

Subtitle Format Burmese

Chapter 1 Introduction

pGrf;tm; jzpfpOf wcka=umifh Zdkif;*kxf ac: vl<qJvfrsKd; wvHk;onf ukaĒaygif; ukaĒ
wpf&maom t¶G,fa&mufqJvf jzpfvmjCIF;rSm obm0 avmu wGif txl;jcm;qHk;aom oGifjyif
jzpfayrnf?

,ckcg okawoDrsm;odonfrSm rsm;pGm aom wr¶kd;pOf aqmif¶Gufcsufrsm;twGuf
t¶G,fa&mufcE<mrS vkyfaqmifr_rsm;onf udk,f0efaqmifumv wGif ¶dS+yD;jzpf&m rdrzGm;rD
umvrsm;wGif ¶Sd+yD;jzpfonf?

om;rzGm;rDzGH<®z;pOf umv onf jyifqifcsdefumv [kydkrdkodvm&+yD; TumvwGif zGH<®z;vm
aomvlom;onf rsm;pGmaom zGJ<pnf;r_rsm; ESifhvkyfaqmifcsufrsm;/
tjcm;aompGrf;¶Infrsm;&vm+yD; om;zGm;+yD;aemuf touf¶Sif aeEldifa¶;twGuf jzpfonf?

Chapter 2 Terminology

omreftm;jzifh vl<udk,f0ef oufwrf; rSm (38) ywf cef<txd =umEdlif+yD; wdkif;wmcsufrSm
,Swfwif csdefrS (0g) oaE<wnfcsdefrS pl uav; zGm;onf txdjzpfonf?

,Swfwif+yD; yxr (8) ywf twGif; zGH<®z;vmaom vlom;udk oaE<om;avmif;[kac:+yD;
“twGif;ykdkif;zGH<®z;jcif;” [k t"dy`,f &onf? Ttcgcsdef/ oaE<wnfumv udk zGJ<pnf;r_ wck jzifh
azmfjyxm;+yD; vl<cE<m . t"du zGJ<pnf;r_ jzpfonf?

tqdkyg ¶SpfvaphonfrS udk,f0ef tqHk;txd “zGH<®z;vmaom vlom; udk oaE<om;”[kac:+yD;
“rarG;ao;aom uav;” [k t"dy`,f &onf? oaE<wnf umv rnf Tumv wGif vl<udk,fonf
}uD;xGm;vm+yD; pwif tvkyf vkyfvmonf?

TtpDpOfwGif oaE<Oumv ESSifh oE<om; umv oufwrf;rsm;onf ,Swfwifcsdef uwnf; odk<
¶Inf!,ef;jy onf?

The Embryonic Period (The First 8 Weeks)

Embryonic Development: The First 4 Weeks

Chapter 3 Fertilization

ZD0aA'usus qdkvsif/ "vlom;.zGH<®z;r_onf ,SwfwifjCIF; wGif pwifonf"/ trsdK;om; ESifh trsdK;orD; wdk<. *¶kdrdkZrf ADZypPnf;rsm; (23) ck pD yl;aygif;=u+yD; ,wdk<. rsdK;yGm;qJvfrsm; aygif;pyf=ucsdef wGif jzpfonf?

rsm;aomtm;jzifh trsdK;orD;. rsdK;yGm;qJvfudk "O" [k ac:+yD; toHk;tElef;trSeFrSm tl;Zxf [k ac:onf?

enf;wl/ trsdK;om; . rsdK;yGm;qJvf onf "okuf&nf" [k trsm;uodaomfvnf; okufaumif [k toHk;ajyjpfonf?

rrsdK;OtdrfrS r rsdK;om;O xkwfv,wfonf ESifh om;Oxkwfv,wfpOfumv r rsdK;om;O ESifh okwfydk; wdk< aygif;pyf =uum om;tdrf'yefwfpck twGif; jzpf+yD; T'yefudk rrsdK;O'yef [k t+rJ!,ef;ajymavh¶Sdonf?

r rsdK;O'yef rsm;onf r rsdK;Otdrfrsm; ESifh qufpyf onfrSm om;tdrftxd jzpfonf?

rzGH<®z;ao;aom yk*~vch &v'f qJvf udk Zdkif;*kwf [k ac:+yD; t"dy`,frSm "twlqufay;xm;onf (0g) aygif;pyfay;xm;onf [ll jzpfonf?"

Chapter 4 DNA, Cell Division, and Early Pregnancy Factor (EPF)

DNA

Zdkif;*kwf . *¶kdrdkZrf ADZ ypPnf; 46 ckonff twkrhJ udk,fpm;ðych yxrykHpH jzpfonfh tjcm; wckjCIF;pD . t+yD;owf ADZykHpH jzpfonf? Tt"dutpDpOf wnf¶Sd&m 'Dtifat armfvD*sL;rsm; onf usyfwnf;pGmacG&pfvsuf ¶Sdonf? zGH<®z;vmr_ twGuf !,ef=um;csufrsm;yG¶Sd+yD; wudk,fvkh;zGH<®z;r_twGufjzpfonf?

'Dtifat armfvD*sL;rsm;onf wGef<vdrfaomavSum; o¾ef¶Sd+yD; ESpxyfuGif;Owftl&pf [kvJac:onf? avSum;.tqHacsmif;av;rsm;udk pkHwGJarmfvD*sL;rsm; ESifhzGJ<pnf;xm;+yD;/ odk<wnf;r[kwf AhJpfj'yf aygif;rsm;jzpfaoM *GeffeJef;/ qdkifwdkqJef;/ at'iffeJef; ESifh xdkifrJef; rsm;jzpfzGJ<pnf;xm;onf?

