BIO302 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 E. coli chromosome is estimated to have about_____ super-coiled loops. **(400)**
2. The first step is the initial binding of polymerase to a promoter to form what is called____? (**Closed complex)**
3. tRNA accounts for some____ of all cellular RNA. (**10%)**
4. Polycyclic aromatic hydrocarbons (PAHs) formed by incomplete combustion of the burning wood or____ **(Coal)**
5. The____ model predicts that the linker DNA forms a straight path between nucleosomes____. (**Zigzag)**
6. tRNA having amino acid joins with____ during protein synthesis. **(mRNA)**
7. Hershey and chase used____ isotopes for their experiments. **(P)**
8. In a molecule of double-stranded DNA, the amount of Adenine present equal to the amount of? (**thymine)**
9. Cell free fermentation was discovered in_____ **(1897)**
10. The wave length range of VU-B light is____ nm. (**296- 320)**
11. Direct de-alkylation reactions have probably been most extensively studied in_____. **(E. coli)**
12. The bacterium used in Hershey and Chase experiments were____. (**E. coli)**
13. The nucleosome of eukaryotic genome contains about____ protein molecules with DNA. **(9)**
14. The wavelength of ultra violet light that damages DNA is_____ nm. (**100- 400)**
15. Which three additional enzyme are required when the nick is present on 3' end the mismatch. (**MutS-alpha, Exol, and RPA)**
16. Presence of 5 origins of replication will divide each chromosome into_____ replicons. **(5)**
17. RNA polymerase functions only in the presence of_____. (**DNA)**

18. _____ number of distinct DNA glycosylase/ lyase enzymes have been identified in human cells. **(6)**
19. Which shows the correct complimentary base pairing of DNA? (**T-A, G-C)**
20. Long patch repair pathway replaces the_____ nucleotides. (**2- 8)**
21. Ribose and deoxyribose sugar in nucleic acids differ in___ at___. **(N, C_3)**
22. E. coli chromosome consists of approx.____ nucleotide pairs. **(4 Million)**
23. All organisms that have a mismatch repair system have MutS and _____ homologs. **(MutL)**
24. Formation of cyclo-butane pyrimidine dimer (CPD) which accounts for about ____ % of all the UV_ induced damage**. (75)**
25. DNA replication is semi- conservative was proved in____. (**1958)**
26. Nucleoside is_____. (**Nucleotide- Phosphoric acid**)
27. The bond angles in protein primary structure resulting from rotations at C are labelled (phi) for the____. (**N- alpha C)**
28. Cisplatin is very effective chemotherapeutic agent for treating cancers of the____. (**Bladder, Testicles, Ovaries, All given)**
29. The first enzyme diastase was discovered by_____. (**Payen)**
30. Key substrates required for the synthesis of DNA to proceeds are_____ and____. **(Deoxy-nucleoside trio-phosphate- primer)**
31. DNA polymerases introduce about one miss-paired nucleotide per____ nucleotides. **(105)**
32. Performed the X-ray diffraction analysis of DNA fibers. (**Rosalind and Wilkins)**
33. Exole enzyme degrades DNA in a_____ direction. **(3'…….5')**
34. _____carries the information from DNA to the ribosomal sites of protein synthesis. **(mRNA)**
35. Symmetry in quaternary structure of protein with two fold rotational axis is called____. **(Dihedral)**
36. RNA creates cavities on their outer surfaces specific for the different_____. **(Amino Acids)**
37. _____ make RNA using appropriate segments of chromosomal DNA as their templates. (**RNA polymerase)**
38. The first discovered enzyme is known as____. (**Diastase)**
39. _____ adds a deoxy-ribonucleotide to the 3'-OH and of DNA. (**DNA polymerase)**
40. The movement of DNA helicae along single strand of DNA strand in defined direction is known as____. (**Polarity)**
41. An AP (apurinic and apyrimidine) site can be produced by___ enzyme. (**DNA glycosylase)**
42. Meselson and Stahl performed a classical experiment to distinguish among three possible models of DNA replication using isotope of____. (**N)**
43. _____ is a sulphur containing amino acid. (**Methionine)**

