ASTR 1030 - FALL 2017 - EXAM #7 - WALLIN

VERSION 1

Instructions (Read carefully):

1. ABSOLUTELY NO TALKING OR PHONE USE!
2. **Do not open the exam until you are directed to do so by your instructor!**
3. Write your name, M#, and your clicker Device ID on the cover sheet below.
4. Read and sign the Honor Code Certification below.
5. Use your M# for your ID on the clicker.
6. This is test version 1
7. Read the questions carefully.
8. Mark all your answers on the paper exam and THEN enter them in your clicker after you have completed the exam with a pen/pencil.
9. When you have completed the exam, turn in the exam to the LA at the front of the room and have your picture ID ready for inspection.
10. GOOD LUCK!!!

- Print your name :
- M # :
- Clicker Device ID :

Honor Code Certification

I certify that I have abided by the MTSU honor code in taking this examination. The work on this exam is my own. I have received no assistance from other persons in completing this exam.

Signature:

SECTION = 0

1. Altitude and azimuth measure:

   (a) Positions on Earth
   (b) Positions in the sky as seen locally
   (c) Positions in the sky which are the same for all observers

   SECTIONNUMBER=0

2. A star's declination is:

   (a) The angle compass heading of a star measured by an observer.
   (b) The angle between the star and the horizon of the observer.
   (c) The distance it is above the Earth's surface.
   (d) The distance between the star and the Sun.
   (e) The angle bewteen the star and the Celestial equator.

   SECTIONNUMBER=0

3. For this question, assume that **Figure 3** shows the position of the Sun in **Murfreesboro** about an hour before Sunset. Which letter is closest to where the Sun will be in one hour?

   (a) Position A (c) Position C (e) Position E
   (b) Position B (d) Position D

   SECTIONNUMBER=0

4. Altitude and azimuth measure:

   (a) Position of objects in the sky measured from the perspective of a particular observer.
   (b) Position on Earth.
   (c) Positions of objects in the sky which are the same for all observers.
   (d) Positions on the Moon.

   SECTIONNUMBER=0

5. Latitude and longitude measure:

   (a) Positions on Earth
   (b) Positions in the sky as seen locally
   (c) Positions in the sky which are the same for all observers

   SECTIONNUMBER=0

6. The stars in a constellation are physically close to one another.

   (a) True (b) False

   SECTIONNUMBER=0

7. Constellations are close clusters of stars, all at about the same distance from the Sun.

   (a) True (b) False

   SECTIONNUMBER=0

8. In **Figure 1** at the back of the test, which letter is closest to the constellation of Cassiopeia?

   (a) A (c) C (e) E
   (b) B (d) D

   SECTIONNUMBER=2

9. Where will the Sun be in two hours?
   (a) A.
   (b) B
   (c) C
   (d) D
   (e) E

SECTIONNUMBER=0

10. How many constellations cover surface of the Celestial Sphere?
    (a) 45
    (b) 88
    (c) 120
    (d) No one knows.

SECTIONNUMBER=0

11. In figure 1 at the back of the test, which letter is closest to the constellation of Cepheus?
    (a) A
    (b) B
    (c) C
    (d) D
    (e) E

SECTIONNUMBER=0

12. Right ascension and declination measure:

    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers

SECTIONNUMBER=0

13. In **Figure 1** at the back of the test, which letter is closest to the constellation of Cassiopeia?
    (a) A
    (b) B
    (c) C
    (d) D
    (e) E

SECTIONNUMBER=0

14. Right ascension and declination measure:

    (a) Positions on the Moon.
    (b) Position of objects in the sky measured from the perspective of a particular observer.
    (c) Positions of objects in the sky which are the same for all observers.
    (d) Position on Earth.

SECTIONNUMBER=0

15. A star's azimuth is:

    (a) The distance it is above the Earth's surface.
    (b) The distance between the star and the Sun.
    (c) The angle bewteen the star and the Celestial equator.
    (d) The angle between the star and the horizon of the observer.
    (e) The angle compass heading of a star measured by an observer.

SECTIONNUMBER=0

16. From the horizon to the observer's zenith is an angle of...
    (a) Azimuth
    (b) Right Ascension
    (c) Latitude
    (d) Declination
    (e) Altitude

SECTIONNUMBER=0

17. A star's altitude is:

    (a) The angle between the star and the horizon of the observer.
    (b) The angle compass heading of a star measured by an observer.
    (c) The distance between the star and the Sun.
    (d) The distance it is above the Earth's surface.
    (e) The angle between the star and the Celestial equator.

