BIO203 MID+FINAL M.C.Q.S MEGA FILE

ALL DATA FROM QUIZES + GRAND QUIZES

GROUP: BIOTECH BRAINY BUNCH

ADMINS: MEHWISH MUGHAL & BELLA

CONTACT: mehwishshabirhussain07@gmail.com

1. ---------- An enzyme derived from the bacterium Thermus aquatics. **(Taq polymerase)**
2. PCR can be performed to amplify--------- **DNA**
3. During extension the most common temperature ----------**93C-98C**
4. Which step the DNA polymerase synthesizes is new DNA strand complementary to DNA template strand by adding dNTP's ? ---------- **Extension**
5. The thermo cycler works on the principle of ---------- which raise and lower the temperature of the block in a pre-programmed manner. **Peliter effect**
6. Primer are single stranded ---------- bp long DNA fragment **18—30**
7. Which one of the following determines the specificity of PCR reaction? **Primer**
8. Formula for calculating melting temperature of primers. **Tm = 4(G+C) +2(A+T)**
9. The extension rate of Taq polymerase ---------- **75nt/sec**
10. Misprimers may occur due to nonspecific ----------of primer **Hybridization**
11. Control s for contamination contains all reagents except DNA template is called ---------- **Blank reaction**.
12. Which type of PCR has very low probability of nonspecific amplification? **NESTED PCR**
13. Two pair of PCR primer are used to amplify a fragment ----------**NESTED PCR**
14. ---------- IS a variant of PCR which enables simultaneous amplification of many targets of interest in one reaction by using more than one pair of primer. **Multiplex primer**

15. Which temperature for each of the primer sets must be optimized to work correctly within a single reaction. **ANNEALING**
16. Amplicon size should be different enough to form distinct bands when visualized by. ------ **gel electrophoresis**
17. The enzyme used to convert RNA into cDNA ------- **Reverse transcriptase**.
18. Which types of PCR is widely used in expression profiling, to determine the expression of gene? **RT-PCR**
19. ---------- Is used to measure the quantity of a PCR product. **Real time PCR**
20. Which is a technique that reduces nonspecific amplification during the initial set up stage of PCR? **HOT START PCR**
21. Allele specific PCR used for identify of ----------**SNPs**
22. In situ PCR is polymerase chain reaction that actually takes place inside the -----on a slide **CELL**
23. Flanking DNA sequences are digested and then ligated to generate ---------- **Circular DNA**
24. A method used to allow PCR when only one internal sequences is known-------- **Inverse PCR**
25. AFLP stands for ---------**Amplified fragment length polymorphism**
26. ----------is highly sensitive PCR-based method for detecting polymorphism in DNA. **AFLP**
27. ----------Is a group of procedure that allow amplification to occur at many locations in genome. **Whole genome amplification.**
28. In mini primer PCR the thermostable enzyme extend primer consist -------nucleotides **9 or 10**
29. PCR has been used in gene cloning and screening of ---------- **Genomic libraries**
30. ----------is the application of scientific procedures to improve criminal and legal matters **FORENSIC SCIENCE**
31. ----------is a forensic technique used to identify individuals by characteristics of their DNA. **DNA PROFILING OR DNA FINGERPRINTING**
32. ---------- enzyme have symmetrical recognition sequences but are little value **TypeIII**
33. ---------- is used for the screening of bacterial or yeast clones for correct ligation or plasmid products. **Colony PCR**
34. Agaros extracted from sea weeds find used in ---------- **Gel electrophoresis**
35. ----------PCR uses the template for the reverse primer is a restriction fragment that has been self-ligated. **Inverse**

36. ----------tools have also allowed to perform prenatal genetic diagnosis. **Molecular**
37. The instrument used to run the PCR is known as ---------- **THERMOCYCLER**
38. Non genomic material such as RNA can be detected by ------- **In situ PCR**
39. If the primer sequence is TCG, what section of DNA will it anneal? **AGC**
40. Which of the following is the source of pfu polymerase? **Pyrococcus furiosus**
41. ----------PCR uses primers whose 3' ends encompass the SNP. **Allele specific PCR**
42. M ethylation-specific PCR is used to identify patterns of DNA methylation at ---------- **CpG island**
43. At what temperature does annealing of DNA and primer takes place? **54C**
44. For making cDNA --------- is used as a template **RNA**
45. A technique for making millions of copies of a specific region of DNA. **POLYMERASE CHAIN REACTION**.
46. The limitation of PCR are---------- **all of these**
47. Assembly PCR is used to assemble two or more pieces of DNA into -------- **one piece**
48. Binding of primer to single stranded DNA is called-------- **Annealing**
49. Two set of primer instead of one pair are uses in ---------- **Nested PCR**
50. Degenerate primer is used for making amplification of -------- **Whole genome**
51. PRIMER used for the process of polymerase chain reaction are ---------- **(single stranded DNA oligonucleotide)**
52. Suicide PCR is used in ------- **paleo genetics**
53. Why are vent polymerase and Pfu more efficient than the Taq polymerase? **(both)**
54. A heat stable enzyme called Taq polymerase is used in polymerase chain reaction which is obtained from a bacterium ---------- **Thermus aquatics**
55. The process of reverse transcription reverse transcribes---------- **RNA into DNA**
56. ---------- is used as a template to produce DNA in Reverse Transcriptase PCR. **RNA**
57. ---------- may occur due to hybridization of primer to each other. **primer dimmers**
58. ---------- determine the specificity of PCR reaction. **Primer**
59. ECOR1 is a ---------- restriction enzyme. **Hexacutter**
60. Primer can be designed ---------- to enable to initiate replication from a larger number of target locations. **Degenerate**
61. Which of the following is not a thermostable polymerase? **DNA Polymerase lll**
62. Sequence of nucleotides which have a twofold axis of rotational symmetry is known as ---------- **Palindrome**
63. A recognition sequence usually ranges from--------- bases. **4-8**
64. Endonuclease are classified in to ----------main classes. **4**

