15P347	(Pages: 2)	Name:
		Reg. No.
THIRD SEMESTER	R M.Sc. DEGREE EXAMIN	NATION, NOVEMBER 2016
	(CUCSS - PG)	

(Applied Geology)

CC15P GEL3 C09 - EXPLORATION GEOLOGY

(2015 Admission)

- I. Short Answer Type Questions. Answer all questions.
- 1. Pneumatic drills.

Time: Three Hours

- 2. Calyx drills.
- 3. Assay value.
- 4. Leakage anomalies.
- 5. Gas survey.
- 6. Bitumen method.
- 7. Free air correction.
- 8. Airborne magnetometers.
- 9. Rayleigh waves.
- 10. Gamma ray logging.
- 11. Gravimeter.
- 12. Core sample.
- 13. Thermal logs.
- 14. Diamond bit.

 $(14 \times 1 = 14 \text{ weightage})$

Maximum: 36 Weightage

- II. Short Essay Type questions. Answer any seven questions.
- 15. Cable tool drilling.
- 16. Sampling methods in mineral exploration.
- 17. Ore reserve estimation.
- 18. Pathfinder elements.

- 19. Geobotanical survey techniques.
- 20. Self potential methods.
- 21. Gravity anomalies.
- 22. Types of seismic survey.
- 23. Seismic instruments and records
- 24. Sonic logging of boreholes.

 $(7 \times 2 = 14 \text{ weightage})$

- III. Long essay type questions. Answer any two questions.
- 25. Describe the principles and methods of geochemical surveys. Add a note on the various types of geochemical anomalies.

OI

- 26. Discuss the principles and methods of electrical resistivity survey. Comment on its application in groundwater exploration.
- 27. Give an account of the magnetic method of geophysical exploration highlighting on its principle, field procedure and interpretations. Add a note on its applications.

Or

28. Discuss the principles, field methods and interpretations of radiometric methods of exploration.

 $(2 \times 4 = 8 \text{ weightage})$
