

Shri Shivaji Education Society Amravati's

## Science College

Congress Nagar, Nagpur

Department of Geology

Add on Course (2019-2020)

### Certificate course in Basic Petroleum Geology

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The Session started from 6<sup>th</sup> of December 2019. 79 students enrolled for this certificate course, The strength of the students were from I, II, and III year. Students successfully completed the theory and practical classes and appeared for the examination.

The class on Basic Petroleum Geology was conducted to provide fundamental knowledge about the geological principles and processes relevant to the exploration and production of petroleum. This report outlines the key topics covered, learning outcomes, and insights gained during the course.

This course is designed for students under the add on course for 30 hours which contain theory and practical.

The objective of this course is to give the Conceptual Understanding, Understanding Petroleum Systems, Identification of Petroleum, Mapping Structural and Stratigraphic Traps, Identifying Reservoir Rocks, Application of Geological Principles Systems, Understanding Petroleum Migration, Evaluating Reservoir Quality, Critical Thinking and Integration of Multidisciplinary Knowledge.



*Amarchas*  
Course Coordinator

To,  
The Principal  
SSES Amt's Science College,  
Congress Nagar, Nagpur-12

Subject: For permission to conduct the add on courses in the Geology department

Respected Sir,


This is to request you that, the teachers of our Geology department have prepared the syllabus and modules of the 30 hours certificate courses for the session 2019-2020.

The details of the course module, syllabus and time table is submitted here with.

Hence please permit to run the add on courses and oblige me.

Thanking you

Date:- 21/06/2019

Yours sincerely  
  
Department of Geology  
S. S. E. S. Amravati's  
Science College, Nagpur.

Permitted  
NSHORE

Shri Shivaji Education Society Amravati's

## Science College

Congress Nagar, Nagpur

### Department of Geology

Add on Certificate Course (2019-2020)

#### **Certificate Course in Basic Petroleum Geology**

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#### **Notice**

All the B.Sc. I, II, III year students of Geology Department are hereby informed that the Geology department commencing a certificate course on Basic Petroleum Geology from 6<sup>th</sup> of December 2019. For this course registration will start from 25<sup>th</sup> of November 2019 to 4<sup>th</sup> of December 2019. Interested students contact to course coordinator for registration.

Note: Registration is free

Course Coordinator: Ms. P. B. Zamarkar

Contact No. 7028898026

  
Course Coordinator



SSES'S

**SCIENCE COLLEGE**

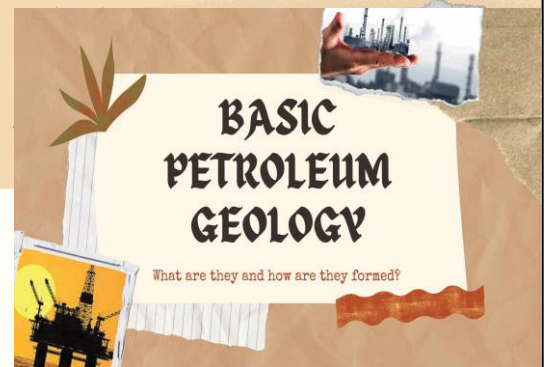
CONGRESS NAGAR, NAGPUR



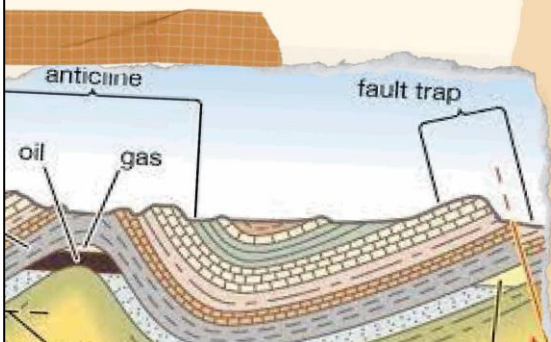
**DEPARTMENT OF GEOLOGY**

**CERTIFICATE COURSE IN BASIC PETROLEUM GEOLOGY**

**JOIN  
NOW**



## OBJECTIVE OF COURSE



- 1 *UNDERSTANDING PETROLEUM SYSTEMS*
- 2 *IDENTIFYING RESERVOIR ROCKS*
- 3 *MAPPING STRUCTURAL AND STRATIGRAPHIC TRAPS*
- 4 *UNDERSTANDING PETROLEUM MIGRATION*
- 5 *EVALUATING RESERVOIR QUALITY*

SSESA's  
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Congress Nagar, Nagpur

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**Certificate course in 'Basic Petroleum Geology'**

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**Content**

**Unit I:** Earth Structure (Lithosphere, Mantle, Core), Determination of Earth structure and Composition (earthquake waves on the Earth, Specific gravity of the earth, Earth's magnetic field, Earth temperature gradient), Plate Tectonics (Continental drift theory, Crust of the Earth, Causes of continental motions, Continental margins, Continental margins and petroleum)

**Unit II:** Geology time (Geological time scale), Stratigraphy, Paleontology, History of continents, Minerals and Rocks (Physical properties of minerals, Igneous-Sedimentary-Metamorphic rocks), Rock Cycle, Rock Cycle and Petroleum, Weathering erosion and deposition.