*GefeJefonfqdkifwdkqJef ESifhomwGJavh ¶Sd+yD;/ at'ifeJef;onf xdkifrJef; ESifhom wGJavh¶Sdonf? vl<qJvf wckpD wGifoef;aygif; oHk;axmifce<faom AJhpfj'yfaygif; pkHwGJ rsm; ygOifonf?

qJvf wvHk;. 'Dtifat wGif odzG,ftcsuf ajrmufjrm;pGmygOif+yD; ,udk yHkESdyfpmvHk;rsm;ESifh udk,fpm;ðy azmfjyjCIF;jzifh AJpfpfckpD. yxrpmvHk; udk pm&if; ðy¶kH ¶Sdygu pmrsufemaygif; (1³⁵) oef; ausmf vdktyfvdrfrnf?

tqkH;rS tjcm;tqkH;wbuftaexm;Y vl<qJvf wvHk;xJ¶Sd 'Dtifat onf 3½ ay (0g) wpf rDwm twdkkif;wm ¶Sdonf?

tu,fl 'Dtifat tm;vHk; ukd racGbJ ajzxm;ygu t¶G,fa&mufol twGif; ¶dS ukaw aygif; ukaw wpf&m qJvfrsm;onf rdkifaygif; 63 oef; ausmf ¶SnfxGuf oGm;rnf jzpfonf? Tr# tuGmta0; onf urBmajrrS ae odk< acgufjyef t}udrfaygif; 340 tuGma0;r# ¶Sdonf?

Cell Division

,Swfwif jyD;24 em&D rS 30 em&Dcef< +yD;aemuf Zdkif;*kxfonf4if;. yxrt}udrf cGJjcrf;pdwfjzmjcf; +yD;qHk;onf? rdwdkqpf . vkyfief;pOf tm;jzifh qJvfwpfckrS ESpfckodk<ESpfckrS av;ckodk< ponfjzifhcGJxGufoGm;=uonf?

Early Pregnancy Factor (EPF)

,Swfwijcf;p+yD;onfrS aemufydkif; yxr 24 em&D rS 48 em&D yifvsif [dkrkef;"mwfudk ¶SmawG<jcif;jzifh udk,f0ef ¶Sda=umif; twnfðyEldif+yD; 4if;udk rdcif. aoG;xJ ¶Sd a¶S;OD; udk,f0ef tajctae [kac:onf?

Chapter 5 Early Stages (Morula and Blastocyst) and Stem Cells

,Swfwifjcf;t+yD; 3 &uf rS 4 &uf twGif; oaE<om;avmif;. qJvfcGJ rsm; onf puf0ef; ykHo¾mef ¶Sdvm+yD; xdkoaE<om;avmif;udk rdk¶kdvm [kac:onf?

4 &uf rS 5 &uf twGif; qJvfvHk;av; rsm;xJwGif zGJ<pnf;aom tacgif; ESifh oaE<om;avmif; udk bvfwfwdkqdkwf(pf) [kac:onf?

bvfwfwdkqdkwf(pf) twGif;¶Sd qJvfrsm;ukd twGif;ydkif; qJvf pkrsm; [kac:+yD; OD;acgif;/udk,fxnf ESifh tjcm;zGJ< pnf;r_rsm;tjzpfodk<ykHazmfvmum cE<mzGH<®z;r_twGuf t"du t&mjzpfonf?

twGif;ydkif;qJvfpk xJ¶Sd qJvfrsm;udk oaE< OD;ydkif; yifrqJvfrsm; [kac: onfESifhtnDpGrf;aqmifEldifr_rSm qJvf trsKd;tpm; 200 ausmf eD;yg; udkzefwD; EldifpGrf; ¶Sd+yD; cE<mudk,f twGif;¶dS qJvfrsm;yifjzpfonf?

Chapter 6 1 to 1½ Weeks: Implantation and Human Chorionic Gonadotropin (hCG)

om;tdrf'yefatmuf odk<qif;csdefrsm;wGif oaE<OD;om;avmif; rdrdudk,fudk,fpl;OifonfrSm rdcifom;tdrf. twGif; ydkif;eH&H wGifjzpfonf? Tpl;OifpGJ+rJjcf; [laomjzpfpOfonf ,Swfwif+yD; 6 &ufwGifpwif+yD; ,Swfwifjcf; ðyonfESifh 10 &uf rS 12 &uf twGif; +yD;qHk;onf?

oaE<O rS qJvfrsm; t¶G,f&ifhfonfESifh [dkrkef;"gwfrsm;udk xkwfvìwfay;+yD; ,udk vlκ
cdk&D,dked *dkemwdkx¶kdyif (odkκ)tdcsfpD*Dds [kac: +yD;/ udk,f0efprf;oyf&mwGif
tawGκ rsm;aom j'yfypPnf;jzpfonf?

tdcsfpD*Ds onf r [dkrkef; "gwfrsm; xdef;ay; jcif;jzifh yHkrSef&moDaoG;tvm oHo&m udk
jywfwamif; apEdlif+yD; udk,f0ef qufvufaqmifapEldifonf?

Chapter 7 The Placenta and Umbilical Cord

Tpl;Oif pGJ+rJr_jzpfonfESifh bvwfpwdkqdkufpf . tay:,HrsufESm qJvfrsm;onf zGJκpnf;r_
tpdwftydkif;jzpfaoM yvmqifwm udkyHkazmfay;+yD; ,onf ESpfbuf=um; bHkrsufESm tjzpf
rdcif ESifh oaE<OD;ydkif; aoG;vnfywfr_ pepfrsm;t=um; tvkyf vkyfay;onf?

xdkoaE<om; tcsif;onf rdcifbufqdkif atmufqD*sif/ t[m&"gwfrsm; [dkrkef;"gwfrsm; ESifh
vlom;zGHκ®z;r_twGuf aq;ukojcif;rsm; udk xkwfv,wfay;+yD; tnpfta=u;rsm;pGeκf ay;um
rdcifaoG;udkumuG,fay;&mY tjcm;aoG;rsm;ESifhra&mrdatmif oaE<om; ESifh oaE<om;avmif;
wdkκ.aog;udk umuG,fay;xm;onf?

oaE<tcsif;onf [dkrkef; "gwfrsm; udk xkwfay;+yD; oaE<om;.udk,ftyLcsdefESifh oaE<O umv
udk xdef;ay;&mwGif rdcif. Tylcsdef xuf tenf;i,f jrifhatmifxdef;nd≠ay;onf?

zGHκ®z;vmaom vlom;udk oaE<tcsif;rS wkHκjyefr_ðy&mwGif csufóu;. aoG;a=umrsm; rS
wqifhðyonf?

oaE<tcsif;. tvM;wljy\emrsm;twGuf toufu,f pGrf;aqmifr_rsm;udk acwfrSD
aq;¶kH}uD;rsm;¶Sd oD;oefκ vlemaq;¶kHcGJrsm; wGifawGκ&onf?

