

# بسماللهالهنالرهن

# P.P Collected Questions Of HLS Final

# Physiology

# 1-Wrong about lymph

- a. contain plasma proteins
- b. doesn't contain cells
- c. lymph flow by increases by muscle contractions
- d. increases with muscular activity
- e. fluids filtered are usually less than reabsorbed
- f. it filter the same amount as reabsorbed amount

#### answer: e+b+f

\*السؤال نفسه بس في كل سنة الإجابة الصحيحة مختلفة \*

# 2-Wrong about ABO blood groups

- a. ABO antigens are present only on RBCs membrane
- b. Blood transfusion deaths are mainly cause ABO incompatibility
- c. O type are the most type to be at risk of death in blood transfusion
- d. cross matching is done to test compatibility in minor antigens

#### answer: a

#### 3-Wrong about the osmolarity of the plasma

- a. 0.9% of NaCl
- b. Glucose 5% is an isotonic solution
- c. Na+ AND Cl- are the major contributories to the osmolarity of the plasma
- d. this pressure opposes ultrafiltration of fluid in capillaries

#### answer: d

\*difficulty index, many chose b\*

## 4-About ADULT males and females fluid distribution

- a. both has the same fluid and fat distribution
- b. Males have more fluid and fat distribution
- c. Females have more water and fat distribution
- d. females have more fat and less water distribution

# answer: d

# 5-Rh+ father and rh- mother, choose the right statement

- a. the first Rh+ child is at risk of agglutination
- b. the second Rh+ child is at risk of agglutination
- c. mild hemolysis in fetus is corrected by giving him -rh from his mother

# answer: b

# 6-We regulate extra cellular fluid because?

- a. to maintain blood pressure
- b. to increase the release of ADH
- c. to prevent cells from shrinkage and swelling

#### answer: c

#### 7-Choose the incorrect statement:

- a. electrolytes don't affect the Osmolality of plasma
- b. components of clotting factors are component of lymph

#### answer: a

# 8-Which of the following is wrong:

- a. water accounts for 10 % of body weight of females and males
- b. osmolality of plasma is 246 mOsmol
- c. sodium chloride contribute by 164 mOsmole

#### answer: a

#### 9-A fall in sodium plasma concentration:

- a. decreases the freezing point of plasma
- b. increases intracellular fluid volume
- c. is not associated with thirst
- d. can't be caused by excessive (uncontrolled) secretion of ADH (anti- diuretic hormone)
- e. causes edema

#### answer: b

### 10-A person with (A Rh-) blood can receive blood transfusion from which of the following?

- 1. A Rh+
- 2. B Rh+
- 3. AB Rh-
- 4. O Rh-

#### 5. A Rh-

- a. 1 only
- b. 4 only
- c. 3 only
- d. 4 + 5
- e. 1 + 5

# answer: d

# 11-Which of the following regarding ABO blood groups is NOT CORRECT?

- a. full cross match involves reacting donar's plasma with patient's RBCs
- b. most cases of blood incompatibility are due to not cross matching the different blood groups
- c. anti- A and anti-B antibodies are sometimes absent in blood group O

#### answer: a

# 12-A man of blood group A has 2 children, plasma from the blood of one of them agglutinates his red cells while that from the other does not, All of the following are TRUE EXCEPT ONE:

- a. mother of 'agglutinating' child could be group B
- b. father must be heterozygous group A
- c. children must have different mothers
- d. 'agglutinating' child could be group O
- e. 'Non-agglutinating' child could be group AB.

#### answer: c

#### 13-Wrong about electrolytes:

- a. participate in the fluid movement between tissues and capillaries
- b. high capillary pressure leads to filteration of high than normal amount of fluid

#### answer: a

## 14-Chose the wrong statement

- a. In hypertonic dehydration, water tends to be drawn from cells
- b. hormones and amino acids are responsible for a significant portion of blood osmolality

#### answer: b

# 15-A tissue that has no lymphatic capillaries

- a. GIT
- b. Respiratory tract
- c. CNS

d. UGT
answer: c
16-Least common blood group in the region
a. A
b. O
c. AB
answer: c
17-One of the following isn't possible to be the blood group of a child whose father blood group is AB and mother
blood group is O:
a. A
b. O
с. В
answer: b
18-Which of the following electrolytes has the most effect on osmolality:
a. K+
b. Na+
c. Cl-
answer: b
(Finally; a question shows the blood groups of the son, mother & father; the answer was he's not the father.)
Pharmacology
1-Thrombopoietin has the same action of:
a. erythropoietin
b. interleukin 11
c. filgrastim
answer: b
2-Streptokinase has the following mechanism of action:
a. inhibiting clotting factors
b. activate plasminogen
c. inhibit platelet receptors
answer: b
3-When we use oral anticoagulant drugs, we wait 2-3 days for its action to start, the cause is:

- a. it has very low efficacy
- b. it is not well absorbed
- c. to deplete the stores of active coagulation factors

# 4-Heparin and LWMH has which of the following in common:

- a. both need monitoring by Protamine
- b. both need monitoring by PTT
- c. both work on coagulation factors (X, IX, II)
- d. both are excreted by renal
- e. can be given orally

#### answer: d

# 5-Heparin and warfarin have which of the following in common:

- a. both need separation by 2-3 days
- b. both need separation by 2-3 weeks
- c. both are given in combination
- d. both are given immediately, heparin is discontinued while warfarin is continued
- e. none of the above

### answer: d (deleted by difficulty index)

# 6-Folic acid analog, used in cancerous and non-cancerous problems therapies:

- a. Methotrexate
- b. Busulfan
- c. Pentamidine
- d. Rituximab

#### answer: a

# 7-Which of the following inhibits factor Xa, Given orally at fixed doses and do not require monitoring, Used to prevent stroke in atrial fibrillation:

- a. Argatroban
- b. Hirudine
- c. foundaparinox
- d. Riveroxaban

#### answer: d

# 8-What is the mechanism of the action for Argotroban:

- a. binds to ADP receptors on platelet
- b. binds to PAR1 receptors
- c. binds to thrombin active site

# 9-Wrong statement about Chloroquine

- a. first drug of choice for all malarial types in blood
- b. resistance is increasing cause mutation in P170
- c. it causes Unmasking of LE, psoriasis and porphyria. Corneal deposits, blindness, blurring of vision
- d. drug of choice for all malarial tissue types

# answer: d

# 10-Drug treat non-hodgkin lymphoma & it's CD20 positive?

- a. Huridine
- b. Imatinib
- c. Rivoxiban
- d. Ifliximab
- e. Rituximab

#### answer: e

#### 11-Rituximab used in:

- a. CML
- b. hodgkin lymphoma
- c. solid tumors
- d. CLL

#### answer: d

## 12-Wrong about Vincristine:

- a. diarrhea is a common adverse effect of it
- b. causes neurotoxicity
- c. acts by inhibiting microtubule formation
- d. used to treat leukemia and lymphoma

#### answer: a

# \*\*Match the following with their therapeutic indications:

#### 13-Protamine sulfate

# 14-Heparin

# 15-Warfarin

# 16-Primaquine

# 17-Ateplase

- a. Radical cure of vivax and ovale
- b. Bind antithrombin
- c. Fibrinolytic
- d. Inhibit synthesis of coagulation factors VII,IX,X
- e. Heparin toxicity

#### answer:

# 13.e-14.b-15.d-16.a-17.c

# 18-Antidote for Dalteparin:

- a. protamine
- b. no need usually

#### answer: b

# 19-Wrong about Warfarin:

- a. acts on liver rather than on circulation
- b. given orally
- c. good for pregnant women
- d. Time to maximal effect depends on factor degradation half-lives

#### answer: c

# 20-A drug that clears already formed clots, good after acute MI and very expensive:

- a. Ateplase
- b. Warfarin
- c. Heparin
- d. Aspirin

#### answer: a

# 21-Blocks gpIIa/IIIb on platelets:

- a. Cangrelor
- b. Ticlopidine
- c. E5555
- d. Abciximab

#### answer: d

# 22-Wrong about erythropoietin:

- a. best source is urine of patients with renal failure
- b. given by IV and subcutaneous injection
- c. can cause hypertension and thrombotic complications
- d. used unethically by athletes

#### answer: a

#### 23-Choose the correct statement:

- a. Streptokinase isn't antigenic and can't cause allergic reactions
- b. comparing recombinant T-pa to streptokinase in terms of fibrin selectivity

#### answer: b

# Microbiology

# 1-The highest rate of relapsing in plasmodium species

- a. P. ovale
- b. P. vivax
- c. P. falciparumm
- d. P. knowlesi

#### answer: b

# 2- The infective stage of Leishmania

- a. metacyclic trypomastigotes
- b. amastegotes
- c. promastegotes
- d. trypomastegotes

