

Final ore deposits Set 1

Q1: Define the following terms: (20M)

Protore, Ground preparation, Stockwork, Hypogene alteration, Paragenetic sequence.

Q2: Give the reason for the following: (15M)

- a) The study of the wall rock alterations is important.
- b) The minor faults may be much better hosts for ore solutions than large faults.

Q3: a) List with illustrations the more reliable criteria of the replacement textures (only six). (10M)

b) List the methods of the determining the temperature of the formation of the ore deposits and explain one of them. (10M)

Q4: Complete the following sentences with a proper words or statements. (25M)

- a) The most common secondary structures are:
- b) The nature of the alteration products depends upon: 1)
2) 3)
- c) The nineteenth and early twentieth century classification are emphasized on, while later classifications are developed around the
- d) The processes that may be reducing the temperature during ore deposition are: 1) 2)
3) 4)
- e) Textural interpretation can assist (help) in: 1)
2) 3)

Q5: The following sentences are either true or false. Mark () in front of the right and () in front of the false, and correct the false. (20M)

- a) Most syngenetic ore deposits are influenced by structures superimposed on the rocks.
- b) Ore bearing fluids react continuously with the wall rocks and constantly change in composition.

c) The high sulfur ratio seems to have favored the stability of the complex copper and iron sulfides.

d) The higher the temperature of deposition of the ore minerals, the more intense in the alteration.

e) Syngenetic hydrothermal zoning found in stratiform sulphide bodies of sedimentary affiliation.

Good Luck

Dr. Faraj H. Tobia

Final ore deposits Set 2

Q1: Define the following terms. (20M)

Epigenetic deposits, Veins, Supergene alteration, Zoning, Gangue minerals.

Q2: a) Write the equation for replacement of silver bearing fluid passing over covellite ore. (7M)

b) List the methods of determining the temperature of the formation of the ore deposits. (8M)

Q3: a) Give three examples for the primary physical controls with illustrations. (10M)

b) List with illustration the most reliable criteria of the open space filling textures (six only). (10M)

Q4: Complete the following sentences with a proper words or statements. (25M)

a) The chemical changes that caused ore deposition, include changes in

b) The zoning in the minerals may be defined by: 1)

2) 3) 4)

c) Schneiderhohn (1941) classified ore deposits according to: 1)

2) 3) 4)

d) Textures vary among ore deposits, depending upon: 1)

2) 3)

e) The reducing of uranium from the soluble hexavalent to the relatively insoluble tetravalent, is due to the equation

Q5: The following sentences are either true or false. Mark () in front of the right and () in front of the false, and correct the false. (20M)

a) Richer portions within veins, pipes, or other ore forms are called shoots or ore shoots.

b) The solubility of many substances increases with temperature decrease, so that the cooling will precipitate any material whose saturation value has been exceeded.

- c) Lignite or black shales may contain anomalous concentrations of V, U, and Ti.
- d) The higher the temperature of deposition of the ore minerals the less intense in the alteration.
- e) The zoning is present in epigenetic and syngenetic deposits.

Good Luck

Dr. Faraj H. Tobia

Final Ore Set 3

Q1: Define the following terms: (20M)

Veins, Ground preparation, Stockwork, Gangue minerals, Eutectic point

Q2: Give the reason for the following: (15M)

a) The inversion point for acanthite-argentite system seems to be reliable geothermometer.

b) The carbonate host rocks are chemically reactive.

c) The problem of explaining the migration of ore-bearing fluids at depth would to be more difficult by colloidal theory.

Q3: a) List with illustrations the more reliable criteria of the open space filling textures (only six). (10M) b)

List the methods of the determining the temperature of the formation of the ore deposits. (10M)

Q4: Complete the following sentences with a proper words or statements. (25M)

a) There are three types of fluid inclusions: 1..... 2.....
3.....

b) Textures vary among ore deposits depending upon: 1.
2..... 3.....

c) The low ratio of sulfur to sulfide forming metal ions seems to have favored the formation of

d) Lindgren classify the ore deposits according to producing processes to:
1..... 2.....
3.....

e) Textural interpretation can assist (help) in: 1.....
2..... 3.....