**Unit III:** Marine environment and deposition (Environment, Erosion, Deposition), Structural Geology (stress, strain, fault, fold, strike, dip), Petroleum Trap (Hydrocarbon traps, Structural traps, stratigraphic traps, Combination traps).

**Unit IV:** Rocks, Reservoirs, Recovery Techniques (Rock sampling, Porosity and permeability)

**Practicals:** Megascopic identification of minerals and rocks, Structural models.

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**Reference Books:** Basic of Petroleum Geology by Peter K. Link, Elements of Petroleum geology by Richard C. Selley, Rutleys Element of Mineralogy.

**Objective of Course**

- **Understanding Petroleum Systems:** Learn about the processes involved in the formation, migration, accumulation, and preservation of hydrocarbons in the Earth's subsurface.
- **Identifying Reservoir Rocks:** Identify and characterize sedimentary rocks that have the potential to host significant quantities of hydrocarbons, such as sandstones and carbonates.
- **Mapping Structural and Stratigraphic Traps:** Develop skills in interpreting seismic data and geological maps to locate potential traps where hydrocarbons can accumulate, such as anticlines, fault traps, and stratigraphic traps.
- **Understanding Petroleum Migration:** Study the mechanisms and pathways through which hydrocarbons migrate from source rocks to reservoir rocks, including buoyancy-driven migration and fault-related migration.

- Evaluating Reservoir Quality: Assess the porosity, permeability, and fluid saturation of reservoir rocks to determine their suitability for hydrocarbon storage and production.

### Course Outcome

1. **Conceptual Understanding:** Developed a solid understanding of the geological processes involved in the formation and accumulation of petroleum.
2. **Identification of Petroleum Systems:** Learned to identify key elements of petroleum systems including source rocks, reservoirs, traps, and seals.
3. **Application of Geological Principles:** Gained proficiency in applying geological principles to petroleum exploration and production scenarios.
4. **Critical Thinking:** Developed critical thinking skills through analysis of geological data and interpretation of subsurface structures and stratigraphy.
5. **Integration of Multidisciplinary Knowledge:** Recognized the interdisciplinary nature of petroleum geology and its integration with other fields such as geophysics, geochemistry, and engineering.

**Duration of Course:** Ten Weeks (30 hours)

### The Structure of the syllabus and system of evaluation

Course		Total Marks	
		Theory	Practical
<b>Certificate Course in Basic Petroleum Geology</b>	<b>Theory paper in Basic Petroleum Geology:</b> Theory examination will be of MCQ pattern having 40 questions with 2 marks each.	80	20
	<b>Practical paper in Basic Petroleum Geology:</b> Practical Examination will be based on performance evaluation in the laboratory	100	

*Amrkar*  
Course Coordinator

*Patil*  
Internal Quality Assurance Cell  
(IQAC)  
S. S. E. S. A. Science College  
Congress Nagar, Nagpur.

*for @luc*  
Principal  
S. S. E. S. Amravati's  
Science College, Nagpur

SSESA's  
Science College  
Congress Nagar, Nagpur

**Certificate course in 'Basic Petroleum Geology'**

**Week wise teaching plan**

Week	Hrs	Syllabus
Week 1	1	Earth Structure -Lithosphere, Mantle
	1	Earth Structure - Core
	1	Earth Structure on model
Week 2	1	Earth structure and Composition
	1	Earth's magnetic field, Earth temperature gradient
	1	Megascopeic identification of minerals
Week 3	1	Continental drift theory
	1	Crust of the Earth, Causes of continental motions
	1	Megascopeic identification of minerals
Week 4	1	Continental margins, Continental margins and petroleum
	1	Geological time scale
	1	Megascopeic identification of minerals
Week 5	1	Stratigraphy,
	1	Paleontology
	1	Megascopeic identification of minerals
Week 6	1	History of continents,
	1	Physical properties of minerals, Igneous-Sedimentary-Metamorphic rocks
	1	Megascopeic identification of rocks
Week 7	1	Igneous-Sedimentary-Metamorphic rocks
	1	Cycle, Rock Cycle and Petroleum, Weathering erosion and deposition
	1	Megascopeic identification of rocks
Week 8	1	Marine environment and deposition
	1	stress, strain, fault
	1	Megascopeic identification of rocks
Week 9	1	fold, strike, dip
	1	Hydrocarbon traps, Structural traps,
	1	Megascopeic identification of rocks
Week 10	1	stratigraphic traps, Combination traps).
	1	Porosity and permeability
	1	Megascopeic identification of rocks