DO NOT COPY

44. CH_3 group is attached at____ of thymine nitrogenous base. (**C6)**
45. Psoralen can_____ DNA if photo-activated. (**Alkylate)**
46. Which one of these amino acids are present in high percentage in histone protein. (**Lycine)**
47. One of the most mutagenic base analogs is 5-bromouracil, an analog of_____. (**Thymine)**
48. The basic nucleotide excision repair pathway is____ in all the organism. **(Same)**
49. The length of mRNA molecules is variable and depends on the length of____. (**Protein)**
50. James Watson and Francis Crick discovered the double helical structures of DNA in___. **(1953)**
51. Which one of these amino acids are present in high percentage in histone protein. (**Arginine)**
52. Central dogma of molecular biology does not involve____. (**Carbohydrates)**
53. CPD photolyases are present in all organisms except___. **(Humans)**
54. Urea was synthesized Wohler in____. **(1828)**
55. The incorporation rate of rNTPs is____ folds lower than dNTPs. (**1000)**
56. Which of the following is not a base of RNA? (**Thymine(T)**
57. Which enzyme prevents the accumulation of supercoils ahead of the replication fork? (**helicase)**
58. Working independently cracked the code in the early 1960s. (**Nirenberrg and Gobind)**
59. The hydrophilic backbones of alternating deoxyribose and phosphate groups are inside the double helix, facing the surrounding water? (**False)**
60. Chromosomes are made up of? **(Protein and DNA)**
61. Chromosome theory of inheritance by Thomas Hunt Morgan was presented in? **(1910)**
62. Nucleotide consists of …… major molecules. **(5)**
63. How many amino acids are there in one complete tern of DNA? **(3.6)**
64. Nucleosomes fold to form the _____ fiber. **(30 nm)**
65. On which media, cells are preferred to be grown? (**N14 b)**
66. DNA polymerase has _____ domains. **(3)**
67. An E.Coli chromosome is estimated to have about.....super-coiled loops. (**400)**
68. Separation of DNA is accomplished by _____. **(Type II topoisomerase)**
69. Which one of the following is not an ionizing radiation? (**Ultraviolet light)**
70. Hydrolytic deamination of cytosine is estimated to take place about a…. **(100 to 500 times a day in a mammalian cell)**
71. What will happen to the DNA exposed to N-methylguanine. (**it will form a basic site)**
72. Aflatoxins are produced by; **(Fungi)**
73. .....are similar enough to the proper bases to get taken up by cells converted into nucleoside triphosphate and incorporated into DNA during replication. **(Base analogs)**
74. Cells infected with phage .....provide the ideal system to find the true template for protein synthesis **(T4)**

DO NOT COPY

75. RNA polymerase performs essentially the same reaction in the cells from bacteria to human that is the synthesis of ..... **(RNA)**
76. There are three human MutS homologs (**MSH2, MSH3, MSH6)**
77. In long patch repair, how many nucleotides are repaired... a) 1 b) 4-6 c) **2-8** d) 10-14 (not confirm)
78. Pyrimidine dimers are formed by... **(UV radiation)**
79. During Elongation RNA polymerase synthesized a short stretch of RNA contain _____Bases (**10 bases)**
80. During elongation the enzyme performs tasks beside RNA synthesis are. **(Unwind Dissociates RNA from Template, Proof Reading, All of these)**
81. The 3 step of Transcription is; (**Termination)**
82. in some cells specific, well characterized sequences trigger termination in other it's is_____ what instructs the enzyme. (**Less clear)**
83. Once the newly RNA is created during transcription which factor is reassessed as well. **(sigma factor)**
84. RNA polymerase initiates transcription in bacteria from (**Any point of DNA)**
85. Which factor recognize that from which point the transcription have to start **(Sigma)**
86. Bacterial Core enzyme is consist of (**Alpha 2 Beta Beta Prime Omega)**
87. In the case of E. coli the predominant Sigma factor is called? (**sigma 70)**
88. Promoters recognized by polymerase have_____ conserved sequence each _____&nucleotides.(**2- 6)**
89. the defined sequences are centered respectively at_____ and ____ upstream of the site where RNA synthesis starts **(10 bp and 35 bp)**
90. There are _____channels into the open complex **(5)**
91. The ____uptake channel allows ribonucleotides to enter the active center. (**Non Template)NTP channel**
92. Within the active center cleft, the DNA strands separate from position **(+3)**
93. .In the open complex region 1.1 shifts, position allows to DNA to access **(50 A)**
94. Region 1.1 of sigma is highly ____charged thus in the holoenzyme region 1.1 acts as molecular mimic of DNA (**negatively charged)**
95. The space in the active center cleft occupied by region 1.1 of DNA is highly____ (**Positively charged)**
96. RNA polymerase can initiate a new RNA chain on DNA template and thus does not need a_____. (**Primer)**
97. RNA polymerase starts most transcripts with? (**Adenine)**
98. During initial transcription RNA polymerase produces and releases short RNA transcripts of <10 nucleotides called (**abortive synthesis)**
99. The model proposes forward and reverse translocation of RNA polymerase. (**Transient excursion)**