Q5: The following sentences are either true or false. Mark (/) in front of the right and (X) in front of the false, and correct the false. (20M)

—————> Continue

- a) Most syngenetic ore deposits are influenced by structures superimposed on the rocks.
- b) Ore bearing fluids react continuously with the wall rocks and constantly change in composition.
- c) Ore bodies in skarn are introduced before the skarn have formed.
- d) The higher the temperature of deposition of the ore minerals, the intense in alteration. more
- e) The study of inclusions is easier and quicker in opaque minerals than transparent minerals. in

Good Luck

Dr. Faraj H. Tobia

Final Ore Set 4

Q1: Define the following terms. (20M)

Ladder veins, Skarn, Colloidal system, Economic minerals, Diffusion

Q2: Give the reason for the following: (15M)

a) The minor faults may be much better hosts for ore solutions than large faults.

b) The high efficiency of colloidal particles to adsorb the ions.

c) Studying the temperature of ore deposition and character of deposition fluids.

Q3: a) Write the equation for replacement of silver bearing fluid passing over covellite ore.

(10M)

b) List with illustration the most reliable criteria of the replacement textures (six only). (10M)

Q4: Complete the following sentences with a proper words or statements. (25M)

a) Texture interpretation can assist in: 1.....
2..... 3.....

b) The high ratios of sulfur to sulfide forming metal ions seems to have favored the formation of

c) Schneiderhohn (1941) classified ore deposits according to: 1.
2..... 3..... 4.....

d) Textures vary among ore deposits, depending upon: 1.....
2..... 3.....

e) The reducing of uranium from the soluble hexavalent to the relatively insoluble tetravalent, is due to the equation

Q5: The following sentences are either true or false. Mark (/) in front of the right and (X) in front of the false, and correct the false.

(20M)

a) Richer portions within veins, pipes, or other ore forms are called shoots or ore shoots.

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b) The higher the temperature of deposition of the ore minerals, the less intense in the alteration.

c) Lignite or black shales may contain anomalous concentrations of V, U, and Ti.

d) The temperature at which a mineral well melt is assumed to mark the lower limit of stability for mineral,

e) Syngenetic ore deposits require ground preparation.

Good Luck

Dr. Faraj H. Tobia



Final Ore Set 5

Q1: Define the following terms: (20 marks)

Veins- Ground preparation- Stockwork- Gangue minerals- Eutectic point

Q2: Give the reason for the following: (15 marks)

a. The inversion point for acanthite-argentite system seems to be reliable geothermometer.

b. The carbonate host rocks are chemically reactive.

c. The problem of explaining the migration of ore-bearing fluids at depth would to be more difficult by colloidal theory.

Q3: a. List with illustrations the more reliable criteria of the open space filling textures (only six). (9 marks)

b. List the methods of the determining the temperature of the formation of the ore deposits. (10 marks)

Q4: Complete the following sentences with a proper words or statements. (26 marks)

a. There are three types of fluid inclusions: 1..... 2.....
3.....

b. Textures vary among ore deposits depending upon: 1.
2..... 3.....

—————> Continue

- c. The low ratio of sulfur to sulfide forming metal ions seems to have favored the formation of
- d. The forms of magmatic segregation deposits are: 1.....
2. 3.
- e. Textural interpretation can assist (help) in: 1.....
2..... 3.....

Q5: The following sentences are either true or false. Mark (/) in front of the right and (X) in front of the false, and correct the false. (20 marks)

- a. Most syngenetic ore deposits are influenced by structures superimposed on the rocks.
- b. Ore bearing fluids react continuously with the wall rocks and constantly change in composition.
- c. Ore bodies in skarn are introduced before the skarn have formed.
- d. The higher the temperature of deposition of the ore minerals, the more intense in alteration.
- e. The study of inclusions is easier and quicker in opaque minerals than in transparent minerals.

Good Luck

Prof. Dr. Faraj H. Tobia