*Amar*  
Course Coordinator

**SSES Amt's Science College, Congress Nagar, Nagpur-12**

**Certificate course in Basic Petroleum Geology**

**Time Table**

Day	Theory
Friday	PBZ (Th) 4:00 PM – 5:00 PM, ADF(Th) 5:00 – 6:00 PM
Saturday	PBZ/ ADF (P) 4:00 PM – 5:00 PM

PBZ- Miss P. B. Zamarkar

ADF- Miss A. D. Fuladi

Th- Theory

P- Practical



Sr. No.	Name of Student	Surname	Signature
1	Aachal	Badnaware	
2	Rahul	Bhusele	
3	Lokita	Patle	
4	Vaidahi	Kamble	
5	Yash	Maske	
6	Sejal	Motghare	
7	Devyani	Shelke	
8	Rohit	Thakke	
9	Harshkumar	Shete	
10	Sejal	Titare	
11	Pooja	Waghmare	
12	Hardik	Wasekar	
13	Vinita	Yadav	
14	Ashwin Kumar	Daf	
15	Abhruv	Zoad	
16	Shreya	Kale	
17	Bhagyashree	Kapate	
18	Anchal	Khatke	
19	Divya	Kurhadkar	
20	Prerna	Raut	
21	Vaishnavi	Meshram	
22	Rutuja	Meshram	
23	Pallavi	Nitnaware	
24	Honey	Parekh	
25	Aniket	Parchake	
26	Bhuvan	Pashine	
27	Tahvaim	Shaikh	
28	Bhalerao	Naina	
29	Burade	Gaurav	
30	Chaware	Aditi	
31	Dhole	Saraswat	
32	Dhomne	Twinkle	
33	Gadre	Sarthak	

Shri Shivaji Education Society Amravati's  
**Science College**  
Congress Nagar, Nagpur  
Department of Geology  
**Certificate course in Basic Petroleum Geology**  
Session 2019-2020

Sr. No.	Name of Student	Surname	Signature
1	Aachal	Badnaware	
2	Rahul	Bhusele	
3	Lokesh	Patle	
4	Vaidahi	Kamble	
5	Yash	Maske	
6	Sejal	Motghare	
7	Devyani	Shelke	
8	Rohit	Thakke	
9	Harshkumar	Shete	
10	Sejal	Titare	
11	Pooja	Waghmare	
12	Hardik	Wasekar	
13	Vinita	Yadav	
14	Ashwin Kumar	Daf	
15	Abhinav	Zoad	
16	Shreya	Kale	
17	Bhagyashree	Kapate	
18	Anchal	Khatke	
19	Divya	Kurhadkar	
20	Prerna	Raut	
21	Vaishnavi	Meshram	
22	Rutuja	Meshram	
23	Pallavi	Nitnaware	
24	Honey	Parekh	
25	Aniket	Parchake	
26	Bhuvan	Pashine	
27	Tahrim	Shaikh	
28	Bhalerao	Naina	
29	Burade	Gaurav	
30	Chaware	Aditi	
31	Dhole	Saraswat	
32	Dhomne	Twinkle	
33	Gadre	Sarthak	

34	Vaishnavi	Betole	Betole
35	Payal	Chandekar	Payal
36	Gitika	Deshmukh	Gitika
37	Neha	Dhanjode	Neha Dhanjode
38	Bhavik	Gedam	Bhavik
39	Samsruddhi	Godse	Godse
40	Mitesh	Hikre	Miteshikre
41	Avanti	Khapre	Avanti
42	Shreya	Kothare	Shreya
43	Yogita	Maske	Yogita
44	Shivam	Nandurkar	Shivam
45	Shubham	Nimbalkar	Shubham
46	Payal	Ade	Ade
47	Apeksha	Ambare	Apeksha
48	Piyush	Barapatre	Piyush Barapatre
49	Nandini	Bhandarkar	Nandini
50	Sudhir	Borkar	Sudhir
51	Rishi	Meshram	Rishi
52	Priyanka	Ganjre	Priyanka
53	Umakant	Hemane	Umakant
54	Dheeraj	Yadav	Dheeraj
55	Chetna	Lanjewar	Chetna
56	Celina	Lazarus	Celina
57	Prajakta	Murarkar	Prajakta
58	Prajakta	Patil	Prajakta
59	Vedang	Chatte	Vedang Chatte
60	Aniket	Dhande	Aniket
61	Rutuja	Gharat	Rutuja Gharat
62	Shruti	Ingle	Shruti
63	Saurabh	Karingwar	Saurabh
64	Chirag	Khadgi	Chirag
65	Gauri	Kole	Gauri
66	Mayuri	Meshram	Mayuri
67	Vaishnavi	Navghare	Vaishnavi
68	Ayush	Nikhare	Ayush
69	Rutuja	Rathod	Rutuja
70	Aditi	Chaurasia	Aditi
71	Pallavi	Chopkar	Pallavi
72	Parag	Dalal	Parag
73	Sujata	Dhote	Sujata
74	Anjali	Dongarwar	Anjali
75	Mahima	Dubey	Mahima

