**MIDWAY BOYS & JUJA GIRLS SCHOOLS**

**R.A.T TERM II 2017**

**FORM TWO PHYSICS**

**REFLECTION AT CURVED SURFACES**

***Answer all questions***

1. State the difference between:
2. Concave reflector and concave mirror. (2mks)
3. Concave mirror and convex mirror. (2mks)
4. Define the following terms associated with spherical mirrors:
5. Aperture (1mk)
6. Pole (1mk)
7. Principal axis (1mk)
8. Radius of curvature (1mk)
9. Centre of curvature (1mk)
10. Define the principal focus for:
11. Concave mirror (1mk)
12. Convex mirror (1mk)
13. Distinguish focal length from focal plane. (2mks)
14. The radius of curvature of a certain concave mirror is 34 cm. What is the focal length of the mirror? (2mks)
15. State the principle of reversibility of light. (1mk)
16. A girl is standing 90cm in front of a large concave mirror of focal length 120cm. State ***three*** characteristics of her image formed by the mirror. (3mks)
17. State ***two*** differences between a real image and a virtual image. (2mks)
18. An object is placed 12cm from a concave mirror of radius of curvature 15cm.Calculate:
19. The position of the image. (3mks)
20. The magnification. (2mks)
21. An object is placed 12cm from a convex mirror of focal length 7.5cm. Calculate:
22. The position of the image. (3mks)
23. State the nature of the image. (1mk)
24. The magnification (2mks)
25. An object is placed 10cm in front of a concave mirror and an image of magnification 2 is formed. Calculate the focal length of the mirror. (3mks)
26. A concave mirror has a radius of curvature of 20cm. A small pin is placed on the principal axis 15cm from the pole. By scale drawing, determine:
27. The position of the image. (3mks)
28. The magnification of the image. (2mks)
29. The nature of the image. (1mk)
30. Which type of spherical mirror is used by dentists to examine teeth? (1mk)
31. It is common practice to use convex mirrors as driving mirrors.
32. Suggest ***two*** reasons why convex mirrors are suitable for this use. (2mks)
33. What is the main shortcoming of using convex mirrors as driving mirrors.(1mk)
34. State the main defect of spherical mirrors. (1mk)
35. Explain how the defect in (15) above is usually overcome. (1mks)
36. When concave mirrors are used in telescopes, the heavenly bodies being viewed are usually at infinity relative to the mirror. State any ***three*** expected characteristics of the image of a star formed by a telescope. (3mks)
37. Why are concave mirrors not used in searchlights or in headlamps of cars? (1mk)