DO NOT COPY

100. The experiments have shown that during transcription the polymerase remains promoter. **(Stationery)**
101. Which of the following is not the function of elongating polymerase. (**Synthesis DNA)**
102. Double stranded DNA enters the front of the enzyme between the___. (**Pincers)**
103. During elongations the enzyme adds _____nucleotide at a time to the growing RNA transcript. (**One)**
104. 38. The size of the bubble length of DNA that is not double helical remains_____ throughout the elongation. (**Constant)**
105. RNA polymerase performs _____proofreading functions on the growing transition. **(Two)**
106. The sequences called _____trigger the elongating polymerase to dissociate from the DNA and release the RNA chain it has made. (Terminators)
107. There are ____Types of terminators in bacteria. **(Two)**
108. Rho-dependent terminators have rather ill-defined RNA elements called? (**Rut sites)**
109. Rho binds the single stranded RNA as it ____the polymerase. (**Exit)**
110. The collision pushes polymerase forward causing dissociation of ternary complex of? **(RNA polymerase, Template DNA, RNA transcript, All of these)**
111. Rho independent terminators sequence elements contain repeat of____ nucleotides followed by the stretch of about eight _____base pairs. **(20 and A: T)**
112. The hairpin works as an efficient terminator only when it's followed by a stretch of ___base pair. (**A: U)**
113. Bacteria have only ____RNA polymerase but eukaryotes have ___RNA polymerase. (**One and three)**
114. RNA Polymerase IV and V are present in.... **(Plants)**
115. In Vitro, the general transcription factors are all that required together with____ to initiate transcription on a DNA template. (**RNA Pol-ll)**
116. In vivo, GTF are not alone sufficient to bind promoter sequence so the addition actors required are.....
    a. **(Mediator complex, chromatin modifying enzymes A&B)**
117. The eukaryotic core promoter refers the minimal set of sequence elements required for accurate transcription initiation by the ____machinery (**Pol II)**
118. A core promoter is typically ____nucleotides long, extending either _____from the transaction start site. **(~40 to ~60 and upstream or downstream)**
119. The Elements found in Poll core promoter include the...
120. (TFIIB,TATA Box, Inr and DPE, All of these)
121. TATA box containing promoter also contains a? (**DCE)**

