

## cifutielu's Astronomy Test Answer Key

1. D
2. B
3. A
4. E
5. C
6. F
7. T Tauri variable
8. Mira variable
9. RR Lyrae variable
10. S Doradus variable
11. RR Lyrae variable
12. RR Lyrae variable, Cepheid variable, & Mira variable
13. Mira variable
14. Cepheid variable
15. 1RXS J160929.1-210524
16. T Tauri variable
17. Approximately 145 parsecs
18. 5 million years
19. Planet
20. 1RXS J160929.1-210524 b
21. 330 AU,  $3.07 \times 10^{10}$  miles
22. 4060 Kelvin, +300, -200
23. Infrared
24. SN 1604
25. Johannes Kepler
26. -2.5
27. 3 weeks
28. G4.5+6.8
29. Milky Way
30. 20,000 Light Years
31. 18 months
32. Mercury, Mars, Jupiter, Saturn, Uranus, Neptune
33. Stellar explosion (Supernova)
34. Chandrasekhar limit
35. X-ray
36. S Doradus
37. NGC 1910
38. Large Magellanic Cloud
39. S Doradus Variable or Luminous Blue Variable
40. Hypergiant
41. -9.9

42. True
43. 20,000 K
44. 8,000 K
45. B
46. False
47. Not visible because it is so far away.
48. RS Puppis
49. Cepheid variable
50. 6500
51. Yes, because it was calculated from geometric analysis of light echoes from particles in the surrounding nebula.
52. 10
53. Serves as a "distance candle" due to the accuracy of the measurement of its distance from Earth
54. 5 weeks or 41.4 days
55. Optical
56. P Cygni
57. S Doradus variable or Luminous Blue variable (either one is accepted)
58. S Doradus
59. False
60. 4.8
61. An example: It has been proposed P Cygni's eruptions could be caused by mass transfer to a hypothetical companion star of spectral type B that would have a mass between 3 and 6 times the mass of our Sun and would orbit P Cygni each 7 years in a high eccentricity orbit.
62. Infrared
63. SN 2014J
64. Type 1a Supernova
65. M82
66. B
67. F
68. A
69. E
70. D
71. C
72. 69.2
73. 6.38
74. 6.21
75. 11.2
76. 7.11
77. 1.84