Chapter 8 Nutrition and Protection

(1) ywf twGif; twGif;ydkif;qJvpkxJ¶Sd qJvfrsm; zGJκpnf;aom tv_m ESpfKd;rSm
[dydkbvwpf ESifh tdydbvwpf wdkκjzpfonf?

[dydkbvwpf arG;xkwfaom tajr≠;yg;tdwfi,f onf zGJκpnf;r_rsm;txJ wck tygtOif jzpf+yD; xdk
zGJ@pnf;r_rSwqifh rdcifonf t[m&"gwfrsm;udk oaE<om;avmif; odkκ ydkκay;onf?

tdydbvwpf qJvfrsm;zGJκpnf;aom trfeD,rf tajr;yg;onf ,twGif;Y oaE<om;avmif; ESifh oaE<om;
tygtOif wdk@udk arG;onfhwdkifatmif zGHκ®z;ay;vsuf¶Sdonf?

Chapter 9 2 to 4 Weeks: Germ Layers and Organ Formation

2 ywfcGJcef@ twGif; / tdydbvufpf zGJ<pnf;ay;onfh t"du wpf¶SL; oHk;rsdK; tv_mEkrrsm;rSm
tufwdk'rf/ tif'dk'rf/ ESifh rqdk'rf wdk<jzpfonf?

tufwdk'rf arG;xkwf ay;onfh cE<mtzGJ<pnf;rsm;rSm OD;aESmuftygt0if / ausm¶kd;
tm¶kHa=umrsm;/ ta&jym; / vufonf;rsm; / ESifh qHyif ponfwdk<jzpfonf?

tif'dk'rf onf touf¶_ t*F g tzGJ@tpnf; . vdkifeif ESifh tpmajc t*F gpk wdk<udk zefwD;ay;+yD;
t"du t*F g. tpdwf tydkif;rsm; rSm tonf; ESifhyefu&d, wdk<jzpfonf?

ESvHk;zGJ<pnf;ay;aom rqdk'rfonf ausmufuyfrsm;/ t¶kd;rsm;/ ufwwdvwfcsf ac:
¶kd;quft¶Guf/ °uufom;rsm;/ aoG;OqJvfrsm;/ ESifh tjcm;zGJ<pnf;r_rsm;
udkvJzGJ<pnf;ay;onf?

(3) ywf twGif;/ OD;aESmufudk tajccH 3 ydkif; jzifh ydkif;jzwf onf?, wdk@ rSm
a¶S•ydkkif;OD;aESmuf/ tv,f ydkkif;OD;aESmuf ESifh aemufbufOD;aESmuf wdk<jzpfonf?

tpmacstzGJ<tpnf; ESifhtouf¶SLt*F g tzGJ<tpnf; wdk<. zGH<®z;r_ onf zGH<®z;aeqJyifjzpfonf?

yxraoG;OqJvfrsm; tajr;tdwfi,f Y ay:vmonfESifh aoG;a=umrsm; zGJ<vmonfrSm oaE<avmif;
wav#muff jzpf 1'yefyHkESvHk;onfvJay:xGufvmonf?

¶kwfw&ufeD;eD; jrefqefpGm}uD;xGm;vmaomESvHk;onf rdrday:wGifjyefvnfacgufcsdK;usl
oD;oef<ESvHk;tcef;rsm;tjzpf pwifzGH<®z;vmonf?

ESvHk;pwifckefvmonfrSm 3 ywf ESifh 1 &uf jzpf+yD; xdk@aemuf ,Swfwifjcif; vdkufvmonf?

aoG;vnfywfr_tzGJ<tpnf;onf yxrcE<mtzGJ<tpnf; odk<r[kwf t*F gpk onf vkyf&nf ¶Sdonftqifhxd
pGrf;aqmifoGm;&efjzpfonf?

Chapter 10 3 to 4 Weeks: The Folding of the Embryo

3 ESifh 4 ywf =um;wGif udk,fxnf ay:xGufvml OD;aESmuftjzpf/ ausm¶kd;/
oaE<avmif;.ESvHk;tjzpf ESifh vG,fvifhwulodEldif+yD; tajr;tdwfi,fESifh,SOfvsuf awG<&onf?

jrefqefaom}uD;xGm;r_ onf jym;csufaom oaE<avmif; udk acgufcsdK; ay;onf? T jzpfpOfRS
pkpnf;aygif;pyfay;onfrSm tajr;yg; tdwfi,f . tpdwftydkif;udk vdkifeif ac: tpmacs
t*FgtzGJ@tpnf;odk@ pkpnf;ay;um &iftkyfydkif;ukd zGJ@pnf; +yD; Orf;Akdufkdif&m
tacgif;rsm; zGH<®z;aomvlom; wGif zGJ@pnf;xm;onf?

Embryonic Development: 4 to 6 Weeks

Chapter 11 4 Weeks: Amniotic Fluid

=unfvifaom tajr‡;yg; trfeD,rf onf oaE<O udk 0ef;&Hxm; onfrSm t&nfjynfhajr;tdwfxJwGif
jzpfonf? tvGefoef@onf@ t&nf T trfeDtdkwdcf ac: t&nf u oaE<O udk rxdcdkufap&ef
umuG,fay;xm;onf?

Chapter 12 The Heart in Action

ESvkH;onf obm0tm;jzifh wprdepfv#if 113 }udrf ckefonf?

ESvkH;ta&mif ajymif;onfudk owd jyKyfav? ESvHk;aoG;cef;rsm;odk@ aoG;txGuft0if
¶SdonfESifh ESvHk;wcsufpDckefonf?

wGufajczifh ESvkH;ckef}udrfaygif;onf rzGm;rSD 54 - }udrf/ ESifh ukaÉ}udrfaygif; 3³2 ausmf
}udrfonf touf 80 ausmf ¶Sifolrsm; Yzpfonf?

Chapter 13 Brain Growth

OD;aESmuf vsifjrefpGm }uD;xGm;aejcif;udk ajymif;vJaom toGifjyif (a¶S•OD;aESmuf)
a&S@OD;aESmuf tv,fykdif; OD;aESmuf ESifh aemufbudykdif; OD;aESmuf wdk@.
toGiftm;jzifhrSwf,lEkdifonf?

Chapter 14 Limb Buds

tv,fykdif;ESifh atmufykdif; ajcvufrsm;. zGH@+zdK;r_ pwif onfrSm ajcvuftzkrsm; pay:vmaom
4 ywf twGif; yifjzpfonf?

