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**BF—107—2016**

**FACULTY OF SCIENCE**

**B.Sc. (Third Year) (Fifth Semester) EXAMINATION**

**NOVEMBER/DECEMBER, 2016**

**(Old Course)**

**PHYSICS**

**Paper-XIII-B (Phy-303)**

**(Astrophysics)**

**(Friday, 9-12-2016)**

**Time : 10.00 a.m. to 12.00 noon**

*Time—2 Hours*

*Maximum Marks—40*

*N.B. :— (i) All questions are compulsory.*

*(ii) All questions carry equal marks.*

1. Attempt any *four* : 8
  - (a) Define Parsec.
  - (b) What is the sequence for classification of stars ? How is it memorized ?
  - (c) What are different parts of the atmosphere of the sun ?
  - (d) Give the ranges of infrared, visible and ultraviolet radiations in terms of wavelength.
  - (e) Write down names of planets of our solar system.
  - (f) State the number of moons of Earth and Mars. State their names also.
  - (g) Define Blackbody radiation.
2. Attempt any *two* : 8
  - (a) Describe in brief electromagnetic spectrum.
  - (b) Explain structure, composition and atmosphere of mercury.
  - (c) Explain in short about Milky-way Galaxy.
3. Attempt any *two* : 8
  - (a) Describe the process of transmission of radiation through atmosphere.
  - (b) Write a note on luminosity classification of stars.
  - (c) Explain Kepler's laws of planetary motion.

P.T.O.

4. Attempt any *one* :

8

(a) Describe in detail, Milky-way Galaxy.

(b) Explain chromosphere of sun.

5. Write short notes on any *two* :

8

(a) Comets

(b) Cosmological test

(c) H-R diagram

(d) Asteroids.