P. S. SCIENCE & H. D. PATEL ARTS COLLEGE, KADI

Internal Examination

B. Sc. SEM - VI [Mark : 40

14-3-2017] **Genetic Engineering** [1-30 to 3-30

CC - 602 (CC - I - 12)

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1. ANSWERS THE FOLLOWING. 10

(1) EcoRI comes from

(a) E.coli 242 (b) E.coli RY13

(c) E.coli RY20 (d) None

(2) 5' - G A A T A C - 3'

3' - C T T A A G - 5 Identify Sequence

(a) PALINDROMIC (b) TATA box

(c) Palinmok (d) none

(3) Plasmid Polylinkers and Marker Genes for Blue-White screening

(a) pUC 19 (b) pUC 18

(c) pUC 114 (d) pUC 45

(4) X-gal is a substrate for

(a) beta-galactosidase (b) alpha-galuctosidase

(c) Permease (d) None

(5) The Amp resistance gene is present on which plasmid

(a) pBR322 (b) pUC 18

(c) pUC 114 (d) pUC 45

[P.T.O.

(6) Fragments from 30 to 46 kb can be accommodated by a _____

(a) cosmid vector (b) Plasmid vector

(c) Lemda Phage (d) None

(7) Give the full name of RT PCR

(8) Give the full name STR

(9) Give the full name RELP

(10) _____ methods is also known as enzymatic digestion sequencing method

2. ANSWER THE FOLLOWING. (ANY FOUR) 20

(1) Explain Sanger method for sequencing

(2) Write a note a Restriction enzyme

(3) Write a note on pBR 322

(4) Write a note on Adapter and linker gene

(5) Write a note on Microarray techniques

(6) Explain Southern blotting techniques.

3. ANSWER THE FOLLOWING. (ANY ONE) 10

(1) Write a note on Pyrosequencing method for sequencing

(2) Write a note on PCR and its Application Medical biotechnology

(3) Write a note on Vector in rDNA technique.