76	Rahul	Gadikar	
77	Shivangi	Gedam	<del>P</del> Gedam
78	Vaibhavi	Gurumukhi	Vaibhavi
79	Gouri	Kale	Kale

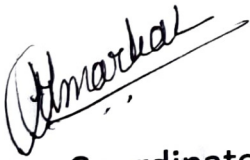
**Shri Shivaji Education Society Amravati's  
Science College, Congress Nagar, Nagpur  
Certificate Course in Basic Petroleum Geology**

**2019-2020**

**Notice**

All the students of B.Sc. I,II,III enrolled for the certificate course in Basic Petroleum Geology are hereby informed that attain classes regularly from 6<sup>th</sup> of December 2019, Friday. It is compulsory to all students to attend the classes and appear for examination.

Go through the time table for more detail about the theory and practical classes.



Course Coordinator



Head  
HEAD  
Department of Geology  
S. S. E. S. Amravati's  
Science College, Nagpur.

**Shri Shivaji Education Society Amravati's  
Science College, Congress Nagar, Nagpur  
Certificate Course In Basic Petroleum Geology**

**2019-2020**

**Notice**

All the students of B.Sc. I,II,III enrolled for the certificate course in Basic Petroleum Geology are hereby informed that the final examination of certificate course in Basic petroleum Geology will be held on 6th March 2020 i.e. Friday. It is compulsory to all enrolled students to appear for examination.

The students are informed to note the date and time of the examination as given below-

**Theory Examination:**

**Date: 6 March 2020**

**Time: 11:00 AM- 12: PM**

**Practical Examination:**

**Date: 7 March 2020**

**Time: 11:00 AM- 2:00 PM**

*Shirarkar*

**Course Coordinator**

*K. S. K. S.*

**Head**

**HEAD**

**Department of Geology  
S. S. E. S. Amravati's  
Science College, Nagpur.**

Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur

Certificate Course in 'Basic Petroleum Geology'

Theory Examination Attendance

Theory/ Practical (2019 – 2020)

Name of the Teacher: Ms. P. B. Zamarkar

Sr. No.	Name of the Student	Surname	Signature
1	Aachal	Badnaware	<del>Aachal</del>
2	Rahul	Bhusele	<del>Bhusele</del>
3	Lokita	Patle	<del>Bhusele</del>
4	Vaidahi	Kamble	Vaidahi
5	Yash	Maske	Y Maske
6	Sejal	Motghare	Sejal
7	Deoyani	Shelke	Alu Nikose
8	Rohit	Thakre	Rutuja
9	Harshkumar	Shete	Shete
10	Sejal	Titare	Sejal
11	Pooja	Waghmare	Waghmare
12	Hardik	Wasekar	Hardik
13	Vinita	Yadav	Yadav
14	Ashwin Kumar	Daf	Ashwin
15	Apurv	Zoad	Atharva
16	Shreya	Kale	Shreya
17	Bhagyashree	Kapate	Bhagyashree
18	Anchal	Khatke	Anchal
19	Divya	Kurhadkar	Divyak
20	Prerna	Raut	Prerna
21	Vaishnavi	Meshram	Rutuja Meshram
22	Rutuja	Meshram	Rutuja
23	Pallavi	Nitnaware	Honey Parekh
24	Honey	Parekh	Honey
25	Aniket	Parchake	Bhuvan
26	Bhuvan	Pashine	Bansel
27	Tahrim	Shaikh	Bhalerao
28	Bhalerao	Naina	Bhalerao
29	Burade	Gaurav	Chaitra
30	Chaware	Aditi	Chaware
31	Dhole	Saraswat	Jannetwink
32	Dhomne	Twinkle	Dhole
33	Gadre	Sarthak	Betole
34	Vaishnavi	Betole	Payal
35	Payal	Chandekar	Gitika
36	Gitika	Deshmukh	Neha Hanjode
37	Neha	Dhanjode	Gedam
38	Bhavik	Gedam	Godse
39	Samsruddhi	Godse	

