B. Sc. Third Year Science 2020-2021 Paper-III: GEOLOGY OF RAJASTHAN AND GROUNDWATER GEOLOGY

Time: 3 hrs MM 50

UNIT-I

Geomorphologic division of Rajasthan and their characteristics. Geologic Time Scale and its equivalents in Rajasthan. Banded Gneissic Complex, Aravalli and Delhi Supergroups, their distribution, classification, lithology, and igneous intrusives.

UNIT-II

Younger Precambrian formations of Rajasthan. Sirohi Group, Sindhrath Group and Malani Igneous Suite Vindhyan and Marwar Supergroups of Rajasthan, their distribution, classification, lithology, fossil content and economic importance.

UNIT-III

Palaeozoic, Mesozoic, Tertiary and Quaternary geology of Rajasthan, their distribution, classification, lithology, fossil content and economic importance.

UNIT-IV

Source and origin of groundwater. Hydrologic cycle. Hydrological properties of rocks: Types of aquifers, porosity, permeability, transmissibility, storage coefficient, specific yield and specific retention. Water table, and artesian well. Occurrence of ground water in: igneous, metamorphic and sedimentary rocks.

UNIT-V

Ground water prospecting methods, prospecting and Ground water resources in Rajasthan.

Checked and Approved (-sd)

(Dr. Maya Chaudhary)

Checked and Approved (-sd)

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(Dr. Harish Kapasya)

(Mr. Subhash Chandra Janagal)