TwGif ta&jym;udk xdkxGif;jrif&onf ta=umif;rSm ,onf qJvf wpfckpmr#omxl jcif;a=umifhjzpf
onf?

ta&jym; xlvmonfESifh ,.f azmufxGif; jrifEkdif r_udkpaw;&awmhrnf? qdkvdkonfrSm
tjyifbufeJ@qkdifaom t*Fgrsm;ukd =unfhEkdif&kHr#om jzpfvdrfhrnf? tjcm;aom
v=um=umcef@ zGH@+zdK;?

Chapter 15 5 Weeks: Cerebral Hemispheres

4 ESifh 5 ywf t=um;wGif OD;aESmufonf vsifjrefpGm qufvuf }uD;xGm;vml rwlndaom 5 pdwf odk<ydkif;oGm;=uonf?

OD;acgif;onf oaE<om;avmif;. 1§3 t¶G,f¶Sdonf?

OD;aESmufxuf0wfjcrf;onf ay:xGufvm+yD; wjznf;jznf;ESifh OD;aESmuf. t}uD;qHk;tydkif;jzpfvmonf?

OD;aESmufxuf0wfjcrf;rStcsddefwdkif; wGifudkifwG,fvkyfaqmif&rnfrsm;rSm oif,ljCIF;tygt0if awG;ac:jCIF;/ rSwf^m%f/tajym/ pufcktm¶kH/ t=um;/qENTavsmuf oGm;vmr_ ESifh jy\emajz¶Sif;r_ wdk<yg0ifonf?

Chapter 16 Major Airways

touf¶SLt*F gtzGJ<tpnf;wGif t"dub,fESifhnm tqkwfav¹yefwdk<¶Sd+yD; ,.tcgwdkif;qufEG,faer_onf av¹yef (odk<) tqkwfav¹yefr}uD; wGif tqkwfrsm;ESifhquf oG,fay;vsuf¬¶Sdonf?

Chapter 17 Liver and Kidneys

}uD;rm;l Orf;Adkufudk jznfhvsuf ckefaeaom ESvHk;em;¶Sd tonf;udkrSwfygav? twnfjzprfnfhausmufuyfonf (5)ywf twGif; ay:vmonf?

Chapter 18 Yolk Sac and Germ Cells

tajr;yg;tdwfi,fY rsdK;yGm;qJvfrsm;yG0if+yD; ,udkqJvfEkrrsm;[kac:onf? 5 ywf twGif; TqJvfEkrrsm; ae&ma¶,<ajymif;vm&m rsdK;yGm;t*F g rsm; ¶Sdaom ausmufuyfem;odk<a&mufvm=uonf?

Chapter 19 Hand Plates and Cartilage

5 ywf twGif;wzef oaE<avmif;onf vuf0g;jym;Ek udk zGH<®z;ay;onfESifh 5 ywfcGJtwGif; t¶kd;r#kifzGJ<pnf;r_pwifonf?

TwGifawG<&rnfrSm b,fvuf0g;jym;Ek ESifh vufaumuf0wf wdk<uddk 5 ywf ESifh 6 &uf wGifawG<&rnf?

Embryonic Development: 6 to 8 Weeks

Chapter 20 6 Weeks: Motion and Sensation

6 ywf twGif; OD;aESmufxufjcrf; aygufzGm;vmonfwGif OD;aESmuf. tjcm;tydkif;rsm;xuf
tcsdK;rhJpGm ydkjrefonf?

oaE<om;avmif;onf tavhayguf ESifh wefjyefv_yf¶Sm;r_ rsm; pwifvmonf?
vdktyfaomTv_yf¶Sm;r_rsdK;onf omrefm¶kHa=um zGH<®z;r_udk jrSifhwifay;&ef jzpfonf

yg;pyf0 udkxday;¶kHjzifh oaE<om;avmif;onf ,. OD;acgif;udk tvdktavsmuf
,kwfodrf;oGm;onf?

Chapter 21 The External Ear and Blood Cell Formation

tjyifydkif; em;onf pwifyHkazmfvmonf?

6 ywf twGif; aoG;OqJvf zGJ<pnf;r_onf tonf;twGif;zGH<®z;aeqJzpfv vifzdkqdk'frsm;¶Sdaom
ae&mwGifjzpf onf? TaoG;jzLOqJvf rsdK;onf a&m*gckcHpGrf;¶Sd udk,ftpktpnf;
zGH<®z;r_twGuft"du usonf?

Chapter 22 The Diaphragm and Intestines

&ifOrf;jcm;°uufom;onf touf¶SL&mwGif t"du usaom°uufom; jzpf+yD; 6 ywf twGif; tus,f
w0ifh zGJ<pnf;onf?

tlodrftlr . tydkkfif;wckonf ,m,D aig@xGufvm&mwGif csufóu;wGifjzpfonf?
TomrmefjzpfpOfjzpfao ZDOurRaA' tac: tlusjcif;onf Orf;xJ ¶Sd tjcm;zGH@®z;aom t*F grsm;
twGuf tcef;rsm;jyifqifay;onf?

Chapter 23 Hand Plates and Brainwaves

6 ywf twGif; vuf0g;Ekjym;onftjym; csufi,frsm; tjzpfodk@zGH@®z;vmum

OD;aESmufv#yfpfwGef;tm;ukdk 6 ywf 2 &uf twGif; oGif;xm;+yD;jzpfonf?

Chapter 24 Nipple Formation

Ekd@oD;onf udk,fvHk; wav#muf wGif xGufvmonf? TonfrSm ,. aemufqHk; ae&m ra&muf¶Sdrnfumvzpf+yD; &ifbufrSm ,.aemufqHk;ae&m jzpfonf?

Chapter 25 Limb Development

6 ywfcGJtwGif; wawmifqpfrsm;onf xif¶Sm;vm+yD; vufacsmif;rsm;vJ pwif uGJxGufvm=uum vufv_yf¶Sm;r_rsm;vJ xif¶Sm;vmonf?

t¶kd;rsm;tjzpf ajymif;vJcif; [kac:aom t¶kd;zGJ@pnf;yHk onf tv,fn¶yf¶kd; (odk<) &ifbuf n¶yf¶kd; ESifhtay:ar;¶kd; ESifh atmufar;¶kd; wdk@wGif wGifpwifonf?

