Associated Gas Processing and Treatment

Knowledge Questions

| 1- | Associated gas is natural | gas found | in crude | oil reser | voirs | either | dissolve | d or | in |
|----|----------------------------|-----------|----------|-----------|-------|--------|----------|------|----|
| | conjunction with crude oil | deposits. | | | | | | | |

- a. True
- b. False
- 2- Based on the sulphur content, the associated gas is classified as sweet or sour gas. Sour gas contains higher levels of sulphur content in its composition and sweet gas has very little or no sulphur.
 - a. True
 - b. False
- 3- Burning crude oil is cleaner than burning or "flaring" associated gas.
 - a. True
 - b. False
- 4- Associated gas may be used in the same context as natural gas.
 - a. True
 - b. False
- 5- Sulfur content, CO2 content, water content, heating value, and mercaptans are the major characteristics for assessing the quality of associated gas.
 - a. True
 - b. False
- 6- Associated gas cannot be transferred or piped with natural gas.
 - a. True
 - b. False
- 7- Associated gas is expensive to treat.
 - a. True
 - b. False
- 8- Technologies to treat associated gas are very complicated and not well understood.
 - a. True
 - b. False
- 9- A main concern with associated gas is the sulfur content, especially in regards to flaring.
 - a. True
 - b. False
- 10- Associated gas may contain liquefied natural gas (LNG), which is one revenue source for this industry.
 - a. True
 - b. False

- 11- One way to calculate the dollar value for associated gas is to find its equivalent in barrels of oil.
 - a. True
 - b. False
- 12- Water produced from associated gas activities cannot be recycled and re-used for other applications.
 - a. True
 - b. False
- 13- While calculating the feasibility of utilizing associated gas projects, most of the cost-revenue numbers are driven from data available for natural gas projects.
 - a. True
 - b. False
- 14- When planning associated gas projects, it is advised to account for the delivery of long-lead procurement items like compressors.
 - a. True
 - b. False
- 15- Permits and licenses from relevant environmental offices are NOT necessary for associated gas projects.
 - a. True
 - b. False
- 16- Associated gas production can potentially contribute to overall gas production and a country's wealth.
 - a. True
 - b. False
- 17-Local standards that determine emissions limits for associated gas production facilities are there to:
 - a. Minimize harmful effects of those emissions on air, water, humans, and natural life
 - b. Limit production capacity of those facilities
 - c. Increase revenue generation of those facilities
 - d. A and C
- 18- Compressor stations should have significant emissions monitoring and control.
 - a. True
 - b. False
- 19-Major waste streams in any associated gas production facility are:
 - e. Sulfur
 - f. GHG
 - g. Water
 - h. All the above
- 20- The standard operating procedures (SOPs) in any facility must list a plan to mitigate leaks during drilling and processing associated gas.
 - a. True
 - b. False

- 21- Emergency plans are NOT part of the initial design for associated gas drilling and processing.
 - a. True
 - <mark>b. False</mark>
- 22-Environmental measures must be included at the initiation of any associated gas activity.
 - <mark>a. True</mark>
 - b. False
- 23-Leaks can happen during the following steps of associated gas activity:
 - i. Drilling and workover
 - j. Piping
 - k. Cleaning the gas
 - I. All of the above
- 24- Sulfur can cause major health concerns like breathing problems, cancer, chest pain, and many other respiratory concerns.
 - <mark>a. True</mark>
 - b. False
- 25-The same technologies used in natural gas facilities can be used to mitigate leaks in associated gas production facilities.
 - a. True
 - b. False