

This question paper contains 3 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 6567

Unique Paper Code : 32191501

HC

Name of the Paper : Economic Geology

Name of the Course : B.Sc. (Hons.) Geology

Semester : V

Duration : 3 Hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Out of eight questions, attempt any five questions.

Question No. 1 is compulsory.

I. Fill the blanks :  $2+2+2+2+2+2+3=15$

- (a) The chemical formula of the mineral wolframite is .....
- (b) The Rampura Agucha deposit is known for .....
- (c) Malanjkhand copper deposit. is in ..... craton.
- (d) From the ..... district of Orissa some injection-type early magmatic chromite deposits have been reported.
- (e) Bushveld Igneous Complex is a large layered igneous intrusive suite containing world's largest reserve of .....

P.T.O.

2. Briefly discuss about the following (with suitable sketches) :  $7\frac{1}{2} \times 2 = 15$

(a) Alteration zones in high sulfidation epithermal deposit

(b) Genesis of tabular uranium deposits

3. Write short notes on the following (with suitable sketches) :  $7\frac{1}{2} \times 2 = 15$

(a) Skarn Deposits

(b) Ore bodies in orogenic gold deposits.

4. Briefly explain the following :  $7\frac{1}{2} \times 2 = 15$

(a) Significance of redox state in formation of base metal deposits in sedimentary basins.

(b) Factors responsible for basin-scale flow of ore fluid in sedimentary basins

5. Justify the following statements :  $7\frac{1}{2} \times 2 = 15$

(a) Formation of uranium ore bodies in sedimentary basins is strongly controlled by organic matter.

(b) Base metal and uranium deposits form in sedimentary basins, even though the temperature of ore fluid is usually below  $200^{\circ}\text{C}$ .

6. Answer the following questions :  $7\frac{1}{2} \times 2 = 15$

(a) What types of ore deposit may be associated with kimberlite pipes ? Explain the process with a sketch.

(b) Write a short note on the distribution of uranium deposits in India

7. Write short notes on :  $7\frac{1}{2} \times 2 = 15$

(a) Formation of ore bodies by immiscible liquid segregation.

(b) Formation of supergene ores.

8. Define the following :  $3 \times 5 = 15$

(a) Greisen.

(b) Gangue

(c) Cherty Iron formation

(d) Sericitization

(e) Phosphorite.