Date:19.07.16

SELECTION TO THE POST OF JUNIOR ENGINEER/WORKS

Max.Marks:100   Time:3 hrs

Part:A   5 x 2=10

I. Answer the following questions:

1.Who is the President of India?   M

2.Which is the capital of Orissa?

3.Who is the Chief Minister of Karnataka?

4.Who is the Union Minister of Railways?

5.Which is the largest country producing Mica?

II. Expand any 5 of the following: 5 x 2=10

1. FRP

2. DPC

3. IWC

4. PVC

5. WHO

6. DAR

7.ETP

III. Choose the correct answer for any five of the following :   5 x 2=10

1.One Kilometer is equal to

a). 1000meters ✓

b). 10,000meters

c). 1000mm

d). 1646meters

2.The South central Railway Headquarter is situated at

a).Chennai

b).Secunderabad ✓

c).Hubli

d).Bangalore

3. Number of bricks required for one m³ of brick masonry is

a).1000

b).500 ✓

c).800

d).300

4.Gauge is the

a). Clear inner distance between the two rails of a track ✓

b). Centre to Centre distance of rails

c). Outer to outer distance of rails

d). None of the above

5. 400/(80-60)

a). 40 ✓

b). 25

c). 20

d). 50

6. Who coined the term Soil Mechanics?

a). Terzahi ✓

b). Rankine

c). George Stevenson

d). Isac Newton

IV. Fill in the blanks:

5 x 2=10

1. The average finished thickness of plastering over concrete surface shall be ....6 mm...........

2. In cement concrete 1:2:4, 4 is ....

3. The minimum curing period for brick work shall be ......Two weeks

4. The plinth area for type II quarters is .....46 m²........

5. The unit of measurement for fabricated steel work is .....Ton.......

V. Say True of False

5 x 2=10

1. Factory OT rules will apply for outside working staff also.   F

2. Arrangement made to divert the train from one track to another track is known as turnout.

3. The structure with roof trusses shall be inspected in detail by Senior Section Engineer/Works, once a year during prescribed month.

4. The unit measurement for painting shall be per cubic meter. F

5. Gate valve is used to control the flow of water.   T

PART- B

I. Answer the following

5 x 4 = 20

1. Write short notes on painting for structural steel work.

2. Write the name of 5 members of structural steel shed with simple sketch.

3. What are the Safety Precaution to be taken during concrete work inside the Factory?

4. Write the specification for brick.

5. Write short notes on Ready mix concrete.

PART-C

1x 30 =30

I.   Estimate for the road of 1km length as per the details given below:

   a. Width of the road is   - 8m
   b. Thickness of soling stone   - 150mm
   c. Thickness of 50mm Blue metal- 75mm
   d. Thickness of gravel   - 50mm

Any other details may be assumed suitably as per the specification.