Teacher Name: Ambreen Badar Class: 9 Subject: Mathematics Date: 14th September 2018

Topic: Paper – 1

Q1: a) Evaluate

b) Evaluate

Q2: By writing each number correct to one significant figure, estimate the value of .

Q3: y inversely proportional to to the square of x. Given that y = 24 when x = 2, Find y when x = 8.

Q4: a) Write 0.00000521 in the standard form.

b) Giving your answer in standard form, evaluate ( 6 102) ( 5 10-3).

Q5: a) Factorise completely p2q – pq.

b) Factorise 5x2 + x – 4.

c) Hence solve 5x2 + x – 4 = 0.

Q6: a) If c = , Find c when a = 3 and b = 4.

b) Rearrange the formula to make b the subject .

Q7: a) Evaluate :

1. 20 + 23.

b) Simplify: (4x2)-2

Q8: The table shows information about some flights from Dubai to Mumbai.

|  |  |  |  |
| --- | --- | --- | --- |
| DepartsDubai  (local time) | 03 30 | 16 10 | 21 55 |
| Arrives Mumbai  (local time) | 08 10 |  | 02 30 |
| Flight Duration | 3 hours 10 minutes | 2 hours 55 minutes | 3 hours 5 minutes |

1. Work out the time difference between Dubai and Mumbai.
2. Work out the local time in Mumbai when the 16 10 flight arrives.

Q9: Solve the simultaneous equations: 6x + y = 1.

4x – y = 4

Q10: Some money is shared between Ali, Ben and Carl in the ratio 5 : 3 : 2. Ben receives $60. How

Much money is shared?