Dep. of Earth Sciences and Petroleum

2023-2024

Q1/ Show the differences and similarities between TSM AP6 and TSM AP7 depending on the tectonic setting and depositional characterization.

Q2/ Show the differences and similarities between TSM AP8 and TSM AP9 depending on the tectonic setting and depositional characterization.

Q3/ A- Write the lithologic composition of the following formations:

- 1) Chia Zairi Formation, 2) Zor Hauran Formation, 3) Sarki Formation, 4) Muhaiwir Formation,
- 5) Gotnia Formation.
- B- What are the boundary natures of the following formations?
- 1) Beduh Formation, 2) Najmah Formation, 3) Mirga Mir Formation, 4) Geli Khana Formation,
- 5) Kurra Chine Formation.

Q4/ A- Determine the probable ages of the following formations:-

- 1) Ga'ara Formation, 2) Mus Formation, 3) Sargelu Formation, 4) Naokelekan Formation,
- 5) Hussainiyat Formation.
- B- What are the depositional environments of the following formations:
- 1) Zubair Formation, 2) Sarmord Formation, 3) Balambo Formation, 4) Mauddud Formation, 5) Nahr Umer Formation
- Q5/ Write about the tectonstratigraphic megasequence AP6 and list the including formations.
- Q6/ Write about the tectonstratigraphic megasequence AP7 and list the including formations.
- Q7/ Write about the tectonstratigraphic megasequence AP8 and list the including formations.
- Q8/ Write about the tectonstratigraphic megasequence AP9 and list the including formations.
- Q9/ List the formations of the TSM AP6 and describe one of them in detail.
- Q10/ List the formations of the TSM AP7 and describe one of them in detail.
- Q11/ List the formations of the TSM AP8 and describe one of them in detail.
- Q12/ List the formations of the TSM AP9 and describe one of them in detail.

Q13/ Describe in detail the following formations:

- A- Sarki Formation
- **B- Sargelu Formation**

Q13/ Describe in detail the following formations: A- Geli Khana Formation B- Kurra Chine Formation Q14/ Describe in detail the following formations: A- Beduh Formation B- Baluti Chine Formation

Q15/ Describe in detail the following formations:

- **A- Nejmah Formation**
- **B- Gotnia Formation**

Q16/ Describe in detail the following formations:

- A- Sarki Formation
- **B- Sehkaniyan Formation**

Q14/ Describe in detail the following formations:

- A- Qamchuga Formation
- **B- Sarmord Formation**

Q14/ Describe in detail the following formations:

- A- Nahr Umer Formation
- **B- Mauddud Formation**

Q15/ Describe in detail the following formations:

- A- Mulussa Formation
- **B- Zor Hauran Formation**

Q16/ Describe in detail the following formations:

- A- Naokelekan Formation
- **B- Barsarin Formation**

Q17/ Describe in detail the following formations:

- A- Beduh Formation
- **B- Baluti Chine Formation**

Q18/ Describe in detail the following formations:

- **A- Balambo Formation**
- **B- Kometan Formation**

Q19/ Describe in detail the following formations:

- **A- Dokan Formation**
- **B- Gulneri Formation**

Q19/ Describe in detail the following formations:

- A- Rumaila Formation
- **B- Ahmadi Formation**

Q20/ Describe in detail the following formations:

- A- Tanuma Formation
- **B- Khasib Formation**

Q21/ Describe in detail the following formations:

- A- Beduh Formation
- **B- Baluti Formation**

Q22/ Describe in detail the following formations:

- **A- Tanjero Formation**
- **B- Shiranish Formation**

Q23/ Describe in detail the following formations:

- A- Hartha Formation
- **B- Tayarat Chine Formation**

Q24/ List the sequences of the TSM AP6, TSM AP7, TSM AP8, and TSM AP9.

Q25/ List the formations of the TMS AP7 and describe one of them in detail.

Q26/ List the formations of the TMS AP8 and describe one of them in detail.

Q27/ List the formations of the TMS AP9 and describe one of them in detail.

Q28/ A- Write the lithologic composition of the following formations:

- 1) Kometan Formation, 2) Agra Formation, 3) Bekhma Formation, 4) Hartha Formation, 5) Tanjero Formation.
- B- Determine the probable ages of the following formations:
- 1) Ratawi Formation, 2) Yamama Formation, 3) Chia Gara Formation, 4) Balambo Formation,
- 5) Sarmord Formation.

Q29/ A- What are the depositional environments the following formations:

- 1) Ga'ara Formation, 2) Kurra Chine Formation, 3) Baluti Formation, 4) Ubaid Formation,
- 5) Butmah Formation
- B- What are the boundary natures between following formations?
 - 1) Ratawi Formation and Zubair Formation
 - 2) Shuaiba Formation and Nahr Umr Formation
 - 3) Mauddud Formation and Rutba Formation
 - 4) Kometan Formation and Tanjero Formation

5) Sa'di Formation and Hartha Formation

Q30/ Write about the tectonstratigraphic megasequence AP5 with including formation. (5 Marks)

Q31/ Describe in detail the following formations: (6 Marks)

- 1- Tanjero Formation
- 2- Chia Gara Formation

Q31/ Explain briefly the tectonic events of the Arabian Plate from TMS AP5 to TMS AP9.

Q32/ Mention the formations of with brief lithologic composition of TSM AP7 at the High Folded and Thrust Zones

Q33/ Mention the formations of with brief lithologic composition of TSM AP8 at the High Folded and Thrust Zones.

Q34/ Mention the formations of with brief lithologic composition of TSM AP9 at the High Folded and Thrust Zones.

Q35/ What are the formations belonging to the Late Permian-Mid Triassic Sequence and describe one of them?

Q36/ What are the formations belonging to the Late Triassic Sequence and describe one of them?

Q37/ What are the formations belonging to the Early Jurassic Sequence and describe one of them?

Q38/ What are the formations belonging to the Late Jurassic Sequence and describe one of them?

Q39/ What are the formations belonging to the Late Tithonian- Hauterivian Sequence and describe one of them?

Q40/ What are the formations belonging to the Albian Sequence and describe one of them?

Q41/ What are the formations belonging to the Cenomanian- Early Turonian Sequence and describe one of them?

Q42/ What are the formations belonging to the Late Turonian-Early Campanian Sequence and describe one of them?

Q43/ What are the formations belonging to the Late Campanian-Maastrichtian Sequence and describe one of them?

Q44/ What are the probable age of the following formations:-

- a- Sarki Formation
- b- Kurra China Formation
- c- Chia Zairi Formation
- d- Geli Khana Formation

Q45/ What are the probable age of the following formations:-

- a- Sargelu Formation
- **b-** Barsarin Formation
- c- Chia Gara Formation
- d- Lower Sarmord Formation

Q46/ What are the probable age of the following formations:-

- a- Lower balambo Formation
- b- Qamchuqa Formation
- c- Dokan Formation
- d- Kometan Formation

Q47/ What are the probable age of the following formations:-

- a- tanjero Formation
- **b- Agra Formation**
- c- Bekhma Formation
- d- Shiranish Formation

Q48/ List the sequences of the TSM AP7, TSM AP8, and TSM AP9.

Q49/ What are the probable formations of the Jurassic period in the High Folded and Thrust zones with clarifying their boundary natures.

Q50/ What are the probable formations of the Cretaceous period in the High Folded and Thrust zones with clarifying their boundary natures.

Dr Sirwan I. Sakry