40	Mitesh	Hikre	-
41	Avanti	Khapre	Avanti
42	Shreya	Kothare	Shreya
43	Yogita	Maske	Yogita
44	Shivam	Nandurkar	Shivam
45	Shubham	Nimbalkar	Shubham
46	Payal	Ade	Ade
47	Apeksha	Ambare	-
48	Piyush	Barapatre	Piyush Barapatre
49	Nandini	Bhandarkar	Nandini
50	Sudhir	Borkar	Sudhir
51	Rita	Meshram	-
52	Priyanka	Ganjre	Priyanka
53	Umakant	Hemane	Umakant
54	Dheeraj	Yadav	-
55	Chetna	Lanjewar	Chetna
56	Celina	Lazarus	Celina
57	Prajakta	Murarkar	Prajakta
58	Prajakta	Patil	Prajakta
59	Vedang	Chatte	Vedanghatte
60	Aniket	Dhande	Rutuja Gharat
61	Rutuja	Gharat	Rutuja
62	Shruti	Ingle	Shruti
63	Saurabh	Karingwar	-
64	Chirag	Khadgi	Chirag
65	Gauri	Kale	Chirag
66	Mayuri	Meshram	-
67	Vaishnavi	Navghare	Navghare
68	Ayush	Nikhare	Ayush
69	Rutuja	Rathod	Rathod
70	Aditi	Chaurasia	Aditi Chaurasia
71	Pallavi	Chopkar	Pallavi
72	Parag	Dalal	Parag
73	Sujata	Dhote	-
74	Anjali	Dongarwar	Anjali
75	Mahima	Dubey	Mahima
76	Rahul	Gadikar	Rahul
77	Shivangi	Gedam	Shivangi
78	Vaibhavi	Gurumukhi	Vaibhavi
79	Gouri	Kale	Gouri
			-
			-

*Amrutesh*  
Course Coordinator



Shri Shivaji Education Society Amravati's Science College, Congress Nagar, Nagpur

Certificate Course in 'Basic Petroleum Geology'

Practical Examination Attendance

Theory/ Practical (2019 – 2020)

Name of the Teacher:

Sr. No.	Name of the Student	Surname	Signature
1	Aachal	Badnaware	Aachal
2	Rahul	Bhusele	Bhusele
3	Lokita	Patle	Bhusele
4	Vaidahi	Kamble	Vaidahi
5	Yash	Maske	Yaske
6	Sejal	Motghare	Sejal
7	Deoyani	Shelke	Alu Nikose
8	Rohit	Thakre	Rohit
9	Harshkumar	Shete	Shete
10	Sejal	Titare	Sejal
11	Pooja	Waghmare	Pooja Waghmare
12	Hardik	Wasekar	Hardik
13	Vinita	Yadav	Vadav
14	Ashwin Kumar	Daf	Ashwin
15	Apurv	Zoad	Alhava
16	Shreya	Kale	Shreya
17	Bhagyashree	Kapate	Bhagyashree
18	Anchal	Khatke	Anchal
19	Divya	Kurhadkar	Divya
20	Prerna	Raut	Prerna
21	Vaishnavi	Meshram	Vaishnavi
22	Rutuja	Meshram	Rutuja Meshram
23	Pallavi	Nitnaware	Nitnaware
24	Honey	Parekh	Honey Parekh
25	Aniket	Parchake	Aniket
26	Bhuvan	Pashine	Bhuvan
27	Tahrim	Shaikh	Tahrim
28	Bhalerao	Naina	Bhalerao
29	Burade	Gaurav	Burade
30	Chaware	Aditi	Chaware
31	Dhole	Saraswat	Dhole
32	Dhomne	Twinkle	Dhomne
33	Gadre	Sarthak	Gadre
34	Vaishnavi	Betole	Betole
35	Payal	Chandekar	Payal
36	Gitika	Deshmukh	Gitika
37	Neha	Dhanjode	Neha Dhanjode
38	Bhavik	Gedam	Bhavik
39	Samsruddhi	Godse	Godse

