Blood & Immunology Module I

First Professional Year MBBS

5 Weeks

KMU - Central Curriculum Committee

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By the end of this module, First year MBBS students shall be able:

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By the end of BLOOD Module, the student should be able to:

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By the end of BLOOD Module the student shall gain the ability and carry responsibility to:

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SNO	**Topic**	**Learning Outcomes**
	Introduction to hematopoietic system	"
	Introduction to Blood	# % ! &) ( )* $ 9
"	**Red Blood Cells**	. - 3 / ! 8 3 9 4

#	**Red Blood Cells Genesis**)	- 3 - 3 " # > = - 3 % >= - 3
%	**Erythropoitin**	& ,) ( )*) - 3 . * - 3
&	**Anemia**	/ 8 " ,
(	**Polycythemia**	# % $
# !		
.	**Introduction of Porphyrins**	& (3 .)

/	**Iron metabolism**	/
8	**Introduction to heme synthesis and degradation**	"8 " " ! 9 "" ! "# - ! 9 "% +* $ "&
	Hemoglobinopathies	"(! ". ! "/ $? #8 0 # 3 #)* @ A #") @ A
	Water soluble vitamins	## $ > * > 3 =

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"	**Anemia's of diminished erythropoiesis**	#% #&' #( )
#	**Hemolytic anemia's**	#. #/)
	!	
%	**Drug treatment of anemia's**	%8) 5 % , : ; % , %") : ;
	"	
&	**Epidemiology of blood borne diseases**	%#) %% B

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(	**Histology**	%& $ %(3

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.	**Hemoglobin determination**	%. $ %/ :! ; &8) 9 C & 0
/	**Blood cells**	&
8	**RBC count**	&" :- 3; - 3

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SNO.	Topic	Learning Outcomes
"	**Gross anatomy of hematopoietic system**	%. ' * %/ &8+ &) ?
#	**Histology of lymphoid tissues**	& $ 5 '< &" ' &# < &% < &&
%	**Embryology/ Developmental Anatomy of lymphoid tissue**	&(
&	**White Blood Cells**	&. 3 $ &/ 7 3

		(8 $: 0 ; (7 3 : , * ;
((	**Reticulo-endothelial (5 5) system**	(: ; (" (#)* : ;
.	**Inflammation**	(% (& : 0 ; ((1
/	**Abnormal leukocyte counts/ Leukemia**	(. ' 0 ' 0 ' 0
"8	**Introduction to immunity**	(/ .8 . .) * ." .#
"	**Immune system**	.%) .& .(..)

		./ ' /8 3 **characteristics** 1 / 3
"	**Immune response**	/ $ /" 0 0
""	**Humoral and cell mediated immunity**	/# /% /& /( )* $ < /.)* * < // < 88 $
"#	**Complement system**	8 8)* $ 8" $ $ 8# 3 $ $
"%	**Immunity: extremes of ages**	8% 3

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"&	**Allergy & Hypersensitivity**	8. 8/ 8 3 ' $
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"(	**Immunoglobulin ’s / Antibodies**	" B #)93-) < B % 9 B & ( )*
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".	**Vaccinology**	#& 4 #( )* * 4 :) ; 0
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"/	**TLC determination**	#. 0 :<'3;
#8	**DLC determination**	#/ 0 : '3;

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SNO	**Topic**	**Learning Outcome**
#	**Introduction to hemostasis**	#. #/ %8 % + 1
#	**Blood Coagulation**	%) %")* %#)* $ %%+ 1 %& $ $: $; $ %($ $: $; * $ %.)* $
#"	**Bleeding disorders**	%/ > D &8 $ > D <

		! & > 7
##	**Thrombotic disorders**	& $! &" , &# , &%) && =
. -		
#%	**Coagulation modifying drug**	&($! < * > D
# (!)		
#&	**Clotting time determination**	&.
#(	**Bleeding time determination**	&/
#.	**Prothrombin time determination**	(8 : <;

% !		
SN0	**Topic**	**Learning Outcome**
#/	**Blood Grouping**	(((" : +; $ 0 $ (# (% + , $ (&
%8	**transfusion reactions**	((- (. (/)* .8)

%	**Erythroblastosis fetalis**	. - . ." + -
%	**Major histocompatibility complex**	.# .%)* $.& 5 ? ! * :5!3; 3 4 ? *
$ &		
%"	**Medico-legal importance of blood groups**	.(5 $ 0 : ; ; : ; E : ;
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%#	**epidemiology of blood borne diseases**	.. $ ./ ! > ! > !3> /8 / / * 0 /" '

# (!) * .- - +		
%%	**Blood grouping**	/# + -
%&	**Blood smear preparation**	/% 0
(8	**Blood Bank**	/& +