

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

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4th Semester
Core Course - VII
ECONOMIC & APPLIED GEOLOGY
Full Marks: 40

PART – A

A. Choose the correct answer 1x25=25

UNIT - I

1. Best example of magmatic segregation is
 - a) Copper deposit
 - b) Bauxite deposit
 - c) Chromite deposit
 - d) Manganese deposit
2. Ores of copper, lead and zinc are produced by the process
 - a) Magmatic segregation
 - b) Magmatic injection
 - c) Contact Metamorphism
 - d) None of the above
3. The minerals formed by the igneous process are termed as
 - a) Essential
 - b) Primary
 - c) Varietal
 - d) Accessory
4. The most common example of disseminated type of deposit in basic rock is
 - a) Chromite
 - b) Diamond
 - c) Platinum
 - d) Copper
5. Diamond bearing rock is known as ‘kimberlite’ pipe a variety of
 - a) Dunite
 - b) Peridotite
 - c) Basalt
 - d) Copper

UNIT – II

6. The openings in the mining, which serve as a means of entry is known as
 - a) Shafts
 - b) Adits
 - c) Cross cut
 - d) Stop
7. Blasting gelatin is made up of

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- a) Atmospheric water
 - b) Surface water
 - c) Underground water
 - d) Industrial water
25. Pressure of hardness depends upon
- a) Presence of Ca and Mg salts
 - b) Absence of Ca and Mg salts
 - c) Pressure of Mg and Fe salts
 - d) Absence of NaCl

PART - B

Fill up the following

1x15=15

1. The useless material associated with ore-mineral is -----
2. The metal content of an ore is called the ----- of the ore.
3. The process in which mineral grains of greater density sink through the fluid magma during the crystallization is known as -----
4. Hydrothermal solutions are -----
5. An is an entrance to an underground_mine which is horizontal or nearly horizontal by which the mine can be entered, drained of water, ventilated, and minerals extracted at the lowest convenient level.
6. The ----- method utilizes the refraction of seismic waves on geologic layers and rock/soil units in order to characterize the subsurface geologic conditions and geologic structure.
7. An ----- is a plane of constant metamorphic grade in the field separates metamorphic zones of different metamorphic index minerals.
8. A branch of geology concerned with the identification and study of geological features through the study of aerial or orbital photographs is known as -----
9. ----- emit energy in order to scan objects and areas whereupon a sensor then detects and measures the radiation that is reflected or backscattered from the target.
10. Water of magmatic and organic origin is known as -----
11. ----- is the instrument which is used for measuring the permeability.
12. The lower the degree of saturation the ----- the permeability.
13. A geophysical method, which is most applicable for surface investigation of ground water is -----
14. ----- is the most common chemical constituent of ground water.

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15. High salinities are found in soils and ground water of -----

ANSWER KEY

PART – A Multiple choice questions

- | | | | |
|-------|-------|-------|-------|
| 1. c | 2. c | 3. b | 4. b |
| 5. b | 6.a | 7.c | 8. d |
| 9. c | 10. d | 11. c | 12. a |
| 13. b | 14. d | 15. c | 16. b |
| 17. b | 18. a | 19. d | 20. a |
| 21. a | 22. a | 23. c | 24. a |
| 25.a | | | |

PART – B Fill in the blanks

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|--|-----------------------------------|-----------------------------|
| 1. Gangue | 2. Tenor | 3. magmatic differentiation |
| 4. Early and end products of magmatic fluids | 5. Adit | |
| 6. Seismic refraction | 7. Isograd | |
| 8. Photogeolog | 9. Active remote sensing | |
| 10. Juvenile water | 11. Permeameter | |
| 12. Lower | 13. Electrical resistivity method | |
| 14. KCl | 15. Arid climate | |