#### answer: c

### 3-The most accurate statement about Parvovirus

- a. causes severe anemia by attacking precursor erythrocytes
- b. can be detected in laboratory by cold agglutinin test
- c. double stranded DNA with envelope

# answer: a

#### 4- B19 causes all of the following EXCEPT

- a. Erythema infectosum
- b. Infectious mononucleosis

- c. Hydrops fetalis
- d. pure red cell aplasia
- e. Transient aplastic crises

# answer: b

# 5- Wrong statement about malignant tertian fever

- a. shows 2 chromatin dots with crescent gametocytes
- b. Affects RBCs of all ages and shows all sizes
- c. irregular fever with usually episodes every (36-48) hours
- d. shows Schuffner's dots

#### answer: d

# 6- Babesia Microti is transmitted by which of the following vectors

- a. Ixodes scapularis
- b. Ixodes pacificus
- c. Ixodes dentatus
- d. Tsetse fly

#### answer: a

# 7- The most accurate statement about trypanosome Cruzi

- a. humans are the main reservoir
- b. vector is redivud (nose cone)
- c. its main effect happens by attacking skeletal muscles
- d. can be detected in muscle biopsy

#### answer: b

#### 8-The most accurate statement about EBV

- a. EBV infectious mononucleosis cytoplasmic wrapping around blood cells caused by EBV infected T helper cells
- b. it affects CD4 T cells
- c. Agglutinate with sheep cells

# answer: c

# 9-Wrong about parvovirus B19:

- a. the only human pathogenic parvovirus identified to date
- b. has tropism for erythrocytes and their progenitors
- c. treated with Ribavarin

# 10-Wrong about HTLV replication cycle:

- a. ssRNA goes directly to ribosomes to synthesize proteins
- b. it has a long latency period
- c. it has tropism for mature T cells

#### answer: a

#### 11-Which is not true about P. malariae:

- a. chronicity
- b. glomeriolonephritis
- c. hepnozoites
- d. benign
- e. band form

#### answer: c

# 12-Which is wrong about malraia:

- a. sporogony in the liver
- b. it has two cycles
- c. falciparum is the most severe one

### answer: a

# 13-The asexual cycle of Plasmodia occurs in:

- a. vector
- b. RBCs

#### answer: B

# 14-The infectious phase of Plasmodia is:

- a. Sporozoites
- b. schizont
- c. trophozoite

### answer: a

# 15-Which is not caused by EBV:

- a. infectious mononucleosis
- b. mild pharyngitis
- c. erythema infectiosum

# 16-Wrong about P. falciparum:

- a. it invades all ages of RBCs
- b. only has schizogony in the erythrocytes
- c. no schuffner's dots

# answer: b

# 17-Wrong about P. malariae

- a. relapse
- b. tends to infect old cells
- c. band form

#### answer: a

\*ملاحظة محمّة؛ لا تنسوا تحلّ الأسئلة اللي عرضها الدكتور في اللّايف كمان \*

# Pathology

# Dr. Tariq Aladily

# 1-Surreptitious polycythemia

no splenomegaly

# 2-Lowest haptoglobin levels are seen in

- a. IHM
- b. PNH

#### answer: b

# 3-Anemia with erythrocytosis

- a. Chronic blood loss
- b. Thalassemia

#### answer: b

# 4-Lowest haptoglobin levels are seen in:

PNH

# 5-BCl2 positive has nothing to do with

burkitt lymphoma

# 6-basophilia + blasts < 5%:

CML

# 9-mantle cell lymphoma:

extranodal

\*الدكتور درّس بس دفعة 016 للمزيد اضغط هنا؛ هاد لو عرفت تحل لغز ، محاولة تخيّل السؤال أصعب من السؤال نفسه للأسف

#### Dr.Ahmad Mansour

# 1-Long question but easy ,Cd19+ with CD5 - , what is the tumor?

- a. Hodgkin lymphoma
- b. Hairy cell leukemia
- c. Plasma cell myeloma

#### answer: b

# 2-Very easy description of iron deficiency anemia, what is your next step?

- a. Iron studies
- b. hepcidin level
- c. Electrophoresis
- d. bone marrow biopsy

#### answer: a

# 3-10 years old child with petechial hemorrhage, what is the disease?

- a. Von-willebrand disease
- b. Accidental Aspirin
- c. Disseminated intravascular coagulation
- d. Hemophilia

#### answer: a

# 4-A 55 year old patient with high WBC count and most of them are lymphocytes, he has monoclonal cells and CD5+, after weeks he comes back with anemia, what is your next step?

