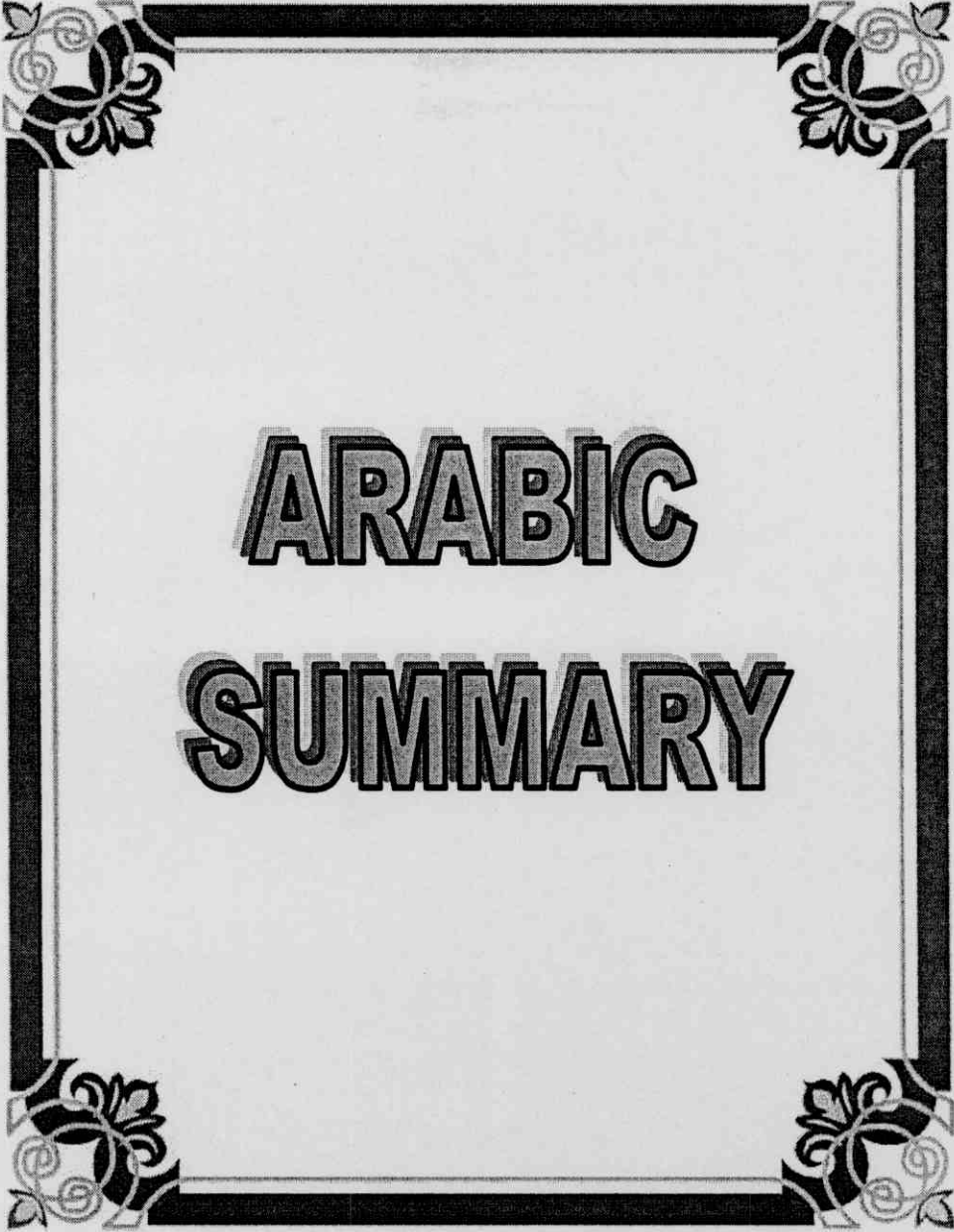




ARABIC SUMMARY

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا

عَلَّمْنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ﴾

(ry 3_4)

c_{bl})g_o

.1111

الملخص العربي

L₂i13 :L....Ni₂%/ s .1_42 LE l c9Ji 019.1
 L1,4_,,11 -11j_s1:5 vA v 1_4l cc_i
 L₈iz, 14:3 JY.i.0 L₅3l 1.:14 .*,4_,411_, 9.1611..S j aAll
 L_ric.

