


Visualisation - Predict Questions [MCQ] (Version : 0)

TEST

 **Correct Answer**

 Answered in 168.1 Minutes

Question 1/29

What is the total installed capacity (MW) in Middelburg?

☐ 3525 MW

☐ 8760 MW

☒ 5235 MW

☐ 1250 MW

Question 2/29

How many stations run by Bethlehem Hydro are operational?

☐ 1

☒ 3

☐ None are operational

☐ 2

Question 3/29

What is the total capacity available for distribution by Eskom-run power stations?

HINT: Only consider the nominal capacity for Eskom operational stations.

☐ 49557 MW

☒ 49035 MW

☐ 49521 MW

☐ 48765 MW

Question 4/29

Which of the following fully operational stations has the largest difference between the total installed capacity and the total nominal capacity?

☐ Medupi

☐ Kusile

☐ Klipheuwel

☒ Duvha

Question 5/29

Complete the following the steps in PowerBI to answer the next question:

- Under the chart selection, select and plot a line chart.
- Under "Axis" for the line chart, input the option with your "date" variable from the "national_electricity_generated_monthly" table.
- Under "Values" for the line chart, input the option with your "electricity_generated_MW" variable from the "national_electricity_generated_monthly" table.

During the month of June, which year had the lowest generation?

☐ 2018

☒ 2019

☐ 2017

☒ 2016

Explanation:

This Question has been discounted due to an error in the Question or Answer Text.

Question 6/29

Complete the following steps in PowerBI to answer the next question:

- Under the chart selection, select and plot a clustered column chart.
- Under "Axis" for the clustered column chart, input the option with your "station_name" variable from the "stations" table.
- Under "Values" for the clustered column chart, input the option with your "nominal_capacity_MW" variable from the "stations_dynamics" table.
- Under "Values" for the clustered column chart, input a section option with your "installed_capacity" variable from the "stations_meta_info" table.

Which of the following statements are correct?

- The Medupi power station has the largest installed capacity out of all the fully operational stations
- Lethabo station has the fourth-highest capacity installed out of all the fully operational stations
- Komati and Avon Stations have nominal capacities of 1630
- The Duvha power station has a better nominal capacity than the Matla power station

☐ ii, iv

☐ ii only

☐ i, ii, iii

☒ ii, iii

Question 7/29

What is the total installed capacity (MW) for coastal Gas/ liquid fuel turbine stations?

☒ 2761 MW

☐ 2943 MW

☐ 2779 MW

☐ 3449 MW

Question 8/29

Which location with 2 operational coal stations has the highest combined installed capacity?

☐ Pretoria

☐ Lephalale

☒ Emalahleni

☐ Bethal

Question 9/29

Which of the following are not a type of filter available in Power BI Reports?

☐ Report level filter

☐ Page level filter

☐ Visual level filter

☒ Model level filter

Question 10/29

True or False: A report level filter only acts/filters for the page it was created on?

☐ True

☒ False

Question 11/29

What station took the longest to build?

☒ Kendall

☐ Majuba

☐ Arnot

☐ Medupi

Question 12/29

In which province is the hydroelectric station that is on hold situated?

☐ Gauteng

☒ Mapumalanga

☐ North West

☐ Free State

Question 13/29

Which coal station has the highest average installed capacity?

☒ Medupi

☐ Duvha

☐ Camden

☐ Hendrina

Question 14/29

What is the province and location for the coal station that has the highest average installed capacity?

☐ Gauteng - Pretoria

☒ Limpopo - Lephalale

☐ Mpumalanga - Ermelo

☐ Mpumalanga - Ogies

Question 15/29

What is the difference between the installed and nominal capacity for Gauteng coal stations (operational and decommissioned stations)?

☒ 928 MW

☐ 955 MW

☐ 943 MW

☐ 950 MW

Question 16/29

In Mpumalanga, which coal station took the longest to build?

☐ Arnot

☐ Medupi

☒ Kendall

☐ Majuba

Question 17/29

What is the oldest operational plant in South Africa?

☐ Medupi

☐ Arnot

☒ Kendall

☐ Majuba

Question 18/29

For Coal stations with between 7 and 10 units, what is the average ramp up rate, average plant availability, and total number of combined station units?

☐ 0.31 ramp-up, 0.55 plant availability and 27 combined station units.

☐ 0.32 ramp-up, 0.33 plant availability and 26 combined station units.

☐ 0.33 ramp-up, 0.43 plant availability and 25 combined station units.

☒ 0.32 ramp-up, 0.79 plant availability and 27 combined station units.

Question 19/29

For Coal stations with between 7 and 10 units, which unit has the highest heat rate to max nominal capacity (MW) ratio?

☐ Medupi

☒ Komati

☐ Camden

☐ Arnot

Question 20/29

What day has the most Eskom mentions for the date range 2019/11/20 to 2019/11/29?

☐ Monday

☒ Thursday

☐ Friday

☐ Tuesday

Question 21/29

How many coal stations in Middelburg-Mpumalanga are operational?

☐ 2

☐ 5

☐ 1

☒ 3

Question 22/29

Of the coal stations in Middelburg-Mpumalanga, which one is the oldest?

☒ Komati

☐ Arnot

☐ Kusile

☒ Hendrina

Explanation:

This Question has been discounted due to an error in the Question or Answer Text.

Question 23/29

What is the installed capacity of the Hendrina station?

☐ 1880 MW

☐ 1890 MW

☐ 1895 MW

☒ 1893 MW

Question 24/29

How many units does the Hendrina station have?

☐ 4

☐ 12

☒ 10

☐ 18

Question 25/29

What is the average ramp up rate for Gas/Diesel plants in the Western Cape if we only consider stations with between 1 and 7 units?

☐ 0.32

☐ 0.30

☐ 0.33

☒ 0.31

Question 26/29

What is the ratio of total fixed operating cost to average variable O&M cost for all mini-Hydro stations?

☐ 17.5

☒ 16.7

☐ 15.8

☐ 12.3

Question 27/29

How much peak electricity was generated in the second quarter of 2015?

☐ 49K MW

☒ 58K MW

☐ 55K MW

☐ 60K MW

Question 28/29

What is the nominal capacity in mega watts (MW) of the first operational unit of the Medupi power station?

☒ 2157 MW

☐ 2257 MW

☐ 2159 MW

☐ 2200 MW

Question 29/29

Between 2030 and 2050 how many stations are planned to be decommissioned?

☒ 7

☐ 5

☐ 6

☐ 9