65. Prenatal genetic diagnosis is not important for identification of---------- Infectious **diseases**

66. ---------- refers to the study of ancient human, animal and plant remain. **Paleontology**

67. ---------- is just a semi –quantitative at best. Only an approx., estimation and not a precise measurement of molecular weight of the protein is possible. **Western blotting**

68. The binding between single stranded labeled probe to a complementary nucleotide sequence on the target DNA is called as----------. **Hybridization**

69. Western blotting technique is used to. **All of the above**

70. Which is true for Non-radioactive probe – biotin. **Sensitive**

71. The presence of mutation affecting a restriction site cause the pattern of bands to ---------- from those seen a normal gene. **Differ**

72. ----------antibody availability is a crucial step in western blotting. **Primary**

73. The process of detection of band complementary to the probe, during southern blotting is called---------- **Autoradiography**

74. The ---------- blotting technique is also employed in the gene expression studies. **(western**)

75. We transfer, during western blotting is recommended for large protein of size-------- **>100kb**

76. During western blotting, transfer can be done in. **wet or semi –dry condition**

77. Labeled material to detect complementary region in the gene or DNA is called as. **Probe**

78. ---------- Antibody availability is a crucial step in western blotting. **Primary**

79. Which is not a property of probe? **200kb-30kb nucleotides.**

80. The most common antibody label used in western blot is --------- **HPR**

81. Endonucleases are classified into---------main classes. **4**

82. ----------enzyme have symmetrical recognition sequences but are of little value. **Typel/Typell**

83. Western blotting technique is simply a way to identify unknown ---------- **protein**

84. Inverse PCR is used for the identification and amplification of ---------- **flanking sequence**

85. ----------can be also used for genotyping individual for a large number of loci. **AFLP**

86. Treatment with sodium bisulfate convert unmethylated cytosine bases to -------- **URACIL**

87. Pfu polymerase enzyme is particularly used in ------- PCR. **LONG**

88. The larger gene is cloned with the ---------- PCR. **Long**

89. Assembly PCR is used to assemble two or more pieces of DNA into ---------- **One piece**

90. In situ PCR is limited to detection of --------- material. **Non-genomic**

91. Suicide PCR is used in --------- **Palo genetics**

92. Western blotting test is used in analysis of Biomarkers such as---------- **all of them**

93. Northern blots are used in many ways while studying RNA, for example. **all of above**

94. The most commonly antibody label used in western blots is --------- **HRP**

95. ----------is sometimes called as protein blotting or immunoblotting. **Western blotting**

96. Which is not application of northern blot? **To make a multiple copies of RNA**

97. In western blotting technique, incorrect labeling of the protein can happen due to the reaction of ---------- antibody. **Secondary**

98. Northern blot is a method used for detection of specific---------- **RNA**

99. During Southern blotting, ---------- drawn from a reservoir passes through the --------- into the stack of ---------- **Paper towel, Buffer, Gel**

100. A change in one nucleotide may alter the nucleotide sequence so that the------ fails to recognize and cleave at that site. **RESTRICTION ENDONUCLEASE**

101. Western blotting technique is widely used analytical technique in the field of ---------- **All**

102. Protein of interest is detected and localized using a specific antibody. In first step, western blotting protocol utilize a---------- directed against the target protein. **Non-labeled primary antibody**

103. Which is true for non-radioactive probe – biotin. **Relatively cheap**

104. ----------antibody availability is a crucial step in western blotting. **Secondary**

105. A change in one nucleotide may alter the nucleotide sequence so that the ----------fails to recognize and cleave at that site. **Taq polymerase.**

Separate Whatsapp Groups for Girls and Boys

Special Internship Group with Senior Guideline

Zero Percentage Irrelevant Chatting in study groups

Follow this Link for Joining Study Group:

https://chat.whatsapp.com/D2yLdI6LFFpJuS2EKWYmbE

Remember Us in Your Prayers