw neat and labeled diagrams whenever necessary.

Q.1 Give Specific answers

a. Enlist any four factors which are considered at the time of selection of a centrifuge.

b. define: photometer and give advantage of single cell photometer.

c. Give the fullform of SDS. Give its principle role in polyacrylamide gel electrophoresis.

d. Differentiate between sticky and cohesive end.

e. Enlist the four technical errors that observed during cell counting.

f. Define: Blotting technique. Differentiate between southern and northern blot techniques.
Q.2 Explain/comment on any two of the following

a. There are various components involve in flamephotometer
b. There are several advantage of automated instruments in hematology.
c. There are two different types of DNA probe methodology based on labeling.

Q.3 Discuss any two of the following.

a. Give the detail note on principle and working of centrifuge.
b. Define HPLC. Explain various components of HPLC in detail
c. Explain in detail various components and mechanism of PCR

Q.4 write short notes on any two of the following

a. Two pan Vs Mono pan balance.
b. Basic components of pH meter.
c. Synthesis of cDNA