Chapter 26 7 Weeks: Hiccups and Startle Response

óu@xdk;jcif;udk (7)ywf twGif; apmifh=uyf¶_xm;onf?

,ckqdkv#if ajcv_yf ¶Sm;r_rsm;udk jrifEdkif +yD; xdwfvef@aom wkef@jyefr_rsm;ESifhtwlawG@&rnf?

Chapter 27 The Maturing Heart

ESvHk;. av;cef;cGJ tcef;onfvnf; us,fjyef@pGm +yD;pD;+yD;jzpfonf? omreftm;jzifh ESvHk;onf wrdepfv#if 167 }udrf ckefonf?

ESvHk; . "gwfv_yf¶Sm;r_rsm;udk (7) ywfcGJ wGif rSwfwrf;wifxm;jcif;u t¶G,fa&mufolwGif¶Sdaom udk,f taetxm; udk xkwfazmfay;onf?

Chapter 28 Ovaries and Eyes

r /rsm;wGifrsdK;Otdrfrsm;udk (7)ywftwGif; cGJjcm;odEkdifonf?

(7)ywf cGJ twGif; ta&mifjc,fxm;aom rsuf=unfv,mudk vG,fulpGmjrifEkdif +yD; rsufcrf;rsm; onf jrefqefaom }uD;xGm;r_ udk tpjyKvmonf?

Chapter 29 Fingers and Toes

vufacsmif;rsm;onf uGJxGufvm=uum ajc acsmif;rsm;vnf; atmifajc Y pwif qufpyfvmonf?

vufbrsm;vJ ,ckcsdef wGif twl¶Sdvm=u+yD; ajcrsm;rSmvnf; jzpfonf?

'l;qpf tqufrsm;onfvnf; ¶Sdvmonf?

The 8-Week Embryo

Chapter 30 8 Weeks: Brain Development

(8)ywf twGif; OD;aESmuf onf vGefpGmzGH@®z;vm+yD; oaE<om;avmif; pkpkaygif;udk,f tav; csdef. wpf0wfeD;yg; ESifhnDrsonf?

}uD;xGm;r_E_ef;onf omrefxuf ydkaoM E_ef;rsm;jzifhquftvkyf vkyfonf?

Chapter 31 Right- and Left-Handedness

8 ywf twGif;oaE<om;rsm;. 75 μ onf vuf,sm vuf.pdk;rdk;r_udk jyonf? useft&monf wlnDpGmydkif;cGJ &mY b,fvufpdk;rdk;r_ESifh pdk;rdk;r_ r¶Sdawmhonfht=um;jzpfonf? TonfrSm b,foef ESifh nmoef jcif;. tOD;qHk;taxmuftxm;jzpfonf?

Chapter 32 Rolling Over

oli,femuk aq;usrf;t& wGm;oGm; wwfonfrSm arG;zGm;+yD; 10 ywf rS 20 ywf t=um;jzpfonf? odk@apumrl pdwfpGJzG,faumif;aom T qufpyfnD!Gwfr_¶Sdjcif;onf tapmydkif;u azmfxxkf+yD;onf twdkif; nifomonfh0ef;usif¶Sd t&nf=unfESifh jynfhxaomtrfeDtdkwdcf ac: tdwfi,f xJwGifjzpfonf? tm;tifenf;yg;r_ twGufom j'yfxk.qGJtm; udk wGef;vSef &efvdk+yD; ,tm;onf om;tdrf.tjyifbufwGif¶Sd l arG;oli,f. wGm;oGm;onf udk r p ay;.?

oaE<om;avmif;rsm; udk,fvuf ayghyg;vmonfrSm Tumv yifjzpfonf?

a¶G•v#m;r_onf jrefcsif jrefrnf/ aES;csifaES;rnf/ wacguf (odk@) xyfrHjzpfcsifjzpfonf ®yifwl (0g) jyefvnf a&mifjyef[yfcsif[yfrnf?

acgif;vnfywfjcif;/vnfyif;qef@jcif;/ vuf rS rsufESmod@k qufoG,jcif;rsm; r=umc% jzpfysufvsuf¶Sdonf?

oaE<om;avmif;udkxday;jcif;jzifh rsufajcjycif;/ ar;¶kd;v_yf¶Sm;jcif;/ a¶G•vsm;jcif;/ ESifh
ajcacs mif;qef@jcif; rsm; jzpfay:aponf?

Chapter 33 Eyelid Fusion

7 ESifh 8 ywf twGif; tay: ESifh atmufydkif;rsufcGHrsm; vsifjrefpGm rsufpd ESifh }uDDD;vml
zl;pf EsifhvJtwl }uD;xGm;vmonf?

Chapter 34 "Breathing" Motion and Urination

om;tdrf wGif av r¶Sdygaomfvnf; oaE<om;avmif;onf (8) ywf
twGif;óu;=um;touf¶SLjCIF;ðyonf?

Ttcsdefrsm;wGifausmufuyfonf qD;&nf udk xkwfv_wf&mwGif trfetdkwfp t&nf=unfw
rsdK;xJodk xkwfv_wfay;onf?

zdk oE<om;avmif;wGif zGH<®z;vmaom aOS<aph rsm;onf wfpwdkpwm¶Gef ac:
[dkrkef;"mwf wprsdK; udk xkwfv_wf ay;onf?

Chapter 35 The Limbs and Skin

t¶kd;rsm;/ t¶kd;qufrsm;/ °uufom;rsm;/ tm¶kH a=umrsm;/ ESifh t*F gwH
aoG;a=umwdk<onf t¶G,fa&muf +yD;olrsm;wGif tvGef<tvGef wlnD =u onf?

(8) ywf twGif; tyfyd'g;rdcf ac: tjyifbufus ta&jym;onf tv_mrs m; pGmyg¶Sdaom tajr±;yg;
jzpfvmwGif odom xif¶Sm;r_ r¶Sdawm hay?

Ekwfcfrf;w0dkuf tar_ ;rsm;aygufvmonf ESifh rsufckH;ar_ ;rsm;vJ aygufvmonf?

Chapter 36 Summary of the First 8 Weeks

oaE<om;avmif;. oufwrf; udk (8) ywf oufrSwfonf?