cii.)^{1_31} Lsla ^{1_611} JSii

j . 14 L_*1c. **keP** CaaS **cs i 4 14 ji**

____.11**HI**____"cl.i1:111 jS1-:1.411 C)4 .141%1l L>la.ii :ASP *dr%*

L5.11 q_3l 341l)a 1.4 **A'k**

j L₈Y i .t_____23L.. L)z a.41 j j..>.:0 LA L113

.ZS...411 3 c.13.kil 14,13l1 Ljil i Cj l j.1;13 1141 j.Cl 3

J.11 L₈**k.** :L1.A Lj y1.> 1 **Jill 1)3A** L_ri

J ^{1_4} _____ A l L1+4 :44l J.41_11A

¹1.13 C.1¹⁺ JI—Aj _____"9 (s⁻⁶³3.)')

c2244 41113j (%) ,o J.C.;%9 ∞,1l cLA4.1 _____

. c).11 c9JS e⁴¹)ll j..31 44: H₄l

:40.lU1 ,9-%.J1l L_ric u.4.41 4.ll LAI J,ill e..AL

:

____J J41l c_t a⁴ j.411 c c44: .1l) j i:-11 c:J1.4 J.43l ,3

4.:Lai:, ul ju.,3.01 c9J9 (l).i,5

u—A.1_u 1 (%))3_4\$JJ :4:|z al i.11 JA

cr.)) ,H L 4 L., cs Iz1 4.1=1 agl j._)41 3 JL43.1S11

(Cj j_ _1^{1_4} i p:).?.) •)...1 51 L₈**0** 1.4:111 (1 **A** **cA1** v ,A9,1

L,641 v',VY4-¹3r-¹ LL4?U¹

L₁L) JJ.²¹ _____%fl'••

L,-J L³¹J J 41c. | .14S J.)⁷1₃

cry X11 uSc ;L,,,L445.11,9 4)4 : 44.W.111 I

J_J,⁹ J.ll

cslc (5 4 lannate

L'pA `19 y11 41c. J.;31.331 LL4 L;)!=ill 9JJ

L:1¹ .1.1.LvI tro

L:13 (j.o,4.1.31 sy. ..)

L. 51i B.,5i 1:f111

o) _____c.4 o_____coumarin

9.. 4 0.12.4 %frrr (,114/1,)

azadirachtin _____(L5 1) .),•;55,11

4_4 :*&-\\ \ LL4_ 0 4.)? cLj.. 1z1 LcIzic.1

(Ls⁻¹¹-.) ••/gdi o 144? v %rAr,r

. Q.4 v

protecto 4.3 =t1N _____L:)4 (511,4 cji 121-111 L:uuJ

L. 51i ;4.6 43.c.1

J. d i Lr.ii y o) 1-rit.414.? ELI v .1,, %A.

v .3A4 %r.

