

Maharashtra Board

Question Paper

2023

Class 12



HSC

QUESTION PAPER

Presented By

AGLASEM.COM

2023	III	13	1100	J-312	(E)
GEOLOGY (41)					
Time : 3 Hrs.		(4 Pages)		Max. Marks : 70	

General Instructions —

- (1) **Section-A :** Q. No. 1 - Contains Ten multiple choice type of questions carrying ONE mark each.
Q. No. 2 - Contains Eight very short answer type of questions carrying ONE mark each.
- (2) **Section-B :** Q. No. 3 to Q. No. 14 are Twelve short answer type of questions carrying TWO marks each.
- (3) **Section-C :** Q. No. 15 to Q. No. 26 are Twelve short answer type of questions carrying THREE marks each.
- (4) **Section-D :** Q. No. 27 to Q. No. 31 are Five long answer type of questions carrying FOUR marks each.
- (5) Draw neat and labelled diagrams wherever necessary.
- (6) All sections are compulsory.
- (7) Figures to the right indicate full marks.

SECTION-A

Q. 1. Choose the correct alternative and write the answers :

[10]

- (i) The discontinuity present between inner core and outer core is called _____.
 (a) Lehmann Discontinuity (b) Gutenberg Discontinuity
 (c) Repetti Discontinuity (d) Moho Discontinuity

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- (ii) The type of igneous rock with SiO_2 percentage between 45-55% can be classified as ____.
- (a) Acidic igneous rock
 (b) Intermediate igneous rock.
~~(c)~~ Basic igneous rock
~~(d)~~ Ultrabasic igneous rock
- (iii) (a) Residual deposit (i) Limestone
 (b) Chemical deposit (ii) Laterite
 (c) Organic deposit (iii) Breccia
 (d) Clastic deposit (iv) Coal
 (A) a - iv, b - iii, c - ii, d - i
 (B) a - i, b - iv, c - iii, d - ii
~~(C)~~ a - ii, b - i, c - iv, d - iii
 (D) a - iii, b - ii, c - i, d - iv
- (iv) Molecule by molecule replacement of organic matter by inorganic matter takes place in ____.
- (a) cast (b) mould
 (c) petrification (d) imprints
- (v) (a) The chemical composition of Bauxite is Fe_2O_3
~~(b)~~ The chemical composition of Bauxite is $\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$
 (c) The chemical composition of Bauxite is CuFeS_2
 (d) The chemical composition of Bauxite is PbS
- (vi) Hardness of mineral diamond is ____
- (a) four ~~(b)~~ six
 (c) eight (d) ten.
- (vii) A fracture along which there is displacement of blocks is called ____.
- (a) fault (b) disconformity.
 (c) fold ~~(d)~~ joint
- (viii) Rocks through which water can be transmitted easily are ____.
- (a) plutonic (b) hypabyssal
 (c) permeable ~~(d)~~ impermeable

- (xi) The funnel shaped depression at the top of volcano is known as _____.
 (a) lake (b) pyroclast
 (c) conduit (d) crater
- (x) An element of image interpretation is called _____.
 (a) association (b) structure
 (c) remote sensing (d) groundwater

Q. 2. Answer the following questions :

[8]

- (i) Give one example of granulose structure.
- (ii) Name any one raw material used in cement industry.
- (iii) Which joint is parallel to bedding plane?
- (iv) Which era is known as age of mammals?
- (v) Which mountain is formed by differential erosion?
- (vi) What is porosity?
- (vii) Give the names of seismic waves.
- (viii) Name the most common source of the illumination of earth.

SECTION-B

Answer the following questions (Any EIGHT) :

[16]

- ✓ Q. 3. What is volcanic mountain?
- Q. 4. What is porphyritic texture?
- ✓ Q. 5. Explain Sill.
- ✓ Q. 6. Write a note on carbonization.
- ✓ Q. 7. Give the economic importance of Gondwana Super Group.
- ✓ Q. 8. Write a note on Dip Joint.
- Q. 9. How is Graben formed?
- ✓ Q. 10. Describe the physical properties of chalcopyrite.
- ✓ Q. 11. Give the chemical composition and physical properties of magnetite.
- Q. 12. What is connate water?
- ✓ Q. 13. Write a short note on shield volcano.
- Q. 14. Write in short account on tone.

0	3	1	2
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SECTION-C

[24]

Answer the following questions (Any EIGHT) :

- ✓ Q. 15. Describe crust of the earth.
- Q. 16. What is vesicular structure?
- Q. 17. Describe cataclastic metamorphism.
- ✓ Q. 18. How are casts and moulds formed?
- Q. 19. What are index fossils? Give the role of index fossils in stratigraphic correlation.
- Q. 20. What is a Joint? Add a note on Strike Joint.
- Q. 21. Describe the parts of a fold.
- Q. 22. Write a note on conservation and management of groundwater.
- Q. 23. Discuss the types of landslides.
- Q. 24. Explain in detail types of remote sensing
- Q. 25. Name the raw materials used in Abrasive industry. Describe the physical properties of any one raw material.
- Q. 26. Write the chemical composition, physical properties and uses of feldspar group.

SECTION-D

Answer the following questions (Any THREE) :

[12]

- Q. 27. Classify sedimentary rocks on the basis of their grain size with examples.
- Q. 28. Describe Vindhyan Supergroup.
- Q. 29. Explain angular unconformity and disconformity.
- Q. 30. Describe manganese ore minerals.
- ✓ Q. 31. What is an aquifer? Add a note on confined aquifer.