DO NOT COPY

122. The most common element found in combination with both TATA and DPES? **(Inr)**
123. Many Pol II promoters contain TATA element some ____, upstream of the transcription start site. **(30 Bp**)
124. The TATA element recognized by the general transcription factor called? (**TFIID)**
125. The component of TFIID that binds to the TATA DNA sequence is called____. **(TBP)**
126. During the abortive initiation the polymerase synthesizes a series of _____transcripts. **(short)**
127. In eukaryotes promoter escape involves ____steps. (**Two)**
128. The large subunit of Pol II has a carboxy-Terminal Domain (CTD) which is referred as 3. **(Tail)**
129. The CTD contains a series of repeats of the ____ sequence. **(heptapeptide)**
130. Series of repeats of the heptapeptide sequence in yeast Pol IICTD are (**27)**
131. Series of repeats of the heptapeptide sequence in worm PoI II CTD are? **(32)**
132. Series of repeats of the hepta-peptide sequence in human Pol II CTD are? (**952)**
133. Series of repeats of the hepta-peptide sequence the number of repeats correlate with the complexity of the ____. (**Genome)**
134. Hepta-peptide sequence repeat contains sites for phosphorylation by specific enzyme called. **(Kinase)**
135. Regulating the ____ state of the CTD of Pol Il controls subsequent steps elongation and the processing of RNA. (**Phosphorylation)**
136. Enzyme the remove phosphate group from CTD is called. (**Phosphatase)**
137. General Transcription Factors are complexes made up of? **(Two or more subunits)**
138. TBP is associated with about ____TAFS ____of the TAFS bind DNA elements at the promoter. (**10-2)**
139. Several of the TAFS have structural homology with ____proteins. **(Histone**)
140. TAF42 and TAF62 from Drosophila have been shown to form a structure similar to that of the ____tetramer of Histones. **(H3.H4)**
141. Structural studies suggest that segments of TFIIB insert into the RNA-exit channel and active center cleft of Pol II in a manner analogous to the o region _____linker in the bacterial case.(**¾)**
142. _____ controls the ATP-dependent transition of the preinitiation complex to the open complex. (**TFIIH)**
143. Within TFIIH are two subunits that function as ____and another that is a protein ____, with roles in promoter melting and escape. (**ATPases and Kinase)**
144. It is now believed that a subunit of TFIIH acts as an ATP-driven translocator of _____.(**Double-Stranded DNA)**

DO NOT COPY

145. TFIIH subunit binds to DNA downstream from polymerase and feeds double-stranded DNA, with a ____threading, into the cleft of the polymerase. (**Right-handed)**

146. Transcriptional regulatory proteins called ____ help recruit polymerase to the promoter, stabilizing its binding there. (**Activator)**

147. The yeast and human Mediators each include more than ____subunits of which ___ shows significant sequence homology between the two organisms. (**20-7)**

148. The mediator from both yeast and humans are organized in ____. (**Modules)**

149. Modules called head, middle and tail can be dissociated from one another under certain condition in? (**in vitro)**

150. Crystal structure of the head module of yeast mediator reveals that it contains ____subunits. **(7)**

151. 3 domain structure that binds the Transcription complex in such a way as juxtapose TFIIH and the CTD tail of RNA polymerase promoting ____ of the letter by the former. (**Phosphorylation)**

152. Once polymerase has escaped the promoter and initiated transcription, it shifts into the; (**elongation phase)**

153. Which of the following factors are the Elongation Factors? (**TFIISTFIIS, A&B)**

154. Which factors are recruited during elongation phase? (**Capping enzyme, Splicing machinery, Polyadenylation and cleavage, All of these)**

155. Which protein bound to Pol II that phosphorylates the serine residue at position 2 for the CTD Repeats? (**Kinase P-TEFb)**

156. In addition, P-TEFb phosphorylates and thereby activates another protein called? (**SPT5)**

157. P-TEFb stimulates elongation ___ in separate ways. (**three)**

158. NusG/SPTS factors bind to their respective RNA polymerase at the ____of the clamp. **(Tip)**

159. The first human ____ protein was originally identified as the product of a gene that under

160. Translocation in acute myeloid leukemia. **(ELL)**

161. Which factor that contributes to proofreading by polymerase? (**TFIIS)**

162. TFIIS stimulates an inherent Rnase activity in polymerase allowing an alternative approach to removing mis-incorporated bases through local; **(Limited RNA degradation)**

163. The final RNA processing event, ____ of the 3' end of the mRNA is intimately linked with the termination of transcription. (**Polyadenylation)**

164. The highly processing RNase polymerase either pushes polymerase ____ the remains of the nascent RNA transcript from the enzyme. (**Forward or pulls)**