- a. Bone marrow biopsy
- b. Coombs test
- c. he has Myelophthisic anemia
- d. Osmotic Fragility test
- e. hemoglobin Electrophoresis

#### answer: b

# 5-Christmas disease is deficiency of?

- a. Factor II
- b. Factor IX
- c. Factor X
- d. Factor VIII

#### answer: b

6-Patient with Hemoglobin 19g/dl (very high) and she has Jak2 mutated gene and Low erythropoietin, on bone marrow biopsy we found that Blast count almost 40% of the cells, your diagnose?

- a. she has Bcl2 translocation
- b. she has a rare complication of Myeloproliferative syndrome
- c. Bone marrow would show fibrosis
- d. Phlebotomy would alleviate the disease

#### answer: b

# 7-Neutrophil would have the same normal appearance in which of the following diseases?

- a. bacterial infection
- b. Chediak-Higashi
- c. Leukocyte adhesion molecules deficiency
- d. leukemoid reaction

#### answer: c

8-A 5 years old child presents with cervical lymph node enlargement, histology shows expansion of the paracortical areas with resulting atrophy of the follicles and The paracortical areas show the presence of immunoblasts with fine

### chromatin and prominent nucleoli, your diagnose?

- a. bacterial infection
- b. burkitt lymphoma
- c. Vaccine
- d. follicular lymphoma
- e. Allergy reaction

#### answer: c

# 9-Reticulocyte count is used to differentiate between?

- a. Microcytic and macrocytic
- b. Hemolysis anemia and normocytic anemia
- c. Anemia of hemorrhage and anemia of bone marrow failure
- d. Iron deficiency anemia and thalassemia

# 10-Chronic disease anemia caused by high

- a. Hepcidin
- b. Iron

#### answer: a

11-A 9 years old child with shortness of breath and muscle weakness, his father told you that he had infection last week, his mother told you that his brothers had the same symptoms and his sisters were normal, choose the right diagnose or statement:

- a. he has gall bladder stones
- b. he has erythroid hyperplasia in bone marrow
- c. low reticulocyte count
- d. coombs test is required

# answer: b(G6PD)

12-A 22-year-old male with back pain and superior mesenteric artery thrombus, on the blood film, he has normal platelet count and function, also coagulation factors test shows normal function, what is your diagnose?

- a. hemophilia A
- b. Acute promyelocytic leukemia
- c. Thrombocytopenia
- d. Paroxysmal nocturnal hemoglobinuria

### answer: d

### 13-Which of the following causes pancytopenia

- a. Immune hemolytic anemia
- b. Thalassemia
- c. Iron deficiency anemia
- d. Hereditary spherocytosis
- e. B12 deficiency

## answer: e

14-51 years old Female with breast cancer, she had radiotherapy and after weeks she comes with anemia and pancytopenia, her blood film show needle like structures inside the WBCs, choose the right statement

- a. The leukemic cells are lymphoid in origin
- b. she had good prognosis
- c. Ring structure in RBCs is common characteristic in her case
- d. she has increased risk of infection

e. Folate levels are low

#### answer: d

# 15-What is the genetic translocation in promyelocytic leukemia

- a. T(8:21) RUNX
- b. T(15:17) PML-RARA
- c. T(9:22)

#### answer: b

# 16-Easy description of HEREDITORY SPHEROCYTOSIS, choose the main characteristic of this disease

- a. Auto splenectomy
- b. X linked disease
- c. low haptoglobin

#### answer: c

# 17-Description of Hodgkin

Reactive cells are more than monoclonal cells

# 18-82 year old with pancytopenia, blasts are less than 1%, neutrophils are hyposegmented and megakaryocyte are small, choose the right statement:

- a. patient must have chemotherapy
- b. the disease causes bone lytic leasions
- c. T(12:21) is common here
- d. increased risk of transformation to AML

#### answer: d

#### 19-True about Bence Jones proteins

- a. Heavy chains found in blood
- b. free light chains found in blood
- c. free light chains found in urine
- d. heavy chains found in urine

