

Roll No.....

Total No. of Sections : 03

Total No. of Printed Pages : 03

Code No. : 02/306(B)

Second Semester Examination, May-2018

M.Sc. GEOLOGY

Paper - III

**METAMORPHIC PETROLOGY**

**Time : 3 Hrs.**

**Max.Marks : 80**

**Note :** Section 'A' consists of 10 very short answer type questions, all of which are compulsory and should be attempted first. Section 'B' consists of four short answer type questions with internal options. Section 'C' consists of four long answer type questions with internal choice.

**Section - 'A'**

**Answer the following very short-answer-type questions in one or two sentences : (2×10=20)**

- Q.1 Define Maculose structure.
- Q.2 Give names of three metamorphic textures.
- Q.3 Which ore mineral is found in rock Khondalite?
- Q.4 Define paired metamorphic belt.
- Q.5 Explain charnockite in one or two lines.
- Q.6 After metamorphism, sedimentary rock shale is converted into which rock?
- Q.7 When we apply pressure and temperature to mineral kyanite then it will convert in to which mineral?
- Q.8 Give names of three metamorphic rocks.
- Q.9 Give the mineralogical composition of the rock which was used for construction of Tajmahal?

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Q.10 What is another name of hypersthene bearing granite?

**OR**

**Section - 'B'**

**Answer the following short-answer-type questions with word limit 200-250 : (5 4=20)**

Q.1 Comment in brief on agents of metamorphism.

**OR**

Explain Gneissose structure.

Q.2 Throw light in brief on 'Eclogite'.

**OR**

Explain in short about 'Migmatite'.

Q.3 Comment on 'Retrograde Metamorphism'.

**OR**

Explain P and T conditions of metamorphism.

Q.4 Comment on paired metamorphic belts with reference to Plate Tectonics.

**OR**

Explain ocean floor metamorphism.

**Section - 'C'**

**Answer the following long-answer-type questions with word limit 400-450 : (10 4=40)**

Q.1 Discuss in detail about 'Metamorphic textures'?

Comment on classification of metamorphic rocks.

Q.2 Explain 'AKF' diagram.

**OR**

Throw light on Gondite rock.

Q.3 Discuss various 'Metamorphic facies' in detail.

**OR**

Throw light on Metasomatism and its types.

Q.4 Comment on anatexis and origin of migmatites.

**OR**

Discuss in detail on 'Regional Metamorphism'.

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