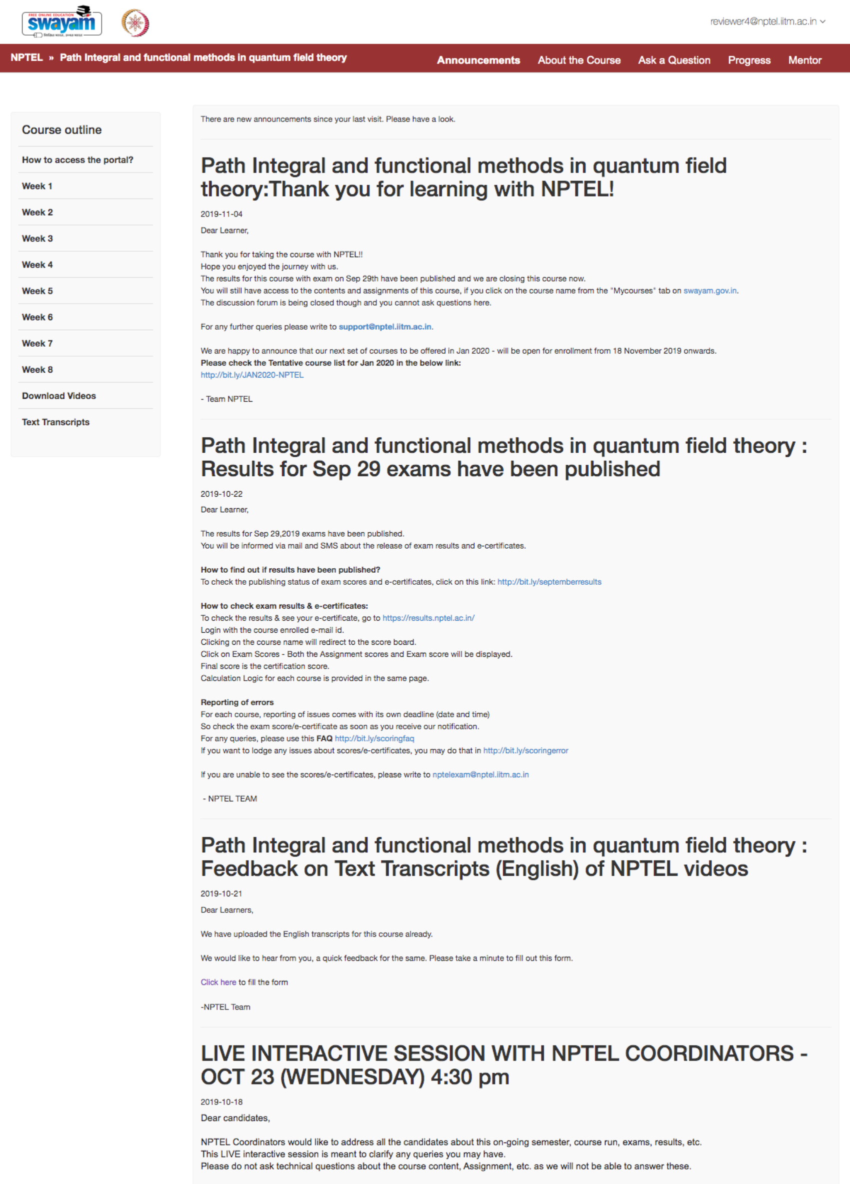


There are new announcements since your last visit. Please have a look.

Path Integral and functional methods in quantum field theory:Thank you for learning with NPTEL!

2019-11-04

Dear Learner,

Thank you for taking the course with NPTEL!!
Hope you enjoyed the journey with us.
The results for this course with exam on Sep 29th have been published and we are closing this course now.
You will still have access to the contents and assignments of this course, if you click on the course name from the "Mycourses" tab on swayam.gov.in.
The discussion forum is being closed though and you cannot ask questions here.

For any further queries please write to **support@nptel.iitm.ac.in**.

We are happy to announce that our next set of courses to be offered in Jan 2020 - will be open for enrollment from 18 November 2019 onwards.
Please check the Tentative course list for Jan 2020 in the below link:
http://bit.ly/JAN2020-NPTEL

- Team NPTEL

Path Integral and functional methods in quantum field theory : Results for Sep 29 exams have been published

2019-10-22

Dear Learner,

The results for Sep 29,2019 exams have been published.
You will be informed via mail and SMS about the release of exam results and e-certificates.

How to find out if results have been published?
To check the publishing status of exam scores and e-certificates, click on this link: http://bit.ly/septemberresults

How to check exam results & e-certificates:
To check the results & see your e-certificate, go to https://results.nptel.ac.in/
Login with the course enrolled e-mail id.
Clicking on the course name will redirect to the score board.
Click on Exam Scores - Both the Assignment scores and Exam score will be displayed.
Final score is the certification score.
Calculation Logic for each course is provided in the same page.