#### answer: c

# Histology Lab

# 1-Identify

- a. basophil
- b. eosinophil
- c. neutrophil
- d. macrophage

#### answer: a

# 2-Which type of cells is not presented in the picture

- a. neutrophil
- b. eosinophil
- c. monocyte
- d. lymphocyte

#### answer: c

# 3-True about monocytes

- a. multinucleated cell
- b. frosted glass appearance
- c. nucleus is masked by granules

# answer: b

# 4-Wrong about this picture

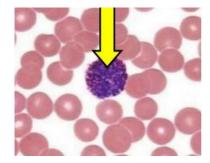
- a. represents palatine tonsil
- b. covered by stratified squamous non keratinized epithelium
- c. taken from nasopharynx

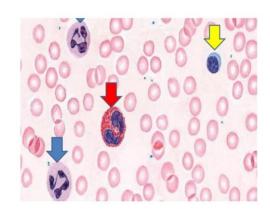
#### answer: c

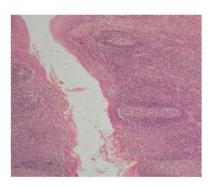
# 5-The arrows represents

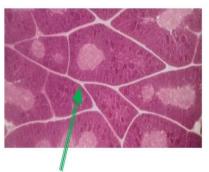
- a. Outer cortex of lymphnode
- b. Paracortex
- c. outer cortex of thymic lobule

# answer: c









# 6-Which of the following isn't seen in this section

- a. thymus dependent zone
- b. central arteriole
- c. high endothelial venules

#### answer: c

#### 7-Cross section

• it's the ileum which contain the most prominent Peyer's patches

# 8-Wrong about thymus section

• it contains afferent lymph vessels

#### 9-Blood film

said that an arrow is a reticulocyte which is wrong

#### 10-About the tube we use in blood smear

EDDTA

# 11-A picture shows reticulocyte and asking about correct statement?

- a. increase in hemolysis
- b. seen in parasitic infection

#### answer: a

# 12-Wrong about monocyte:

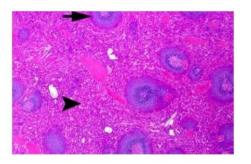
- a. pink
- b. it has azurophlic granules
- c. neutrophil most abundant in plasma

# answer: a

# 13-A picture of postcapillary venule of a lymph node, which is true:

- a. present in the medulla of lymphnode
- b. used by the lymphocytes to get from lymph to blood
- c. both are correct
- d. neither of which

#### answer: d



# 14-A picture of 2ry follicle, which is true:

- a. it contains plasma cells and memory cells
- b. it's present in the cortex of lymph node
- c. both correct
- d. neither is true

#### answer: c

# 15- Picture of thymus pointing at cortex and medulla

- a. tolerance in cortex
- b. mature T cells in medulla
- c. A+B

#### answer: c

# 16-Picture of medulla of lymph node

- a. this region contains follicles
- b. this region contains medullary cords

#### answer: b

# 17-Which of the following cells can give rise to an APC?

- a. myeloblast
- b. basophil
- c. monocyte

#### answer: c

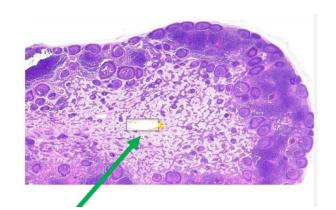
# 18-Pictures of neutrophil, band cell, metamyelocyte and myelocyte – which can increase in bacterial infections?

- a. neutrophil
- b. band cell
- c. metamyelocyte
- d. myelocyte
- e. all of the above

#### answer: e

#### 19-In this section, the arrow contains?

- a. plasma cells
- b. follicles
- c. sinuses
- d. B lymphocytes



#### answer: e

# Physiology Lab

# 1-A blood tube with 3.1 blood and total 6, what is PCV

- a. 51.7%
- b. 57%
- c. 60%

#### answer: a

# 2-The same previous patient, what is your diagnose

- a. hemoglobin (19g/dl), blood cells (8million/microL), ESR=30mm/hour
- b. hemoglobin (19g/dl), blood cells (8million/microL), ESR=5mm/hour
- c. need more information to be diagnosed

#### answer: b

# 3-Choose the wrong combination

- a. Sahli test with PCV
- b. blue tip capillary tube with ESR
- c. PCV with anemia types

#### answer: b

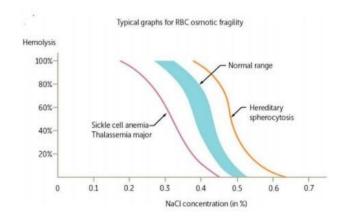
# 4-BLEDDING TIME is prolonger in all of the following except