Ttcsdefrsm;wGif vloaE<om;avmif;onf qJvfwpfvkH;rS }uD;jyif;vmonf? qJvfvkH;aygif;
wpfukaËeD;yg; tjrifhokd@}uD;jyif;vmum av;aomif;ausmf oD;jcm; cE<mtzGJ@tpnf;udk
wnfaqmufonf?

oaE<om;aumifykdif;qkdifaom t&G,fa&mufolwGif&Sdaom cE<mwnfaqmufr_. (90μ) jzpfonf?

The Fetal Period (8 Weeks through Birth)

Chapter 37 9 Weeks: Swallows, Sighs, and Stretches

oaE<om;umvonf uav; xGm;onf txdjzpfonf?

(9) ywftwGif; vufrv_yf&Sm;r_ pwif oaE<om;onf trferkdwif t&nf =unfwpfrsKd;ukd rsKdEkdifp
&Sdvmonf?

oaE<om;onf t&m 0wWKrsm;ukd pwifod&Sdvm+yD; OD;acgif;udk a¶S•aemuf a¶G•vsm;
vmEkdifl ar;¶kd;rsm; tzGifhydwf/oufjyif;/ v#mESifhudk,f a¶G•qef<vmEdkifonf?

rsufemESifhvuf0g;¶Sd tm¶kHa=umt*F grsm; ESifh ajcz0g; wdk<onf tomav; txd udk
odvmEkdifonf?

“ajcz0g;udk xday;¶kH ESifh wkef<jyefonfh tae jzifh” oaE<om;onf wifyg;ESifh 'l;udkjy+yD;
ajcacsmit;rsm;udk wGef<vdrfjyonf?

TwGif rsufcGHrsm;onf vHk;0 ydwfoGm;=uonf?

toHtdrfwGif toHESifhqdkifaom t¶kd;quft¶Gufjym;onf ay:vm l toHxdef; vnf^ouufom;
zGH<^z;r_ tpOD; udk !,ef;jyxm;onf?

r oaE<om;rsm;wGif om;tdrfudk cGJjcm;odEkdif rzGH<^z;ao;aom rsdK;yGm;t*F gqJvf
rsm;jzpfaoom tl;udk;eD,m; onf udk,fwdkif om;Otdrf wGif yHkwlazmfvmmonf?

jyify rsdK;¶kd;t*F gonf ,wdk<udk,fwdkif tzdk tr jzpfjcf;udk xif¶Sm;jy=uonf?

Chapter 38 10 Weeks: Rolls Eyes and Yawns, Fingernails & Fingerprints

(9) ESifh (20)ywf twGif; ¶kwfw&uf }uD;xGufvmr_u udk,f tav;csdef 75 μ txuf
wdk;jr¶ifhay;vmonf?

(10) ywf twGif; wGif tay:ydkif; rsufcGHudk vHk<aqmf ay;jcif;tm;jzifh rsufpd udk atmufodk< vdrfh oGm;ap onf?

oaE<om;onf r=umc% oef; +yD; yg;pyfukd tzGifhtydwfvkyfwwfonf?

trsm;qkH; Ekd@wkdufowW0g oaE<om;onf nmbuf vufukd pkyf,lonf?

csuf}uKd;twGif;Y &Sdaom tl.tykdif;rsm;onf 0rf;Akdufacgif;qDokd@ jyefoGm;onf?

t&kd;rsm;xJwGif t&kd;jzpfogm; jcif; jzpfpOfonf¶SdqJzpfonf?

vufonf;ESifh ajconf;rsm;vJ pwif zGH@®z;vmonf?

,Swfwif +yD;aemuf 10 &ufwGif xl;jcm;aom vufaAGrsm;ay:vmonf? TyHkpHukd b0wpfav#mufvkH; odomxif¶Sm;r_twGuf tokH;jyEkdkifonf?

Chapter 39 11 Weeks: Absorbs Glucose and Water

(11) ywftwGif;? ESmacgif;ESifh E_wfcrf;onf t+yD;tpD; jzpfay:vmonf? tjcm;aom cE<mukd,f tpdwftykdif;rsm;tm;vHk; ,wkd@. &kyfoGifrs;onf jzpfpOf wpfckcsif;Y ajymif;vJvdrfhrnf jzpfonfrSm vl@b0 oHo&mvHk;yifwnf;?

tlr onf *vl;ukdpf o=um;"wfESifh a&ukdpkyf,l&ef pwif+yD; oaE<om;onf,udk rsKd;csonf?

,Swfwif jcif;Y jzpfaoimfvnf; ,ck vdift*Fgpyfudk ykdif;jcm;owfrSwf &mwGif tzkdtr [kwfr[kwfodEdkifonf?

Chapter 40 3 to 4 Months (12 to 16 Weeks): Taste Buds, Jaw Motion, Rooting Reflex, Quickening

(11) ywfESifh (12) ywf t=um;? oaE<om; tav;csdefonf 60µ vkeD;yg; wkD;vmonf?

12 ywf onf yxr wwd, . oufwrf; (okd@r[kwf) udk,f0ef oufwrf; yxr 3 v jzpfonf?

woD;jcm;v#mtm&kHcHzkav;onf yg;pyf. twGif;bufukd zkH;tkyfxm;onf? t&om&kHtzl; onf arG;&myg usef&pf rnf? yg;pyf. trkd;ESifh v#may:wGifom usef&pfrnf?

tlr}uD;a&G;vsm;r_onf 12 ywf apml pwifonf? +yD;aemuf 6 ywf =um=um pwifonf?

tlr}uD; ESifh oE<om; rS z,fxkwfch yxrypPnf;udk arukdeD,rf [kac:onf? ,onf udk tpmacs
tifZdkif;ac: y&kdwif;"wfrsm;EsifhqJvfao rsm;jzifhaygif;pyfxm;onf? ,udk tpmacs t*F gpk rS
pGef@ay;onf?