SECTIONNUMBER=0

18. In **Figure 1** at the back of the test, which letter is closest to the constellation of Draco?

    (a) A (c) C (e) E
    (b) B (d) D

SECTIONNUMBER=1

19. The closest terrestrial analog to hours of right ascension is angle of longitude.

    (a) True (b) False

SECTIONNUMBER=0

20. The celestial sphere is divided into 88 modern constellations.

    (a) True (b) False

SECTIONNUMBER=0

SECTION = 1

21. Altitude and azimuth measure:

    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers

SECTIONNUMBER=0

22. A star's declination is:

    (a) The angle compass heading of a star measured by an observer.
    (b) The angle between the star and the horizon of the observer.
    (c) The distance it is above the Earth's surface.
    (d) The distance between the star and the Sun.
    (e) The angle bewteen the star and the Celestial equator.

SECTIONNUMBER=0

23. For this question, assume that **Figure 3** shows the position of the Sun in **Murfreesboro** about an hour before Sunset. Which letter is closest to where the Sun will be in one hour?

    (a) Position A (c) Position C (e) Position E
    (b) Position B (d) Position D

SECTIONNUMBER=0

24. Altitude and azimuth measure:

    (a) Position of objects in the sky measured from the perspective of a particular observer.
    (b) Position on Earth.
    (c) Positions of objects in the sky which are the same for all observers.
    (d) Positions on the Moon.

SECTIONNUMBER=0

25. Latitude and longitude measure:

    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers

SECTIONNUMBER=0

26. The stars in a constellation are physically close to one another.

    (a) True (b) False

SECTIONNUMBER=0

27. Constellations are close clusters of stars, all at about the same distance from the Sun.

    (a) True (b) False

SECTIONNUMBER=0

28. In **Figure 1** at the back of the test, which letter is closest to the constellation of Cassiopeia?

    (a) A (c) C (e) E
    (b) B (d) D

SECTIONNUMBER=2

29. Where will the Sun be in two hours?
    (a) A.
    (b) B
    (c) C
    (d) D
    (e) E
SECTIONNUMBER=0

30. How many constellations cover surface of the Celestial Sphere?
    (a) 45
    (b) 88
    (c) 120
    (d) No one knows.
SECTIONNUMBER=0

31. In figure 1 at the back of the test, which letter is closest to the constellation of Cepheus?
    (a) A
    (b) B
    (c) C
    (d) D
    (e) E
SECTIONNUMBER=0

32. Right ascension and declination measure:
    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers
SECTIONNUMBER=0

33. In **Figure 1** at the back of the test, which letter is closest to the constellation of Cassiopeia?
    (a) A
    (b) B
    (c) C
    (d) D
    (e) E
SECTIONNUMBER=0

34. Right ascension and declination measure:
    (a) Positions on the Moon.
    (b) Position of objects in the sky measured from the perspective of a particular observer.
    (c) Positions of objects in the sky which are the same for all observers.
    (d) Position on Earth.
SECTIONNUMBER=0

35. A star's azimuth is:
    (a) The distance it is above the Earth's surface.
    (b) The distance between the star and the Sun.
    (c) The angle bewteen the star and the Celestial equator.
    (d) The angle between the star and the horizon of the observer.
    (e) The angle compass heading of a star measured by an observer.
SECTIONNUMBER=0

36. From the horizon to the observer's zenith is an angle of...
    (a) Azimuth
    (b) Right Ascension
    (c) Latitude
    (d) Declination
    (e) Altitude
SECTIONNUMBER=0

37. A star's altitude is:

    (a) The angle between the star and the horizon of the observer.
    (b) The angle compass heading of a star measured by an observer.
    (c) The distance between the star and the Sun.
    (d) The distance it is above the Earth's surface.
    (e) The angle between the star and the Celestial equator.

SECTIONNUMBER=0

38. In **Figure 1** at the back of the test, which letter is closest to the constellation of Draco?

    (a) A (c) C (e) E
    (b) B (d) D

SECTIONNUMBER=1

39. The closest terrestrial analog to hours of right ascension is angle of longitude.

    (a) True (b) False

SECTIONNUMBER=0

40. The celestial sphere is divided into 88 modern constellations.

    (a) True (b) False

SECTIONNUMBER=0

SECTION = 2

41. Altitude and azimuth measure:

    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers

SECTIONNUMBER=0

42. A star's declination is:

    (a) The angle compass heading of a star measured by an observer.
    (b) The angle between the star and the horizon of the observer.
    (c) The distance it is above the Earth's surface.
    (d) The distance between the star and the Sun.
    (e) The angle bewteen the star and the Celestial equator.

