Class: VII
Date: 3/9/2019

Max. Marks: 80
Time: 3hrs

## General Instructions:

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(i) All questions are compulsory
(ii) Calculations should be shown in a working column on the right hand side.
(iii) Section A : Questions 1-20carry 1 mark each

Section B : Questions 21-26 carry 2 mark each
Section C : Questions 27-34carry 3 mark each
Section D : Questions 35-40 carry 4 mark each

|  | Section A |  |
| :---: | :---: | :---: |
|  | CHOOSE THE CORRECT ANSWER FROM THE FOLLOWING: |  |
| 1 | Which of the following is the exponential form of 625 ? <br> a) $5^{3}$ <br> b) $5^{4}$ <br> c) $3^{5}$ <br> d) $5^{5}$ | 1 |
| 2 | How many vertices are there in a cube? <br> a) 6 <br> b) 8 <br> c) 12 <br> d) 4 | 1 |
| 3 | If the side of a square is $(a+6)$ units, its perimeter is , <br> a) 4aunits <br> b) $(4 a+24)$ units <br> c) $(a+4)+4$ units <br> d)64 units | 1 |
| 4 | Which of the following is the simplest form of $\left\{(3)^{6} \div(3)^{3}\right\} \times 3^{0}$ <br> a) 27 <br> b)-27 <br> c) 9 <br> d) 0 | 1 |
| 5 | $\left\{\left(\frac{3}{8}\right)^{4}\right\}^{-2}$ is: <br> a) $\left(\frac{3}{8}\right)^{8}$ <br> b) $\left(\frac{3}{8}\right)^{-8}$ <br> c) $\left(\frac{3}{8}\right)^{2}$ <br> d) $\left(\frac{8}{3}\right)^{-8}$ | 1 |
| 6 | Which of the following is the value of $0.1 \times 13.5$ <br> a) 135 <br> b) 13.5 <br> c) 0.135 <br> d) 1.35 | 1 |
| 7 | Identify the pair of supplementary angles: <br> a) $114^{0}, 36^{0}$ <br> b) $120^{0}, 50^{0}$ <br> c) $97^{0}, 93^{0}$ <br> d) $120^{\circ}, 60^{0}$ | 1 |
| 8 | The value of $\frac{3}{8}$ of 120 is: <br> a) 15 <br> b) 360 <br> c) 45 <br> d) 960 | 1 |
| 9 | If $\square \mathrm{x} \frac{2}{11}=0$, then $\boldsymbol{\square}$ is: <br> a) $\frac{2}{11}$ <br> b) 0 <br> c) 1 <br> d) $\frac{11}{2}$ | 1 |
| 10 | In a class of 50 students, $\frac{3}{5}$ of the total numbers of students are girls'. How many students of the class are boys? <br> a) 30 <br> b) 20 <br> c) 16 <br> d) 15 | 1 |
|  | FILL IN THE BLANKS: |  |


| 11 | The standard form of 12700 is....... | 1 |
| :---: | :---: | :---: |
| 12 | The additive inverse of -27 is .... | 1 |
| 13 | The coefficient of x in $3 \mathrm{x}^{3}-4 \mathrm{x}^{2}+7 \mathrm{x}-8$ is..... | 1 |
| 14 | The supplementary angle of $84^{0}$ is $\ldots . .$. | 1 |
| 15 | The equivalent fraction of $\frac{3}{4}$ with numerator 18 is.... | 1 |
|  | IDENTIFY THE FOLLOWING STATEMENT AS TRUE OR FALSE |  |
| 16 | The product of a positive integer and a negative integer is negative. | 1 |
| 17 | The value of (-1) ${ }^{100} \times(-1)^{200}$ is 20000 . | 1 |
| 18 | The perimeter of a rectangle of length $\frac{3}{4} \mathrm{~m}$ and breadth $\frac{1}{4} \mathrm{~m}$ is 1 m . | 1 |
| 19 | Linear pair angles are supplementary | 1 |
| 20 | If $x=2$ the value of $3 x-2$ is 0 | 1 |
|  | Section B |  |
| 21 | Find a) $2.7 \div 100$ <br> b) $26.3 \div 1000$ | 2 |
| 22 | In the following figure, is $<1$ adjacent to $<2$ ? Give reasons? | 2 |
| 23 | Find the product of $-32 \times-11 \times-100$ | 2 |
| 24 | Using the laws of exponents simplify and write the answer in exponential form $5^{2} \times 5^{4} \times 5^{8}$ | 2 |
| 25 | Add $3 a^{2}-4 a+10$ and $-3 a^{2}-5$ | 2 |
| 26 | Draw the nets of the following solids. <br> a) $\square$ b) | 2 |
|  | Section - C |  |
| 27 | Find the product using suitable properties. $625 \times(-99)+(-625)$ | 3 |
| 28 | Evaluate each of the following. <br> a) $(-31) \div\lfloor(-30)+(-1)\rfloor$ <br> b) $13 \div(-2+1)$ <br> c) $(-6+5) \div(-2+1)$ | 3 |
| 29 | Find <br> a) $36 \div \frac{3}{4}$ <br> b) $\frac{4}{5} \div 1 \frac{1}{2}$ | 3 |
| 30 | Which is greater? $\frac{2}{7}$ of $\frac{3}{4}$ or $\frac{3}{5}$ of $\frac{5}{8}$ | 3 |


| 31 | State the property that is used in each of the following statements? <br> i) If a $\\| \mathrm{b}$,then $<1=<5$ <br> ii) If $<4=<6$,then a\\|b <br> iii) If $<4+<5180^{\circ}$, then a\\| b | 3 |
| :---: | :---: | :---: |
| 32 | In the given figure below, decide whether $\mathbf{I}$ is parallel to $\mathbf{m}$. | 3 |
| 33 | Classify into monomials,binomials and trinomials. <br> a) $-y-37$ <br> b) $100 x$ <br> c) $1+x+x^{2}$ | 3 |
| 34 | Subtract $6 a b^{2}-13 b-18 a$ from $-4 a b^{2}+2 b+4 a$ | 3 |
|  | Section - D |  |
| 35 | In a class test containing 15 questions, 4 marks are given for every correct answer and ( -2 ) marks are given for every incorrect answer. i) Jiya attempts all questions but only 9 of her answers are correct. What is her total score? ii) One of her friends gets only 5 answers correct. What will be her total score? | 4 |
| 36 | Each side of a regular polygon is 2.5 cm in length. The perimeter of the polygon is 12.5 cm .How many sides does the polygon have? | 4 |
| 37 | In the adjoining figure, pllq .Find the unknown angles. | 4 |
| 38 | From the sum of $5+4 x$ and $7-2 x-2 x^{2}$, subtract the sum of $-3 x^{2}-7 x$ and $-x^{2}+6 x+10$ | 4 |


| 39 | Find the value of the following expressions for $\mathrm{a}=-3, \mathrm{~b}=-2$ <br> i) $2 \mathrm{a}+\mathrm{b}$ <br> ii) $7 \mathrm{a}-2 \mathrm{~b}$ <br> iii) $\mathrm{a}^{3}-\mathrm{b}^{3}$ | 4 |
| :--- | :--- | :--- |
| 40 | Simplify <br> $25 \times 5^{2} \mathrm{xt}^{8}$ | 4 |
| $10^{3} \mathrm{xt}^{4}$ |  |  |