165. Which factor is universally involved in initiating transcription by Poll, Pol II and Pol III. **(TBP)**

DO NOT COPY

166. ____ is required for the expression of only one gene that encoding the rRNA precursor. **(Pol I)**
167. The promoter for the rRNA gene comprises two parts____ and ____. **(Core element and UCE)**
168. The former is located around the start site of transcription, and the latter between ____ upstream (In humans).
169. **(Start site - 100 and 150bp)**
170. In addition to Pol I, initiation requires two other factors, called _____. (**SL1 and UBF)**
171. SL1 comprises ____specific for Pol I transcription. (**TBP and 3 TAFS)**
172. SL1 binds DNA only in the presence of UBF. **(UBF)**
173. Pol III promoters come in various forms and the vast majority have the unusual feature of being located from the transcription start site. (**Downstream)**
174. Some Pol III promoters (eg, those for the tRNA genes) consist of two regions, called ____ separated by a short element. **(Box A and Box B)**
175. 5S rRNA gene contains box? **(Box A and box C)**
176. The TFIIC complex binds to the promoter region. This complex recruits TFIIIB to the DNA just of the start site, where it, in turn, recruits Pol III to the start site of transcription. (**Upstream)**
177. It is generally assumed that the coding sequence is ____ ie., the codon for one amino acid is immediately adjacent to the codon for the next amino acid in the polypeptide chain.
178. (**Contiguous)**
179. In eukaryotic genes the coding sequence is interrupted by stretches of ____. (**Non-coding sequence)**
180. The coding sequences are called____ and the intervening sequences are called___. (**Exons and introns)**
181. Once transcribed into an RNA transcript, the _____must be removed and the ___ joined together to create the mRNA for that gene. (**Introns and Exons)**
182. The no of the introns in the case of the Titin gene of humans are. **(363)**
183. Introns are very often much ____ that the exons they separate. (**Longer)**
184. Example of mammalian gene Enzyme is**? (dihydro- folate reductase)**
185. The split genes of eukaryotes are transcribed into a ____ of the entire gene. (**Single RNA copy)**
186. The length and number of introns, the primary transcript (or pre-mRNA) can be_____. **(Very long)**
187. Primary transcripts of intron-containing genes must have their introns ____ before they can be translated into proteins. (**Removed)**
188. RNA Splicing must occur with great precision to avoid the _____ of even a single nucleotide at the sites at which the exons are joined. **(Loss or addition)**

DO NOT COPY

189. Lack of precision in splicing will change the reading frames of _____. **(Exons)**
190. Alternative splicing strategy enables a gene to give rise to more than one polypeptide product. These alternative products are called ____. **(Isoforms)**
191. It is estimated that 90% or more of the protein-coding genes in the human genome are spliced in alternative ways to generate more than one isoform. (**90% or more)**
192. The borders between introns and exons are marked by specific nucleotide sequences within _____. (**Pre-mRNAs)**
193. The 5′ and 3′ splice sites were sometimes referred to as the _____ sites, respectively. **(Donor and accepter)**
194. The third sequence necessary for splicing. This is called the _____ site. (**Branch-point)**
195. The most highly conserved sequences are the _____ in the 5' splice site, the ____ in the 3' splice site, and A at the branch site. (**GU and AG)**
196. An intron is removed through two successive transesterification reactions in which ____ within the pre-mRNA are broken and new ones are formed. (**Phosphodiester linkages)**
197. The first reaction is triggered by the 2'-OH of the conserved A at the branch site. This group acts as ____ to attack the phosphoryl group of the conserved G in the 5' splice site. (**Nucleophile)**
198. In this first reaction, the phosphodiester bond between the ____ and at the 5' junction between the intron and the exon is cleaved. (**Sugar and Phosphate)**
199. In addition to the 5' and 3' backbone linkages, a third phosphodiester extends from the 2'-OH of that A to create a three way junction hence its description as a_____. (**Branch-point)**
200. In the second reaction, the 5' exon reverses its role and becomes a nucleophile that attacks the _____ at the 3' splice site. (**Phosphoryl group)**
201. The 5' end of the intron had been joined to branch point A in the first transesterification reaction. the newly liberated intron has the shape of a ____. (**Lariat)**
202. In the two reaction steps, there is no net a number of chemical bonds ____ phosphodiester bonds are broken, and new ones are made. (**2 and 2)**
203. During the removal of introns phosphodiester bonds are broken, and two new ones are made. **(No energy required)**
204. During the splicing reaction….. (**Large amount of energy required)**
205. Point regarding the splicing reaction is direction: what ensures that splicing only goes forward-that 15, toward the products. **(Forward toward the product)**
206. The transesterification reactions are mediated by a huge molecular "machine" called ____. (**Spliceosome)**
207. The spliceosome machine size is similar to a? (**Ribosomes)**
208. The Spliceosome complex machine comprises about ____ proteins and ____ RNAS. (**150 and 5)**