40	Mitesh	Hikre	-
41	Avanti	Khapre	-
42	Shreya	Kothare	Avanti
43	Yogita	Maske	J.P.
44	Shivam	Nandurkar	M.M.
45	Shubham	Nimbalkar	M.M.
46	Payal	Ade	Ade
47	Apeksha	Ambare	-
48	Piyush	Barapatre	-
49	Nandini	Bhandarkar	Piyush Barapatre
50	Sudhir	Borkar	Nandini
51	Rita	Meshram	Borkar
52	Priyanka	Ganjre	-
53	Umakant	Hemane	Priyanka
54	Dheeraj	Yadav	Dheeraj
55	Chetna	Lanjewar	-
56	Celina	Lazarus	Chetna
57	Prajakta	Murarkar	Celina
58	Prajakta	Patil	Prajakta
59	Vedang	Chatte	Vedang
60	Aniket	Dhande	Aniket
61	Rutuja	Gharat	Rutuja Gharat
62	Shruti	Ingle	Saurabh
63	Saurabh	Karingwar	-
64	Chirag	Khadgi	Chirag
65	Gauri	Kale	Chirag
66	Mayuri	Meshram	-
67	Vaishnavi	Navghare	Nav
68	Ayush	Nikhare	Ayush
69	Rutuja	Rathod	Rathod
70	Aditi	Chaurasia	Aditi
71	Pallavi	Chopkar	Pallavi
72	Parag	Dalal	-
73	Sujata	Dhote	-
74	Anjali	Dongarwar	Anjali
75	Mahima	Dubey	Mahima
76	Rahul	Gadikar	Rahul
77	Shivangi	Gedam	Shivangi
78	Vaibhavi	Gurumukhi	Vaibhavi
79	Gouri	Kale	Kale
			-
			-

*Amardeep*  
Course Coordinator

**SSES Amt's SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR**  
**DEPARTMENT OF GEOLOGY**  
**Add on Certificate Course (2019-2020)**  
**SUBJECT: CERTIFICATE COURSE IN BASIC PETROLIUM GEOLOGY**

**Time: 1 hour]**

**[Marks: 80**

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1. Question: Which of the following is NOT a type of rock?
  - Sedimentary
  - Metamorphic
  - Igneous
  - Elemental
  
2. Question: What is the process by which rocks are broken down into smaller fragments?
  - Erosion
  - Weathering
  - Sedimentation
  - Deposition
  
3. Question: Which type of rock is formed from the cooling and solidification of magma or lava?
  - Sedimentary
  - Metamorphic
  - Igneous
  - Conglomerate
  
4. Question: What is the term for the process by which sediments are compacted and cemented together to form rock?
  - Lithification
  - Precipitation
  - Fossilization
  - Agglomeration
  
5. Question: Which type of rock is typically formed from the accumulation of organic matter in marine environments?
  - Sandstone
  - Shale
  - Limestone
  - Granite
  
6. Question: What is the term for a naturally occurring concentration of one or more minerals?
  - Rock
  - Ore
  - Pebble
  - Sediment
  
7. Question: Which of the following is NOT a mineral?
  - Quartz
  - Coal
  - Diamond
  - Feldspar

8. Question: What is the hardest naturally occurring substance on Earth?
- Quartz
  - Diamond
  - Calcite
  - Feldspar
9. Question: What is the term for the process by which one type of rock transforms into another due to heat and pressure?
- Weathering
  - Erosion
  - Deposition
  - Metamorphism
10. Question: What is the name of the scale used to measure the hardness of minerals?
- Richter scale
  - Mohs scale
  - Kelvin scale
  - Beaufort scale
11. Question: Which type of rock is typically formed from the compaction and cementation of mineral grains?
- Igneous
  - Metamorphic
  - Sedimentary
  - Conglomerate
12. Question: What is the term for a naturally occurring, inorganic solid with a crystalline structure and a definite chemical composition?
- Rock
  - Mineral
  - Ore
  - Sediment
13. Question: Which of the following is NOT a type of sedimentary rock?
- Sandstone
  - Marble
  - Conglomerate
  - Limestone
14. Question: What is the term for the process by which rocks are physically or chemically broken down by water, wind, or other natural forces?
- Lithification
  - Erosion
  - Precipitation
  - Fossilization
  -
15. Question: Which of the following is NOT a characteristic used to identify minerals?
- Color
  - Taste
  - Hardness
  - Cleavage

16. Question: What is the primary organic component found in petroleum?
- Oxygen
  - Nitrogen
  - Carbon
  - Hydrogen
17. Question: Which geological process is responsible for the formation of sedimentary rocks?
- Erosion
  - Volcanism
  - Weathering
  - Sedimentation
18. Question: What is the term for a naturally occurring underground reservoir of hydrocarbons?
- Aquifer
  - Geyser
  - Reservoir
  - Trap
19. Question: What is the primary source of organic material in petroleum source rocks?
- Plants
  - Algae
  - Animals
  - Fungi
20. Question: Which type of rock is typically impermeable and acts as a seal for petroleum reservoirs?
- Sandstone
  - Shale
  - Limestone
  - Conglomerate
21. Question: What is the term for the process by which petroleum migrates through porous rock?
- Seepage
  - Diffusion
  - Migration
  - Permeation
22. Question: Which geological structure is formed by the folding of rock layers?
- Fault
  - Dome
  - Graben
  - Syncline
23. Question: What type of trap is formed by the bending of rock layers?
- Stratigraphic trap
  - Structural trap
  - Combination trap
  - Salt dome trap