- a. thrombocytopenia
- b. vit K deficiency
- c. abnormal platelet function
- d. use of Aspirin
- e. A+D

#### answer: b

# 5-According to the figure, a patient with thalassemia would have which of the following in osmotic fragility test

- a. shifted to the right with less fragility cells
- b. shifted to the left with more fragility cells
- c. shifted to the left with less fragility cells
- d. shifted to the right with more fragility cells



# 6-Given easy numbers, calculate the differential leukocyte count and absolute count

Choices include the same numbers with two different UNITS

# 7-Informations about 4 squares with their RBCs counting numbers in hemocytometer, and picture of the fifth square:

• you have to count the RBCs and then what is the overall RBCs number

# 8-Choose the wrong statement:

- a. ESR increases in polycythemia
- b. ESR decreases in polycythemia
- c. If you forget to check the ESR in the first hour you can check it in the second hour

#### answer: a

#### 9-About ESR test:

- a. increase in the case of polycythemia
- b. increase in the case if protein content of plasma increased
- c. diagnostic
- d. change according to age, sex

#### answer: d

## 10-Measuring Hb concentration by

cyanmethemoglobin

#### 10-Increases bleeding time

thrombocytopenia

# 11-There was a picture for the blood type test

- a. B+
- b. B-
- c. A+
- d. A-

#### answer: b

12-Blood test showed agglutination only when adding Anti-A Abs - patient can receive transfusion from?

- a. AB+
- b. AB-
- c. A-
- d. B+

# 13-Picture of eosinophil - true -

increases in parasitic infection

# 14-Picture of Hb test showing 18g/dl woman has

polycythemia

# 15-Wrong about intrinsic pathways

PT above 30 seconds indicates abnormality

# 16-Wrong about ESR

can be used to exclude underlying disease

# 17-HB 11, Cell diameter 8.2, RBC count 3000, wrong

• this is typical of IDA

# 18-Wrong about reticulocyte

has no hemoglobin synthesis

# Pathology Lab

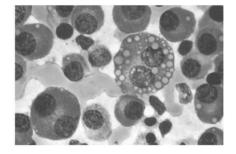
# 1-The following section represents?

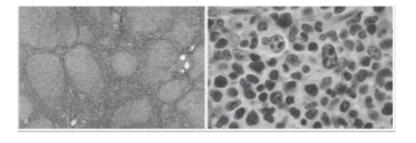
- a. Hodgkin lymphoma
- b. Follicular lymphoma
- c. Hairy cell leukemia
- d. Plasma cell myeloma

# answer: d

## 2-These two sections represents?

- a. Follicular hyperplasia
- b. Follicular lymphoma
- c. Hodgkin lymphoma





# d. ALL

#### answer: b

# 3-This section represents?

- a. Iron deficiency anemia
- b. Megaloblastic anemia
- c. Schistocytes
- d. Spherocytosis

#### answer: c

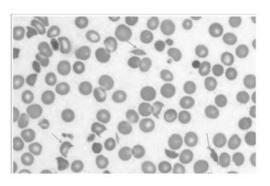
#### 4-This test is used for?

- a. Hereditory spherocytosis
- b. Iron defiency anemia
- c. Leukemias

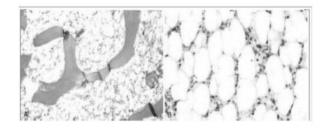
#### answer: a

# 5-The second picture represents

- a. Myelophthisic anemia
- b. Anemia in liver disease
- c. Aplastic anemia
- d. Anemia of renal disease







#### answer: c

لهون خلص التجميع يلي قدرنا عليه، للأسف الملف يا دوب انجمع ما لحق يتدقق أو يترتب، وكمان هالمرة مو شامل كل اشي لو حابب تطلع كمان ممكن تلاقي هون؛ سامحونا عالتأخير والقصور، وموققين يا رب

وَاجْعَلْ خَيَالُكَ سَامِياً فَلَطَالَمَا...سَمَتِ الحَقِيقَةُ بِامْتِطَاءِ خَيَالَ ابْعِدْ مُنَاكَ عَلَى الدَّوَامِ فَكُلَّمَا...ذَانَ النَّجَاحُ عَلَتْ مُنَى الأَبطَالِ