DO NOT COPY

209. In performing even a single splicing reaction, the spliceosome hydrolyzes _____. **(Several ATP Molecules)**
210. Many of the functions of the spliceosome are performed by? **(RNA component)**
211. _____ locate the sequence elements at the intron-exon borders and likely participate in catalysis of the splicing reaction itself. **(RNA)**
212. The five RNAs (U1, U2, U4, US, and U6) are collectively called? **(snRNA)**
213. snRNAs is between ____ and ____ nucleotides long in most eukaryotes and is complexed with several proteins. **(100 and 300)**
214. snRNPs is stand for... ? (**Small nuclear Ribo-nuclear Proteins)**
215. The snRNPs have ____ roles in splicing. (**Three)**
216. During the splicesome which interactions are important? (**RNA-RNA, RNA-Protein, Protein-protein, All of these)**
217. Some non-snRNPs are also involved in splicing. One example, ____ recognizes the polypyrimidine (Py tract/3' splice site. (**U2AF)**
218. Proteins involved in the splicing reaction include; **(RNA annealing factor, DEAD-box helicase, A&B)**
219. Which enzyme helps load snRNPs onto the mRNA. (**RNA Annealing Factor)**
220. The latter use their ____ activity to dissociate given RNA -RNA interactions, allowing alternative pairs to form and thereby driving the rearrangements that occur through the splicing reaction. (**ATPase)**
221. U4 is released from the complex, allowing U6 to interact with U2 through the ____ base pairing. (**RNA-RNA)**
222. The second reaction, between the 5' and 3' splice sites, is aided by the U5 snRNP which helps to bring the ___ exons together. **(Two)**
223. Classes of splicing found in the cells are? (**Nuclear pre-mRNA, Group II introns, Group introns, All of these**)
224. Self-splicing introns are? **(Group II introns& Group I introns)**
225. Group I introns splice by a different pathway, instead of a branch point A residue, they use a free G. **(Nucleotide or nucleoside)**
226. This G species is bound by the RNA, and it is _____ group is presented to the 5' splice site. **(3'-OH)**
227. The structure of group I introns includes a binding pocket that will accommodate any _____ nucleotide or nucleoside. **(Guanine)**
228. ____ are essential for splicing. They cannot only ensure the accuracy and efficiency of constitutive splicing but also regulate alternative splicing. (**SR Protein**)
229. Common form of Allternating splicing in which complete exons are included or excluded from the mature message. (**Cassette exon)**
230. Proteins that regulate splicing bind to specific sites called _____. (**Exonic ESE or intronic ISE, Silencers (ESS or ISS), both)**

DO NOT COPY

231. Each SR protein has another domain, rich in arginine and serine, called? (RS domain)
232. Larry Simpson and colleagues found that editing system should add or delete UMPS when they discovered. (**gRNAs)**
233. kinetoplasts have a terminal ____that could add extra UMPS (uridylates) to the mRNA during editing. (**TUTase))**
234. During editing mRNA has to cut and add UMPs so kineto-plasts contain ____. **(RNA ligase)**
235. Information in nucleotides interpreted to generate sequence of amino acids is called. **(Translation)**
236. Many genes in higher eukaryotes encode _____ that can be spliced in alternative ways to generate two or more different ____ and thus different protein products. (**RNAs-mRNAs)**
237. What % Drosophila genes undergo alternative splicing: **(40%)**
238. What % Human Genes undergo Alternative splicing. **(90% d) 95%)**
239. Many alternatively spliced genes generate only ____ alternative products. (**Two)**
240. The number of potential alternatives that can be generated from a single gene is breath taking hundreds e.g., in the human _____. (**Slo gene)**
241. The mammalian muscle protein is? (**Troponin T)**
242. The pre mRNA made from troponin T gene contains ____? (**Five exons)**
243. The case of T antigen of the monkey virus SV40 shows an example of an? (**Extended** exon)
244. Both forms of T antigens are made in a cell infected by? **(SV40)**
245. _____ induce transformation and cell cycle re-entry, whereas ____ blocks the apoptotic response of cells forced that path. (**large and small t)**
246. The ratio of the two forms produced differs depending on the level of the splicing regulator. **(SF2/ASF)**

DO NOT COPY

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