## Similar Figures

| Sr | Questions | Answers Choice |
|---|---|---|
| 1 | The parallelogram has an area of 64 cm2 and a similar parallelogram has an area of 144 cm2. If a side of the smaller parallelogram is 8 cm, what is the corresponding side of the larger parallelogram? | A. 10 cm<br>B. 12 cm<br>C. 18 cm<br>D. 16 cm |
| 2 | In similar figures corresponding angles are congruent and corresponding sides are | A. Congruent<br>B. Parallel<br>C. Perpendicular<br>D. Proportional |
| 3 | If radii of two circles are in the ratio 2:3 then their surface areas are in the ratio. | A. 2:3<br>B. 4:9<br>C. 8:18<br>D. 8:27 |
| 4 | Two spheres are similar, and their radii are in the ratio 4:5. If the surface area of the larger sphere is 500 | A. <br><p class="MsoNormal"><!--[endif]--><span style="font-size:24.0pt; mso-bidi-font-size:11.0pt;line-height:107%"><o:p></o:p></span></p> |
| 5 | In a regular hexagon, the ratio of the length of a diagonal to the side length is. | A. 2:1<br>B. 3:2<br>C. 2:3<br>D. 4:1 |
| 6 | If two polygons are similar, then | A. Their correspoding angles are equal<br>B. Their areas are equal<br>C. Their volumes are equal<br>D. Their corresponding sides are equal |
| 7 | A regular polygon has an exterrior angle of 30 $^{o}$. How many diagonals does the polygon have? | A. 54<br>B. 90<br>C. 72<br>D. 108 |
| 8 | The total number of diagonals in a polygon i with 9 sides is | A. 18<br>B. 21<br>C. 25<br>D. 27 |
| 9 | If two Spheres have volumes in th ratio 8:27 then their corresponding lengths are in the ratio. | A. 2:3<br>B. 4:9<br>C. 8:18<br>D. 8:27 |
| 10 | A regular polygon has an interior angle of 165 $^{o}$. How many sides does it have? | A. 15<br>B. 16<br>C. 20<br>D. 24 |
| 11 | The each interior and exterior angle of which regular polygon is equal | A. Square<br>B. Pentagon<br>C. Hexagon<br>D. Heptagon |
| 12 | The each interior angle of regular pentagon is. | A. 20 $^{o}$<br>B. 108 $^{o}$<br>C. 36 $^{o}$<br>D. 72 $^{o}$ |
| 13 | The ratio of the areas of two similar polygons is | A. Equal to the ratio of their permeters<br>B. Equal to the square of the ratio fo their corresponding sides<br>C. Equal to the cube of the ratio of their corresponding side<br>D. Equal to the sum of their corresponding sides |
| | | A. <p class="MsoNormal"><span style="font-size:28.0pt;mso-bidi-font-size:16.0pt; line-height:107%;mso- |

| # | Question | Options |
|---|----------|---------|
| 14 | Whch of the following is the symbol of similarity. | B. = <br> C. ≡ <br> D. ≈ |
| 15 | Which of the followign is scale factor of area. | A. K <br> B. $K^2$ <br> C. 2K <br> D. $K^3$ |
| 16 | The each interior angle of which regular polygon is 108 $^o$ | A. Square <br> B. Pentagon <br> C. Hexagon <br> D. Heptagon |
| 17 | If the volume of two similar solids is 125 cm3 nd 27 cm 3, the ratio of their correspoding heights is. | A. 3:5 <br> B. 5:3 <br> C. 25:9 <br> D. 9:25 |
| 18 | Ratio has | A. Fixed <br> B. No symbol <br> C. No unit <br> D. No importance |
| 19 | The repeating pattern of regular shapes is called. | A. Tessellation <br> B. Oscillation <br> C. Rotation <br> D. Citation |
| 20 | The interior and exterior angles of regular hexagon are in the ratio. | A. 1:2 <br> B. 2:1 <br> C. 1:6 <br> D. 2:3 |

Raw markup present in question 14 options:

B. =

C. `<span style="font-size:22.0pt;mso-bidi-font-size:11.0pt; line-height:107%;font-family:&quot;Calibri&quot;,sans-serif;mso-ascii-theme-font:minor-latin; mso-fareast-font-family:Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font: minor-latin;mso-bidi-theme-font:minor-latin;mso-ansi-language:EN-US;mso-fareast-language: EN-US;mso-bidi-language:AR-SA">≡</span>`

D. `<p class="MsoNormal"><span style="font-size:26.0pt;mso-bidi-font-size:11.0pt; line-height:107%;mso-bidi-font-family:Calibri;mso-bidi-theme-font:minor-latin">≈</span><span style="font-size:26.0pt;mso-bidi-font-size:11.0pt;line-height:107%"><o:p></o:p></span></p>`

(top fragment) `bidi-font-family:Calibri;mso-bidi-theme-font:minor-latin">~</span><span style="font-size:28.0pt;mso-bidi-font-size:16.0pt;line-height:107%"><o:p></o:p></span></p>`