24. Question: Which method is commonly used to locate potential petroleum reservoirs beneath the Earth's surface?
- Satellite imaging
  - Well drilling
  - Seismic surveys
  - Ground-penetrating radar
25. Question: What is the primary technique used to measure porosity in reservoir rocks?
- Well logging
  - Core analysis
  - Geochemical analysis
  - Seismic interpretation
26. Question: Which of the following is NOT a type of petroleum trap?
- Anticline trap
  - Salt dome trap
  - Deltaic trap
  - Fault trap
27. Question: What is the term for the process of increasing the flow of petroleum from a reservoir?
- Primary recovery
  - Secondary recovery
  - Tertiary recovery
  - Enhanced recovery
28. Question: Which type of seismic wave is typically used in seismic surveys to map subsurface structures?
- P-wave
  - S-wave
  - Surface wave
  - Rayleigh wave
29. Question: What is the primary component of natural gas?
- Methane
  - Ethane
  - Propane
  - Butane
30. Question: Which of the following is NOT a factor influencing reservoir quality?
- Porosity
  - Permeability
  - Organic content
  - Depth of burial
31. Question: What is the term for the process of breaking down organic matter into hydrocarbons?
- Maturation
  - Deposition
  - Diagenesis
  - Catagenesis

32. Question: Which type of rock contains the highest porosity and permeability?
- Shale
  - Sandstone
  - Limestone
  - Granite
33. Question: What is the primary source of energy for the formation of petroleum?
- Geothermal heat
  - Solar radiation
  - Radioactive decay
  - Pressure from tectonic forces
34. Question: What is the term for the process by which petroleum is extracted from the ground?
- Drilling
  - Production
  - Extraction
  - Refining
35. Question: Which geological feature is formed by the accumulation of sediment at the mouth of a river?
- Fault
  - Graben
  - Delta
  - Rift
36. Question: Which type of rock is typically formed from the accumulation of organic debris in a swampy environment?
- Sandstone
  - Limestone
  - Shale
  - Conglomerate
37. Question: What is the primary mechanism responsible for petroleum migration?
- Pressure
  - Temperature
  - Gravity
  - Capillarity
38. Question: What is the primary component of crude oil?
- Methane
  - Ethane
  - Octane
  - Asphaltene
39. Question: Which type of trap is formed by the upward movement of salt within the Earth's crust?
- Salt dome trap
  - Fault trap
  - Anticline trap
  - Stratigraphic trap

40. Question: What is the term for the process by which petroleum moves vertically through rock layers?

- Seepage
- Migration
- Capillarity
- Diffusion





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Recognized Centre for Higher Learning and Research  
Mentor College under 'PARAMARSH Scheme', UGC, New Delhi

## Add-on Course

Course Exam Name: Certificate Course in Basic Petroleum Geology

Name of Student:

..Shreya...Kale.....

Roll No.:

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Session: 2019-20

Test Date: 6/03/2020

Max. Marks: 80

Invigilator Signature

Obtained Marks:

74

### INSTRUCTIONS FOR FILLING THE SHEET

1. This sheet should not be folded or crushed.
2. Use only blue/ black ball point pen to fill the circles.
3. Use of pencil is strictly prohibited.
4. Circles should be darkened completely and properly.
5. Cutting and erasing on this sheet is not allowed.
6. Do not use any stray marks on the sheet.
7. Do not use marker or white fluid to hide the mark.

WRONG METHODS



CORRECT METHOD



A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D					
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2	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	42	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	23	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	43	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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5	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	15	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	25	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	35	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	45	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	26	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	36	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	46	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	27	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	37	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	47	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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10	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	20	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	30	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	40	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	50	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Shri Shivaji Education Society Amravati's