12 ywf twGif; ajcvuft*Fg tay:ykdif; tvsm;onf aemufqkH; cE<mukd,f t&G,f odk@a&muf
vkeD;&Sdonf? atmufykdif; ajcvuft*Fgrsm;onf ,wkd@. aemufqkH;aomtykdif;rsm;ukd
a&muf&Sd&ef ydk=umwwfonf?

aemufbuf OD;acgif;ESifh xdyf . 'cif;csufESifhtwl oaE<om;wpfckvkH;. cE<mukd,fonf
tvif;xdawG;r_qD wkH@jyefvm onf?

zdk r qdk&m zGH<®z;r_ rwlndr_rsm; yxr qHk; tae ESifh ay:xGufvmonf? Oyrm/ r
oaE<om;rsm;onf ar;¶kd;v_yf¶Sm;r_ udk xifjy&mwGif zdk oaE<om;rsm;xuf t}udrfaygif;
ydklomonf?

tapmydkif; wkef;jyefr_ ¶kwfodrf; onf ESifhqef<usifvsuf Ekwfcrf;w0dSuf vHk<aqmfr_rsm;
ay:xGufvmum vHk<aqmfay;aom t&m ESifhzGifh[aeaom ygpyfqD odk< vSnfhvsufaeonf?
Twkef;jyefr_ udk "a&mifjyef[yfay;jcif;" [kac:+yD; arG:+yD;aemuf ydkif; qufvufl
arG;puav;rsm;udk rdcif. Ekd<oD; udk ¶SmawG<ay;jcif;jzifhulnd+yD; Edk<wdkufumv
tawmtwGif;jzpfonf?

rsufEsmonf qufvwf &ifhuswfvum um tqD v_mrsm;onf yg;rsufemudkjznfhpgyfay;+yD;
oGm;rsm;vJ pwifzGH<®z;vmonf?

(15) ywf twGif;/ aoG; tzGJ<tpnf; yifr qJvf rsm;a&mufvmum
t¶kd;jcifqDtwGif;odk<y;uyfvm=uonf? aoG;OqJvfjzpfay:vmykHtrsm;pkukd TwGif
awG@&Sdayvdrfhrnf?

a&G;vsm;r_onf 6 - v &Sdaom oaE<om;avmif;twGif; pwifaomfvnf; ukd,f0efonf
rdef;rwpfOD;onf oaE<om; tv_yf ukd tm&kHjzifh OD;pGm od&onfrSm (14) ESifh (18) ywf
pyf=um;jzpfonf? rd&kd;zvmt& Tumvtjzpfysufudk oaE<om;v_yf&rf;jcif; [kac:onf?

Chapter 41 4 to 5 Months (16 to 20 Weeks): Stress Response, Vernix Caseosa, Circadian Rhythms

(16) ywf twGif; / tyfpdkufxdk;&mwGif oaE<om;. Orf;Akduf xJodk@xdk;ay;um
[kdrkef;"mwfyg&Sdaom wk@Hjyefonfh zdpD;jcif; udk jzpfay:apaom Ekd&m'&ifemvkdif
Edk&Dyifz&dfef; wdk@udk aoG;pD; a=umif;xJodk@oGif;ydk@ay;onf? arG;pESifh
t&G,fa&mufolrsm;wGif tvm;wlwkef@jyefr_rsm; us,fus,fjyef@jyef@awG@&onf?

touf&SLt*Fg tzGJ@tpnf;wGif tqkwf'yef tpkyHkph onf +yD;vkeD;+yD jzpfonf?

tuG,fum ay;aom tjzLa&mif j'yfypPnf; jzpfaoam Am;epf auqtdkqmonf oE<om;ukd
zHk;xm;+yDjzpfonf? Am;epfonf ta&jym;/ (tuG,ftum ay;) rtDromjzppfaomta&jym; &ef rS
umuG,f ay; onf? rtDdromjzppfaom t a& jym; onf trfeDtdkwdcf t&nf a=umifhjzpfonf?

oaE<om;umv (19) ywf rS pl oE<om;a&G;vsm;r_/ touf&SL v_yf&Sm;jcif; ESifh ESvHk;ckefr_
rsm; ae@pOf wHo&m twdkif; jzpfvmjcf; udk qm&fua',rf &Dwmrf [kac:onf?

Chapter 42 5 to 6 Months (20 to 24 Weeks): Responds to Sound; Hair and Skin; Age of Viability

20 ywfwGif c¶kywftwGif; em;onf (t=um; t*Fgjzpf) t&G,fa&mufvm onfrSm vkH;0
zGH@+zdK;+yD;aom twGif;em;xJwGifjzpfonf? ,ckrS pl oaE<om; wkH@jyef rnfrSm

acgif;a&Y qHyifrs; pwif aygufvmonf?

ta&jym;tv_mrs;ESifhtjcm;zGJ< pnf;r_rsm; tm;vHk;yg¶Sdonfhtjyif qHyifayguf&m
taygufi,frsm; ESifht}udwf*vif; rsm;yg0ifonf?

,Swfwif +yD;aemuf (21) ESifh (22) ywf twGif; tqkwfrsm;onf av¶SL pGrf;¶Sdvmonf? Tonfudk
¶SifoefEdkifpGrf; umv [k owfrSSwf onf? ta=umif;rSmom;tdrf . tjyif buf wGifvnf;
wcdk<oaE<om;rsm;onf touf¶SifaeEkdifjcf;a=umifhjzpfonf? aq;0g;qdkif&m
pGrf;aqmifr_rsm; wav#mufvHk;. wdk;wwfr_rsm;onf uav;oli,fwdk<.touf udk
xdef;odrf;ay;EkdifpGrf;¶Sd +yD; oufwrf; rjynfh apmvsifpGm arG;aom uav;i,frsm;
toufyiffjzpfonf?

Chapter 43 6 to 7 Months (24 to 28 Weeks): Blink-Startle; Pupils Respond to Light; Smell and Taste

(24) ywf twGif; rsufcGHrsm; jyefyGifhvm+yD; oaE<om;onf rdSwfwkyf rdSwfwkyf
wkef<jyefr_wck udkjyonf? toHus,fjzpfay:apaom T wkef<jyefr_onf r
oaE<om;OD;ydkif;rsm;wGif yDjyifpGm zGH<®z;vmonf?

pl;prf;oltrsm;qdkonfh tajcae t& xdktoHus,fonf oaE<om;. usef;rma&;udk ab;Oy'f
jzpfapEdkifonf? vspfay:aom tusdK;owfa&muf_rsm; onf =um¶Snfwdk;jrifh vmonfh
ESvHk;ckefElef; tygt0if/ oaE<Oqdkif&m rsdKcsvGefjcf; ESifh rajy jypfaom jyKrl
ajymif;vJr_rsm;yg0ifonf? a&¶Snf tusdK;qufrsm;jzpfaoam toHr=um;Ekdifawmhjcf;vJ
yg0ifonf?

oaE<om;. touf¶SL E_ef;onf jrifhEkdifonfr# jrifhEdkif+yD; wpfrdepfwGif touf¶SL vnfywfr_
xGufouf - 0ifouf E_ef; 44 r#¶Sdonf?

udk,f0efoufwrfr; . wwd, 3 v wGif tvGefjrefaom OD;aESmuf }uD;xGm;E_ef; 50 μ ausmf tm;tif
udkukefcef;aponf? oaE<om; oHk;aompGrf;tm; jzpfonf? OaESmuf.tav;csdefonf 400 ESifh 500
μ pyf=um;jzpfonf?