$$\begin{array}{l} \mathbf{v}_i^j, \mathbf{r}, \mathbf{r}', \mathbf{L}_{4:1:1} \mathbf{U} \quad \mathbf{LC}_{50} \\ \mathbf{A} \mathbf{E} \quad \mathbf{r} \quad \mathbf{j} \mathbf{j}^{41} \\ \mathbf{L5-1}^\circ \bullet \bullet \mathbf{LS-11-1} \mathbf{AOi} \\ \mathbf{j}, 4\#11 \quad :211111 \\ \mathbf{L_e1z} \quad \mathbf{j}, i11.A11 \mathbf{u1.sS_J}, 11 \quad (\mathbf{i}) \\ \text{old LgiS} \quad .11151 \\ \mathbf{L_{4,2},J}, \mathbf{L} \quad \mathbf{L_{J,},3} \mathbf{LIZ}, \mathbf{j}, 4511 \\ -\mathbf{V} \bullet) \mathbf{c} (\mathbf{AN}^i \bullet -\mathbf{tA}, \mathbf{rr}) \mathbf{c} (\%00-\mathbf{tn}, 11) \mathbf{c} (\%1.-\mathbf{to}) \quad \mathbf{L}, 4_{-}, \mathbf{L}--.<:\bullet 41 \\ \mathbf{Jr.} (\%0. \\ (\mathbf{L3_J5LISII}) \quad \mathbf{c}:2:\mathbf{a} \quad \mathbf{L.3+?} \quad \mathbf{_{,5,11}P} \quad \mathbf{i1C_{,3}}+\mathbf{11}_{,3} \\ \mathbf{j1:1} \mathbf{S} \quad \mathbf{L_{r}1C} \quad \mathbf{_{,AL}} (\mathbf{u}) \\ \mathbf{i4.0} \mathbf{0519} \quad \mathbf{LS1:1111} \mathbf{cJj}^i\mathbf{2} \\ .1,\mathbf{y} \quad \mathbf{Lia} \quad \mathbf{0} \quad \mathbf{C} \quad \mathbf{q1} \mathbf{51} \quad \mathbf{3:Lj4.1} \mathbf{3} \mathbf{LL3_{,11}} \\ \mathbf{t} \mathbf{r}, \mathbf{y}), (\mathbf{tt}, \mathbf{v}-\mathbf{to}, \mathbf{y}) \quad , (\mathbf{to}- \\ \mathbf{A}, \quad \bullet, \mathbf{r} \\ \mathbf{avL}, \mathbf{_{,11}} \mathbf{LL114}_{->...31} \\ \mathbf{J}, \mathbf{WJ1} \quad \mathbf{j9}^1, \mathbf{0} \quad \mathbf{0.6C.} \quad \mathbf{J}, \mathbf{i11...4,11} \quad (\mathbf{c}) \\ \mathbf{s} \quad \text{---} \\ \mathbf{j} \mathbf{51} \quad \mathbf{'L'_{11}S} \mathbf{J431}_{\text{---}}; \mathbf{41^1,0} \mathbf{CLJ1_{,1S51}} \\ -\mathbf{1} \mathbf{I}, \mathbf{Y}) \mathbf{c} (\mathbf{A}, \mathbf{t}^--\mathbf{1} \mathbf{1}, \mathbf{0}) \quad -\mathbf{1} \mathbf{_{,v})} \quad (\mathbf{t}_{\mathbf{_{,v}}} - \mathbf{t}, \mathbf{v}) \quad \mathbf{la} \mathbf{ol}, \mathbf{S}_{\mathbf{_{,11}}} \\ \mathbf{U.} \quad \mathbf{_{, <L}, 4JD} \quad \mathbf{LL11_{, ,111}} \quad \mathbf{_{,1}} (\mathbf{A} \end{array}$$

V,9 < V c 9 c 9,1' c "5111 j⁴¹₋₉
 .Ls.11.3:111 1 a<sup>L.11 LL11.4.)⁴¹¹ Lydil Z41..11 j A cL)L9_{-,4}11
 _____ ;L&zls i _____ j):‘ L_o¹ (J)
 :
 j uL4 Lt1 cJ_JL)
 A_{).}11 3 LAS j->8.
 (%AA,A-0.) li_{J,11} U,0¹¹, 11111 ,Lj₋₁₁ z i_A
 4_L4_411.1_3c (%) (%vy,t —it,i), (%Ao,1-11,1)
 _____ % 9 r, r c 9,, .
 cLA4s,,.1 Lyail z.0111
 _____ cc³c. _____ s _____ tps .1,, (r)
 ;LiA131 j_JS:11 ;4.3
 ->)" L11 :A4.3)c. tti.1_J¹ Ls.11
 L¹¹43 ¹¹ " ¹¹IP (r)
 ^,1111 0;z14,11
 L⁴_{j,....,4} L24₁ L j.u14_J\$il L:4 L:111 34_5g .1c. LL1_4_{).}31
 j).⁴ Ly|1111 j :a₄₄11 .12z. b.. yS a jL_{-,m}3
 r , (,yyv—A0Y) ,(vo.
 ;>>N1 c ; 1.1S1j.)f11 aul.4 Ls2
 _____ l _____, 1_Y. Y ... jL3
 .aL.11 u.i¹¹ L511₉1111 csic. k1 jell L'JL.,11 Jill</sup>

