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﴿پہلا گروپ﴾

نوٹ: حصہ اول لازمی ہے۔ حصہ دوم میں سے کوئی سے تین (3) سوالوں کے جوابات لکھئے۔

(حصہ اول)

(6 x 2 = 12)

2- کوئی سے چھ سوالات کے مختصر جوابات تحریر کیجئے:

- مسامی سیٹ کی تعریف کیجئے۔
- مثالی ربط کی تعریف کیجئے۔
- x کی قیمت معلوم کیجئے جبکہ $(x - 1, y + 2) = (2x + 4, -4)$
- عکسش سے کیا مراد ہے؟
- $(\sqrt{2} + \sqrt{7})$ کا مختصر کیجئے۔
- کیا سیٹ $\{0, -1\}$ خاصیت بندش بلحاظ جمع اور ضرب رکھتا ہے؟
- 0.224 کو سائنسی ترتیب میں لکھئے۔
- خاصیت کی تعریف کیجئے اور مثال دیجئے۔
- اگر $\log_x 81 = 2$ ہو تو x کی قیمت معلوم کیجئے۔

(6 x 2 = 12)

3- کوئی سے چھ سوالات کے مختصر جوابات تحریر کیجئے:

- $y^2 + \frac{1}{4}$ کو مکمل مربع بنانے کیلئے کیا جمع یا تفریق کیا جائے؟
- $x^2 + y^2$ کی قیمت معلوم کیجئے جبکہ $x - y = 8, xy = -15$
- ترتیب صعودی سے کیا مراد ہے؟
- تجزی سے کیا مراد ہے؟
- $1 - x^6$ کی تجزی کیجئے۔
- $\frac{1}{x^2y^4} + x^2y^4 - 2$ کا جذر الرقع معلوم کیجئے۔
- $x^2 - 16, x^3 + 64$ کا عاوا عظم معلوم کیجئے۔
- x^2, xy, x^2y^2 کا ذواضعا ق اقل معلوم کیجئے۔
- $\frac{a+b}{a^2+ab+b^2} + \frac{1}{a-b} - \frac{ab}{a^3-b^3}$ کو مختصر کیجئے۔

(6 x 2 = 12)

4- کوئی سے چھ سوالات کے مختصر جوابات تحریر کیجئے:

- وتری قائب کی تعریف کیجئے۔
- x کی قیمت معلوم کیجئے جبکہ $x + \begin{bmatrix} 3 \\ 4 \end{bmatrix} = \begin{bmatrix} -4 \\ 3 \end{bmatrix}$
- $\begin{bmatrix} 1 & 5 \\ 3 & p \end{bmatrix} \begin{bmatrix} q \\ 7 \end{bmatrix} = \begin{bmatrix} 35 \\ 10 \end{bmatrix}$ سے p اور q کی قیمتیں معلوم کیجئے۔
- تعارف کی تعریف کیجئے۔
- مربع اور متین کا فرق شکل بنا کر واضح کیجئے۔
- متناظرہ زاویوں کی تعریف کیجئے۔
- شلت بنا ئے جس کے اضلاع کی لمبائیاں 3.5 سم، 4.1 سم اور 4.4 سم ہوں۔
- عمودی تا صاف کی تعریف کیجئے۔
- شلت کے ارتفاع کی تعریف کیجئے۔

(حصہ دوم)

(ہر سوال کے 8 نمبر ہیں اور ہر جزو کے 4 نمبر ہیں)

5- اگر $A = \{a, b, c\}, B = \{b, d, f\}, C = \{a, f, e\}$ تو ثابت کیجئے کہ
 $(A \cap B) \cup (A \cap C) = A \cap (B \cup C)$

ب) $x^2 + \frac{1}{x^2}$ کی قیمت معلوم کیجئے اگر $x = \sqrt{2} - 1$

6- لوگار تھم کی عدد سے $\frac{(8.97)^2 \times (1.059)^3}{57.7}$ کی قیمت معلوم کیجئے۔

ب) $x^2 + \frac{1}{x^2} = 2$ کی قیمت معلوم کیجئے جبکہ $x + \frac{1}{x}$

7- $64a^2 - 343b^3 - 4a + 7b$ کی تجزی کیجئے۔

ب) $4x^3 - 3x^2 - 24x - 9$ اور $8x^3 - 2x^2 - 53x - 39$ کا عاوا عظم پڑائیے

8- قائبوں کی عدد سے کل سیٹ معلوم کیجئے۔

ب) $2x - 5y = 1$; $3x + 4y = 36$ شلت کے اضلاع کے عمودی تا صاف کیجئے جس میں

9- ثابت کیجئے کہ اگر کسی شلت کے دو اضلاع باہم متماثل ہوں تو ان اضلاع کے مخالف زاوے بھی متماثل ہوتے ہیں۔

Matric Maths Paper 2012

**Martin Carlsen, Ingvald Erfjord, Per
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