26 ywftwGif; rsufpdonf rsuf&nfrsm;udkxkwfvìwf onf?

oli,ftdrfonf tvif;udk 27 ywf twGif;pwifwkef<jyefvmonf? Twkef<jyefr_onf tvif;yrm% udk
pepfwus xdrf;csKyfay;+yD; rsuf=unfv_modk<ta&muf woufvHk; vkyfaqmifay;onf?

vdktyfaom tpdwftydkif;tm;vHk; t eH@ch tm¶kHrsm;twGuf vkyfaqmif&ef toifhjzpfonf?
uav;i,frsm; ESifhywf owfl avhvmcsufrsm;u &eH@ch EkdifpGrf;¶Sd a=umif;
axmufjyoGm;onf? ,rSm ,Swfwif+yD;aemuf 26 &uf twGif;jzpfonf?

trfeDtdkwdcf ac: t&nf=unf wrsdK;xJ csdKaomj'yfypPnf;rsm;xm;ay;jcif;jzifh oaE<om;
qdkif&mrsdKcs E_ef; jrifhwwfvmonf? , ESifhqef<usifvsuf/ oaE<om; rsdKcs jcif; E_ef;
usqif;pjyKvmonfrSm cg;aomj'yfypPnfrsm;xm;ay;onf ESifhw ®yif euf jzpfvmjCIF;jzpfonf?
rsufESmXm; ajymif;vJr_rsm; r=umc% jzpfavh¶Sdonf?

ajcvSrf; v_yf¶Sm;rsm;. twef;pOfrsm;rS wqifh vrf;av#mufonfESifhwlaom oaE<om;onf
udk,fu|rf;ypfxdk;jcif;rsm; vkyf wwfonf?

oaE<om; Y wGef<vdrfl ta&jym;atmufY¶Sdaom tqDydkavmuf tqDrygay? tqDonf udk,ftylcsdef
xdef;odrf;&mY, arG;zGm;+yD;aemuftiftm;jyefvnf&¶Sd a&;Y , t"du uè rSyoifonf?

Chapter 44 7 to 8 Months (28 to 32 Weeks): Sound Discrimination, Behavioral States

oE<om;onf28 ywf twGif; toHae toHxm; tedrfh tjrifh udk cGJjcm;odjrifEkdifonf?

t ywf (30)twGif;/ touf¶SL v_yf¶Sm;r_rsm;onf yHkrSeftwdkif; jzpf+yD; omrefoaE<om; wGif
tcsdef . 30 rS 40 μ jzpfysufonf?

udk,f0efoufwrfr; tqHk;ydkif; (4) v twGif; oaE<om;onf nD!Gwfaom vkyfief; umv udk
xif¶Sm;jy+yD; ,umv udk tem;,lumv rsm;u =um;Oifjzwfawmufonf? TjyKrlyHk tqifhrsm;onf
¶_yfaxG;l wdk;yGm;rsm;jym;r_rsm; udka&mifjyef[yfvm+yD; ,rSm A[dk tm¶kHa=um
tzGJ<tpnf; wGifjzpfonf?

Chapter 45 8 to 9 Months (32 to 36 Weeks): Alveoli Formation, Firm Grasp, Taste Preferences

(32) ywf cef<twGif; tqkwfavtdwfi,f ac: tvfADtdkvD (odk<) avtdwf qJvfrsm;onf tqkwfrsm; xJ wGif pwifzGH<®z;vmonf? ,wdk<onf arG;zGm;+yD; aemuf (8) ESpf txd qufvuf zGH<®z;rnf?

(35) ywf wGif oaE<om; onf vufqkwfvmEkdifonf?

trsdK;rsdK; j'yfypPnf;rsm;wGif oaE<om; yHkpHtaexm; ay:vm+yD; arG;zGm;+yD;aemuf ESpfouf zG,faom teH<udkjzpfapof? Oyrm/ prkefpyg;udk rSD0Jaom rdcifrs;. oaE<om;rsm;onf tqdkyg j'yfypPnf;rS ay;aom EG,fcsdK"mwfudk &onfESifhtnD arG;zGm;+yD;aemuf prkefpyg;odk< ESpfoufzG,f jzpfjcif;udk jyonf? oE<om;tzHk;tumr¶Sdaom arG;cgp uav; rsm;onf prkefpyg;udk róuuf=uyg?

Chapter 46 9 Months to Birth (36 Weeks through Birth)

oaE<om;onf om;zGm;jcif;udk tpjyKoGwfoGif;&mwGif tufp¶kd*sif ac: [dkrkef;"mwftajrmuf trsm;udk xkwfv,wfjCIF;tm;jzifh oE<om; rS arG;p uav;b0odk< ajymif;vJaom tjzpf pwifonf?

om;zGm;jcif;udk tm; }uD;aom om;tdrfusKH<jcif;[k rSwfxm;+yD; &v'frSm arG;zGm;jcif;yifjzpfonf?

,SwfwifjCIF;rS rdarG;onf txd ESifh x<dkaemuff wGifvnf; vlom;.zGH<®z;r_onf r+yD;jywfoGm;bj qufvuf ¶_yfaxG;aeao;onf? Tpdwf0ifpm;zG,f jzpfpOf . acwfrSDawG<¶Sdcsufrsm;u oaE<zGH<®z;r_.t"du *,wfudk ydkrdk!,ef;jyvm=uonfrSm usef;rmouf¶Sif umvywfvHk; jzpfonf?

vlom;. tapmydkif;umv zGH<®z;r_ tay: 'dk<.todrsm;u 'dk<.pGrf;&nfrsm;ESifh usef;rma&;udk ydkl jr#ifhwifay;rnf jzpf+yD; rarG;rSD ESifh arGzGm;+yD; umv ESpfckvHk; tusHK;0ifonf?