# Science College

Congress Nagar, Nagpur

Department of Geology

## Certificate course in Basic Petroleum Geology


Session 2019-2020


### Marksheet

Sr. No.	First Name	Surname	Theory (80)	Practical (20)	Total (100)	Grade
1	Aachal	Badnaware	50	18	68	A
2	Rahul	Bhusele	60	17	77	A+
3	Lokita	Patle	74	20	94	A+
4	Vaidahi	Kamble	45	10	55	B+
5	Yash	Maske	78	15	93	A+
6	Sejal	Motghare	55	9	64	A
7	Deoyani	Shelke	78	19	97	A+
8	Rohit	Thakre	40	19	59	B+
9	Harshkumar	Shete	74	15	89	A+
10	Sejal	Titare	48	12	60	A
11	Pooja	Waghmare	76	15	91	A+
12	Hardik	Wasekar	72	16	88	A+
13	Vinita	Yadav	62	10	72	A
14	Ashwin Kumar	Daf	70	17	87	A+
15	Apurv	Zoad	60	13	73	A
16	Shreya	Kale	74	14	88	A+
17	Bhagyashree	Kapate	68	12	80	A+
18	Anchal	Khatke	56	18	74	A
19	Divya	Kurhadkar	48	10	58	B+
20	Prerna	Raut	58	18	76	A+
21	Vaishnavi	Meshram	70	15	85	A+
22	Rutuja	Meshram	56	16	72	A
23	Pallavi	Nitnaware	66	13	79	A+
24	Honey	Parekh	66	18	84	A+
25	Aniket	Parchake	46	17	63	A
26	Bhuvan	Pashine	48	15	63	A
27	Tahrim	Shaikh	80	16	96	A+
28	Naina	Bhalerao	58	15	73	A

29	Gaurav	Burade	74	18	92	A+
30	Aditi	Chaware	66	13	79	A+
31	Saraswat	Dhole	72	13	85	A+
32	Twinkle	Dhomne	56	16	72	A
33	Sarthak	Gadre	70	16	86	A+
34	Vaishnavi	Betole	50	17	67	A
35	Payal	Chandekar	72	16	88	A+
36	Gitika	Deshmukh	56	18	74	A
37	Neha	Dhanjode	48	13	61	A
38	Bhavik	Gedam	48	20	68	A
39	Samsruddhi	Godse	70	17	87	A+
40	Mitesh	Hikre	-	-	-	AA
41	Avanti	Khapre	74	16	90	A+
42	Shreya	Kothare	62	18	80	A+
43	Yogita	Maske	62	11	73	A
44	Shivam	Nandurkar	60	16	76	A+
45	Shubham	Nimbalkar	68	18	86	A+
46	Payal	Ade	42	15	57	B+
47	Apeksha	Ambare	-	-	-	AA
48	Piyush	Barapatre	48	13	61	A
49	Nandini	Bhandarkar	52	16	68	A
50	Sudhir	Borkar	54	13	67	A
51	Rita	Meshram	-	-	-	AA
52	Priyanka	Ganjre	72	18	90	A+
53	Umakant	Hemane	64	12	76	A+
54	Dheeraj	Yadav	-	-	-	AA
55	Chetna	Lanjewar	56	15	71	A
56	Celina	Lazarus	68	18	86	A+
57	Prajakta	Murarkar	66	13	79	A+
58	Prajakta	Patil	70	18	88	A+
59	Vedang	Chatte	36	12	48	B
60	Aniket	Dhande	60	11	71	A
61	Rutuja	Gharat	70	17	87	A+
62	Shruti	Ingle	60	14	74	A
63	Saurabh	Karingwar	-	-	-	AA
64	Chirag	Khadgi	64	17	81	A+
65	Gauri	Kale	58	16	74	A

66	Mayuri	Meshram	-	-	-	AA
67	Vaishnavi	Navghare	80	18	98	A
68	Ayush	Nikhare	70	19	89	A
69	Rutuja	Rathod	68	20	88	A
70	Aditi	Chaurasia	70	20	90	A
71	Pallavi	Chopkar	68	20	88	A
72	Parag	Dalal	74	18	92	A
73	Sujata	Dhote	-	-	-	AA
74	Anjali	Dongarwar	72	18	90	A
75	Mahima	Dubey	70	19	89	A
76	Rahul	Gadikar	68	18	86	A
77	Shivangi	Gedam	66	20	86	A
78	Vaibhavi	Gurumukhi	68	20	88	A
79	Gouri	Kale	70	20	90	A

  
Course Coordinator  
Ms. P. B. Zamarkar

  
Head  
HEAL  
Department of Chemistry  
S. S. E. S. Amruti's  
Science College, Nagpur.





















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**CERTIFICATE**

Mr./Ku. Shriya Kale is awarded with certificate on successful completion of the course entitled, Certificate course in **Basic Petroleum Geology**.

Session 2019-20 under Add-on course conducted for **30 hours from 06/12/2019 to 21/02/2020** by Department of Geology, SSES's, Science College, congress Nagar, Nagpur 440012.

He/She has passed the Examination with 'A' Grade.

Dr. P. B. Zamarkar

**Dr. P. B. Zamarkar**  
Coordinator, Department of Geology

Prof. M. P. Dhore

**Prof. M. P. Dhore**  
Principal, Science College, Nagpur