cJ_115

sz1.4,3,1

:46.11 c₁₁

Lc_J11.11

c44.1:111

k₄.z³ jf 4.3

:k.4.41,14

• 3451^{11 1,11},04 byzli 4-⁶ Jz.):)

¹.)4PJ Sk-cs.1)4¹¹

o1._.11 34s

(%) • •)

i.*sr

csl.1:111

(3—²₁ 1-2-11c• cJ⁹, J.11 Z.L-3 c:J¹

⁴4³.% 9:¹⁻⁰⁵J,J4³¹9

L: 1¹¹

603i L:4s...₄₃₁

:t.41.)11 jii1

j^u *: (5¹) (4. ¹¹ -¹.44³¹j k:uLull L:J1_____

J_14

L

csin..., 3  II

jskal

J9 g

v11:15₃

jac.1111

Lf₁₃.1

² qk₅

ejy.=

jjilij kin4UN.&31 alguLi 1|41.1c,

j_61x11

c'11

fS.14:94.411 cJA

ls_il 491

...k11

4u

till

\$11 ls*i**9

...₁₁ lya

c.LW

jSti_j 441

lp=x121 out.i.11

i41₆ ;1=1 114

J

JJ J J 4.447)

.3A

'433.4._f⁴n u.kai 4,10 0 *duio ll* cll4 .J.41

: LW.4Li.11 p_24.11

4.4

j11 J.40.11 L'At.1 (ALL

4¹¹!

Invertase

();=¹i&³¹ 4¹¹ :L:1¹¹ ..)+¹⁵ 7

-11 j_j

.) r)) lannate

),0 azadirachtin (III $\gamma^{[n]}$) 1A) protecto
Invertase

),` n) coumarin $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

$\mathbf{j_j}$ $\mathbf{j^{tio}}$ $\mathbf{g_i j}$

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

•,Y f i) coumarin $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ Trehalase

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ ai $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

lannate $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ „L. •,•:'/Y) Protecto

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ L-42 $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ r

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ Trehalase J $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ L-11-4³¹ L. •,l'kv) azadirachtin

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ Amylase II

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ „L. •,rYv) coumarin

a39 $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ azadirachtin

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ i2i1 $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ lannate $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ Amylase

M) Protect° $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ J.3.)¹³S¹) C JUL°

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ GPT $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ LELS

Protect° $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ L,14 •,0A) lannate

•,l' r) coumarin $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$),. v)

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ azadirachtin

$\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$ $\frac{\text{L}^{411} \text{L}^{41}}{\text{L}^{411} \text{L}^{41}}$

GOT _1 ccⁱ
 Ls3.4 A, f.) coumarin mil⁺ l la v Gail j^{4l}
 (c-- _____ Ls^{ig} 9,9v) azadirachtin _____ j^j
 v, j1.10--4 (A V, f 9) Protecto
 GOT —11 gc_ 4A1 1=1 _____ (j^j
 0,9 lannate al

alpha_II c^{ic}. _AIL 4^{3l} Z.L..1.4
 c^A-1)411*A-.-4_3l=4 4^{1l}) c.11111 c:J J-.11 esterase
 L51° azadirachtin
 JS / ¹.)%. r, • t Y) coumarin
 IL:111 e^l_p. L,14 '1,01 .)
 „L. 1 ,A9 •) lannate Lc^{ali} cc-E
 — L:),)3 _____ protecto L^j j^j
 Beta- 4 .0251)/1 .1.12,111 j^j;.111&.11 s^{us} c:k^llll 3.4.411
 /r^l_ Iu r, r f A) lannate 4^{lll} j^{4l} esterase
 u j Ls_ IA ,A0 0) protecto (Da,
 azadirachtin , _____ ,⁰)) coumarin
 ,s1„)',1 '1 9) Li.1511S1l. Ls.I. ,AAY)

