

molecular-med

دفعه رَوُح



الطبيب الجراحة
لجنة

1) which transcriptional factor does release RNA polymerase from promoter?

- A) TFIID**
- B) TFIIB**
- C) TFIIF**
- D) TFIIE**
- E) TFIIH**

Answer: E

2) What is sequence at end of chromosome?

- A) centromere**
- B) Telomere**
- C) Telomerase**
- D) kinetochore**

Answer: B

3) DNA can be extracted from all of the following except:

- A) blood**
- B) cell lysate**
- C) white blood cells**
- D) red blood cells**

Answer: D

4) if guanine forms 42% of total DNA nitrogenous bases, how much is the percentage of pyrimidine?

- A) 60%**
- B) 50%**
- C) 42%**
- D) 40%**
- E) 8%**

Answer: B

6) Optimum temperature of pcr DNA POLYMERASE?

- A) 94°**
- B) 72°**
- C) 55°**
- D) 32°**

Answer: B

7) fetal bovine serum in PCR is used for?

- A) Frequent unfreezing-freezing at temperature - 20°**
- B) dissolution of nucleic acids**
- C) promotes specificity for hybridization**
- D) stabilizing complex of primers and matrix**

Answer: A

8) termination sequence of human chromosome?

TTAGGG

9) To sequester Ca^{+2} and Mg^{+2} required for nuclease activity ?

- A) Proteinase k
- B) RNA guard
- C) Chaotropic salt
- D) EDTA

Answer: D

10) Steps of DNA extraction ?

- A) Cell lysis , inactive endogenous nucleases , purification
- B) Purification, cell lysis , inactive endogenous nucleases
- C) inactive endogenous nucleases, cell lysis, purification
- D) inactive endogenous nucleases, purification, cell lysis
- E) cell lysis, purification, inactive endogenous nucleases

Answer: A

11) $Od = .1$, dilution factor= 20 volume of RNA = 100 micro liter

Yield ??

- A) 8000 ng
- B) 8000 micro g
- C) 80ng\micro L
- D) 80Mg\ml

Answer: A

12) Correct about T_m ?

- A) Separation of all DNA strand
- B) T_m increase with increase in AG
- C) T_m increase with increase in AT
- *D) T_m increase with increase in GC
- E) T_m increase with increase in TC

Answer:D

13) Function of zinc finger motif ?

Maintain the tertiary structure of this domain

14) DNA recognition surface of helix turn helix proteins ?

A) Alpha 1

B) Alpha 2

C) Alpha 3

D) Beta 1

E) Beta 2

Answer: C

15) Incorrect ?

Stacking of base pairs through van der waals and hydrogen bonds

16) A DNA , B DNA , Z DNA , 36 base pairs , which one is the tallest ?

A) A DNA

B) Z DNA

C) B DNA

D) Both A DNA and B DNA

E) all of them have the same length

Answer: B

17) Uridine ?

Uracil + ribose

18) Mental deficiency , cardiac anomalies , cleft lip ?

- A) Patau syndrome**
- B) Down syndrome**
- C) Edwards syndrome**
- D) Turner syndrome**

Answer: A

19) 47,XX,+21 ?

- A) Female with 21 extra chromosome, diagnosed with down syndrome**
- B) female with 1 extra chromosome in pair 21, diagnosed with down syndrome**

Answer: B

20) Monosomy ?

- A) Loss of a single chromosome**
- B) loss of a pair of chromosomes**
- C) adding one single chromosome**
- D) adding a pair of chromosomes**

Answer: A

21) Tandem duplication ?

- A) extra chromosome segment may be located immediately after the normal segment**
- B) extra chromosome segment away may be located away from the normal segment**
- C) extra chromosome segment may be located on another chromosome**

Answer: A

22) Remove the RNA primer ?

- A) primase**
- B) Rnase H**
- C) Ligase**
- D) Helicase**

Answer: B

23) Wrong about cental dogma ?

- A) RNA from DNA**
- B) protein from RNA**
- C) DNA from RNA**
- D) protein fro. DNA**
- E) RNA from protein**

Answer: E

24) Incorrect ?

- A) RNA polymerase | .. tRNA**
- B) RNA polymerase || mRNA**
- C) RNA polymerase || miRNA**
- D) RNA polymerase ||| tRNA**
- E) RNA polymerase ||| 5s rRNA**

Answer: A

25) TFIIID binds with ?

- A) BRE**
- B) Inr**
- C) TATA box**

Answer: C

26) Cap0 ?

a)ppNpRNA

b)m7GpppNmpRNA

c)GpppNpRNA

d)m7GpppNpRNA

Answer: D

27) which of the following processing proteins is not found in CTD tail?

A) PAP

B) CPSF

C) CStF

D) TATA box from -26 ----> -31

E) spliceosome

Answer: A

28) Determine the final length of the tail ?

A) Poly – A binding proteins

B) CPSF

C) CStF

D) poly A polymerase

Answer: A

29) type of sugar in DNA:

2-deoxy-beta-D-ribose

30) choose the wrong statement about phosphate group in DNA:

- A) it is phosphoric acid in origin**
- B) 2OH form phosphodiester bonds**
- C) third OH is released making a negative charge on phosphate**
- D) negative charge of phosphate leads to repulsion and destabilize the structure of DNA**
- E) the fourth OH is released as a proton making the phosphate group acidic**

Answer : E

31) _____ is used to evaluate integrity of DNA, and _____ is used to form a pellet from DNA.

- A) centrifuge, electrophoresis**
- B) nanodrop, centrifuge**
- C) electrophoresis, centrifuge**
- D) electrophoresis, nanodrop**
- E) centrifuge, nanodrop**

Answer: C

32) an investigation done upon a virus shows the genetic material as, A33%, T22%, G22%, C33%

Which of the following is correct?

- A) A binds with C, while T binds with G**
- B) virus has single stranded DNA**
- C) It contains RNA instead of DNA**
- D) virus uses human's DNA to build its DNA**

Answer: B

33) which of the following is incorrect regarding bonds between nitrogenous bases in DNA?

- A) 6'C from G with 4'C from C
- B) 1'C from G with 3'C from C
- C) 2'C from G with 2'C from C
- D) 6'C from A with 4'C from T
- *E) 2'C from A with 2'C from T

Answer: E

يا رب؛ يا عُدتي لأيامي العصبية، ويا أول من يخطر اسمه في قلبي حين أخاف وحين أوَمِّل، ويا مَنْ يبقى لي حين لا يبقى لي ركنٌ أو أنيسٌ أو سميع؛ لا تُخَلِّني وحدي، ولا تَكِلني إلى نفسي، ولا تجعل حاجتي عند غيرك.
• شيماء سعد.

لا تنسونا من صالح دعائكم
مع أمنياتنا بالتوفيق والنجاح
#لجنة_الطب_والجراحة