Blueprint Reading & GD&T; Quiz – TITAN-509LM

1. What is the material specified for this part?

2. What are the units used for dimensions on this drawing?

3. What is the general tolerance for dimensions with one decimal place (X.XXX)?

4. What is the surface finish requirement noted on the drawing?

5. According to the title block, what is the drawing scale?

6. Who is listed as the drafter of this print, and when was it drawn?

7. What note specifies how to handle burrs and edges on the part?

8. What is the fillet radius maximum allowed unless otherwise specified?

9. What material condition (if any) is applied to the geometric tolerances shown?

10. What type of thread is used in the tapped holes (size and class)?

11. What is the diameter tolerance for the .375 holes in Detail B?

12. What is the depth requirement for the 10-32 UNF threaded holes?

13. In Section A-A, what is the dimension and tolerance of the .250-inch feature?

14. What does the symbol R.025 ± .005 indicate about edge treatment?

15. What is the positional tolerance applied to features relative to datums A, B, and C?

16. How many total R.300 radii are shown on the print, and where are they located?

17. In Detail A, what is the true position tolerance and what datums control it?

18. Which GD&T; datum reference frame establishes the primary, secondary, and tertiary datums for this part?

19. A feature is called out with .005 M A B — explain what each part of this feature control frame means.

20. The callout .010 A B C is seen in Section N-N. Explain what the geometric control represents and what tolerance zone it defines in 3D space.