C:L¹¹¹ 'Lliii-¹⁶¹ CJA
 M..)—?.)A protecto 14141. :1 Ls^{all} j^{lll} (.5¹⁵¹¹
 u j 1 ,)q^el.) ,sIA 91) j j¹⁶¹¹⁴
 lannate Ls^{aD} cj-i.):1¹¹ LAD C.v.s.i)4¹¹

ro) coumarin j_ji L514 ,1 9 1)

- j_i L514 • , f V°) azadirachtin , j_i

Acetylcholinesterase s.L)i LA

„I. • ,) vo) protecto Lsall

u•-a.k•11.A4) (r^—11 /d^1_ csi4 ' i) azadirachtin

Lfr iL, 0.118) lannate ...j LL1|

iSJ4 4 ,) A) L 35^6< n4 ^41 ,)tia

Alkaline _II .1,1,t;11 j:c,I i&31

cs .- • , • ° A) protecto phosphatase

_____ „I.. • , • v' V) lannate

azadirachtin , _____ Ls-LA • , • _____ coumarin

.,. A0) j951!CL ;1_41i4 _____ Ljij _____ L514 • , • VT°)

Acid (fss"~J1 Ljji (1^J÷ /e^1-).

Lc_j .)j 2.3 LA zjt.ID

„.ry) protecto j 3| phosphatase

_____ cja) .,ro) lannate aij

azadirachtin cjaj _____ L52.4 • f ct) coumarin

r ajj _____ L53.4 • , • ro)

Zjctio

4.11 IOWA. 0.64

al.))¹ 41.1 S 1^{u1}+; 147(4.9)⁰ ;aW (k9.1a 0⁴9:1A9¹¹-C4

0.0.4.42 4:-)1.41.%) 4.).1 J.sAaa.0

4.4G \$Lits.et.)11 C-14

411 :k.11.41+ 4c.1 _____ s.k.

0.1614¹ A.1.%111
4. i

4¹ 4.P. L.0⁰)¹¹ ‘rLa

—:tai J.11 —ZpL..g.S171 cLA l 1 31. j

..... la*1.....66g

c.31.2L,11 il l

4 11. 4 11 1 4 00¹4 !

1+4 ;lit.1 — J41 Lt

40¹)11 ithig b9Lr /

— .344.4.14 4c 1, jll 441S —.11.,411 L)l yell ~li.yl

3)1 49.1 *Ja* "4,)k.o 1.6791 9 CLUI
:121.11

4\--J

'59 411 14kati 14aa jleoi

' t .)4:¹⁻¹41 "t-Q¹J.:.)¹¹ ATAS (~-:4¹¹;41-i-9) arc l_j j c'.9¹C•c.)".94JJAS4
(411.4a1 C:41,)41.%) 4 1 j_)11 * -4 1 1 JJ 0.1C. c3.s.4.1Z11

: pg.4111.11 LAW A^N21 ZL.11

..... Sall;%11 j9U7)4/4:1

l+ 1; - j³¹¹ "a4IS - z_i.11 311 ,LJ j_jz₁.11

..... *[Signature]* 4¹94².? dtiii^I OO¹)1!

- awl, A₄1s - ,L,14111 Z₄19

;1 2 41,,

c.# •¹¹ Z).4-'11 ^c llitr

4c1 J} 4₄is - ,11,4111

31:j

—

Q1.611 ,4;k9

)41'14. at P j)/1 ii#LS

14:4

T. •

z 013 olgr 4) ri14 ; 9'91 6:11artp

:4₄4₃₄₁₁11

II-)

11 4₄111 3)1.41

z¹.44 .)4114-.1 C>4.9-1.)-321S-1

jsmaz.11

¹⁴4J.¹

¹¹₁L¹

(;;LJLt3.111

4₀Li_s

jy

l'••'1