2017

GEOLOGY

(Major)

Paper : 6.2

(Indian Mineral Deposits and Mineral Economics)

Full Marks: 60

Time: 3 hours

The figures in the margin indicate full marks for the questions

1. Answer the following questions: $1 \times 7 = 7$

- Name any two gold deposits from India.
- (b) Name two lead-zinc deposits from India.
- Give the name of one ore mineral each of lead and zinc.
- (d) Cite one occurrence of manganese deposit in India.
- (e) Give one industrial use of diamond.
- (f) Name two strategic minerals or elements.
- Name two economic deposits of silver in (q) India.

- 2. Give short answers to the following (any four): 2×4=8
 - (a) What do you understand by refractory minerals? Give one example.
 - (b) What is the name of primary ore mineral of aluminium? Where are they found in India?
 - (c) What are the industrial raw materials required for cement industry? Where are they found in North-East India?
 - (d) Where are beach monazites found in India? What is their economic significance?
 - (e) Write in short on the genesis and host rock of nickel deposits.
 - 3. Answer the following (any three): 5×3=15
 - (a) Name the places of occurrence of copper deposits in India. Add a note on the genesis of copper deposits.
 - (b) What is National Mineral Policy?
 - (c) What do you understand by strategic, critical and essential minerals? Give suitable examples.
 - (d) Name the places of occurrence of diamond in India. What are the host rocks of diamond?

- **4.** Answer any *three* questions from the following: 10×3=30
 - (a) Write a note on the occurrence of lead-zinc (Pb-Zn) deposits in North-Western India. Describe their rock association and origin. 5+5=10
 - (b) Name two ore minerals of iron with chemical composition. Where are iron deposits found in India? Write briefly on the genesis of iron deposits. What is Banded Iron Formation? 1+3+4+2=10
 - (c) Mention the raw materials used in glass and ceramic industry. Name three clay minerals. Name two members of asbestos group of minerals. What are the desirable physical properties of asbestos group of minerals?

 2+3+2+3=10
 - (d) Where are chromite deposits found in India? Write on the genesis of different chromite deposits with Indian examples.

 3+7=10
 - (e) What are radioactive minerals? Name two radioactive minerals with chemical composition. Where are radioactive mineral deposits found in India? Write briefly on the genesis of uranium deposit of Singhbhum shear zone. 1+2+3+4=10