SECTIONNUMBER=0

43. For this question, assume that **Figure 3** shows the position of the Sun in **Murfreesboro** about an hour before Sunset. Which letter is closest to where the Sun will be in one hour?

    (a) Position A (c) Position C (e) Position E
    (b) Position B (d) Position D

SECTIONNUMBER=0

44. Altitude and azimuth measure:

    (a) Position of objects in the sky measured from the perspective of a particular observer.
    (b) Position on Earth.
    (c) Positions of objects in the sky which are the same for all observers.
    (d) Positions on the Moon.

SECTIONNUMBER=0

45. Latitude and longitude measure:

    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers

SECTIONNUMBER=0

46. The stars in a constellation are physically close to one another.

    (a) True (b) False

SECTIONNUMBER=0

47. Constellations are close clusters of stars, all at about the same distance from the Sun.

    (a) True (b) False

SECTIONNUMBER=0

48. In **Figure 1** at the back of the test, which letter is closest to the constellation of Cassiopeia?

    (a) A (c) C (e) E
    (b) B (d) D

SECTIONNUMBER=2

49. Where will the Sun be in two hours?
    (a) A.
    (b) B
    (c) C
    (d) D
    (e) E
SECTIONNUMBER=0

50. How many constellations cover surface of the Celestial Sphere?
    (a) 45
    (b) 88
    (c) 120
    (d) No one knows.
SECTIONNUMBER=0

51. In figure 1 at the back of the test, which letter is closest to the constellation of Cepheus?
    (a) A
    (b) B
    (c) C
    (d) D
    (e) E
SECTIONNUMBER=0

52. Right ascension and declination measure:
    (a) Positions on Earth
    (b) Positions in the sky as seen locally
    (c) Positions in the sky which are the same for all observers
SECTIONNUMBER=0

53. In **Figure 1** at the back of the test, which letter is closest to the constellation of Cassiopeia?
    (a) A
    (b) B
    (c) C
    (d) D
    (e) E
SECTIONNUMBER=0

54. Right ascension and declination measure:
    (a) Positions on the Moon.
    (b) Position of objects in the sky measured from the perspective of a particular observer.
    (c) Positions of objects in the sky which are the same for all observers.
    (d) Position on Earth.
SECTIONNUMBER=0

55. A star's azimuth is:
    (a) The distance it is above the Earth's surface.
    (b) The distance between the star and the Sun.
    (c) The angle bewteen the star and the Celestial equator.
    (d) The angle between the star and the horizon of the observer.
    (e) The angle compass heading of a star measured by an observer.
SECTIONNUMBER=0

56. From the horizon to the observer's zenith is an angle of...
    (a) Azimuth
    (b) Right Ascension
    (c) Latitude
    (d) Declination
    (e) Altitude
SECTIONNUMBER=0

57. A star's altitude is:

    (a) The angle between the star and the horizon of the observer.
    (b) The angle compass heading of a star measured by an observer.
    (c) The distance between the star and the Sun.
    (d) The distance it is above the Earth's surface.
    (e) The angle between the star and the Celestial equator.

    SECTIONNUMBER=0

58. In **Figure 1** at the back of the test, which letter is closest to the constellation of Draco?

    (a) A (c) C (e) E
    (b) B (d) D

    SECTIONNUMBER=1

59. The closest terrestrial analog to hours of right ascension is angle of longitude.

    (a) True (b) False

    SECTIONNUMBER=0

60. The celestial sphere is divided into 88 modern constellations.

    (a) True (b) False

    SECTIONNUMBER=0

1. B	5. A	9. E	13. E	17. A
2. E	6. B	10. B	14. C	18. B
3. E	7. B	11. E	15. E	19. A
4. A	8. E	12. C	16. C	20. A

1. 13, B	5. 12, A	9. 15, E	13. 1, E	17. 16, A
2. 18, E	6. 8, B	10. 6, B	14. 4, C	18. 19, B
3. 5, E	7. 11, B	11. 2, E	15. 17, E	19. 7, A
4. 3, A	8. 20, E	12. 14, C	16. 9, C	20. 10, A