Reporting of errors
For each course, reporting of issues comes with its own deadline (date and time)
So check the exam score/e-certificate as soon as you receive our notification.
For any queries, please use this **FAQ** http://bit.ly/scoringfaq
If you want to lodge any issues about scores/e-certificates, you may do that in http://bit.ly/scoringerror

If you are unable to see the scores/e-certificates, please write to nptelexam@nptel.iitm.ac.in

- NPTEL TEAM

Path Integral and functional methods in quantum field theory : Feedback on Text Transcripts (English) of NPTEL videos

2019-10-21

Dear Learners,

We have uploaded the English transcripts for this course already.

We would like to hear from you, a quick feedback for the same. Please take a minute to fill out this form.

Click here to fill the form

-NPTEL Team

LIVE INTERACTIVE SESSION WITH NPTEL COORDINATORS - OCT 23 (WEDNESDAY) 4:30 pm

2019-10-18

Dear candidates,

NPTEL Coordinators would like to address all the candidates about this on-going semester, course run, exams, results, etc.
This LIVE interactive session is meant to clarify any queries you may have.
Please do not ask technical questions about the course content, Assignment, etc. as we will not be able to answer these.

Kindly fill this form with your queries which will be discussed during the LIVE session.
You may ask queries via the chat window during the session.

DAY: OCTOBER 23, 2019 (Wednesday)
TIME: 4:30pm

Link to submit queries/suggestions: https://forms.gle/AD5tLgGK2oSJxFi98
YouTube Link for Live Session: https://youtu.be/1xKn1vfnJFk

-NPTEL Team

Feedback for Path Integral and functional methods in quantum field theory

2019-10-04

Dear student,

We are glad that you have attended the NPTEL online certification course.

We hope you found the NPTEL Online course useful and have started using NPTEL extensively.

In this regard, we would like to have feedback from you regarding our course and whether there are any improvements, you would like to suggest.

We are enclosing an online feedback form and would request you to spare some of your valuable time to input your observations. Your esteemed input will help us in serving you better.

The link to give your feedback is: https://docs.google.com/forms/d/1Mrs8HpG2FrF_ErdbwLtQfUl3T8OUZitlKTYtRdzJb8Y/viewform

We thank you for your valuable time and feedback.

Thanks & Regards,

-NPTEL Team

Path Integral and functional methods in quantum field theory - Evaluation of the Assignment 6 to Assignment 8

2019-09-26

Dear learners,

We have evaluated the assignments from Week 6 to Week 8. You can see your evaluation in your progress after you login with your course id. If you don't see your marks(but has successfully submitted through drive before deadline) then please do a fresh login.

Please fill the weekly feedback form which is accessible in the portal.

Thanks and Regards,
Chayan and Supriya

Path Integral and functional methods in quantum field theory - Solution of Assignment 8 has been released

2019-09-25

Dear Learners,

The solution of Assignment 8 has been released and can be accessed from the following link:
Assignment 8 Solution

Thanks and Regards.
Chayan and Supriya

Path Integral and functional methods in quantum field theory - Solution of Assignment 7 has been released

2019-09-20

Dear Learners,

The solution of Assignment 7 has been released and can be accessed from the following link:
Assignment 7 Solution

Thanks and Regards.
Chayan and Supriya

Evaluation of the Assignment 0 to Assignment 5

2019-09-15

Dear learners,

We have evaluated the assignments from Week 0 to Week 5. You can see your evaluation in your progress after you login with your course id.

Thanks and Regards,
Chayan and Supriya

Path Integral and functional methods in quantum field theory - Week 8 Contents and Assignment 8 have been released

2019-09-15

Dear Learners,

The week 8 contents and the Assignment 8 have been released and can be accessed from the following link:
Assignment 8

The assignment has to be submitted on or before **Wednesday, 25 September 2019, 23:59 IST**.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory - Solution of Assignment 6 has been released

2019-09-15

Dear Learners,

The solution of Assignment 6 has been released and can be accessed from the following link:
Assignment 6 Solution

Thanks and Regards.
Chayan and Supriya

Path Integral and functional methods in quantum field theory - Solutions of Assignment 1,2,3,4,5 have been released

2019-09-11

Dear Learners,

The solution of Assignment 1,2,3,4,5 have been released and can be accessed from the following links:
Assignment 1 Solution
Assignment 2 Solution
Assignment 3 Solution
Assignment 4 Solution
Assignment 5 Solution

The evaluation of the assignments will be updated soon.

Thanks and Regards.
Chayan and Supriya

Path Integral and functional methods in quantum field theory - Solution of Assignment 0 has been released

2019-09-11

Dear Learners,

The solution of Assignment 0 has been released and can be accessed from the following link:
Assignment 0 Solution

The other assignments solutions and the evaluation of the assignments will be updated soon.

Thanks and Regards.
Chayan and Supriya

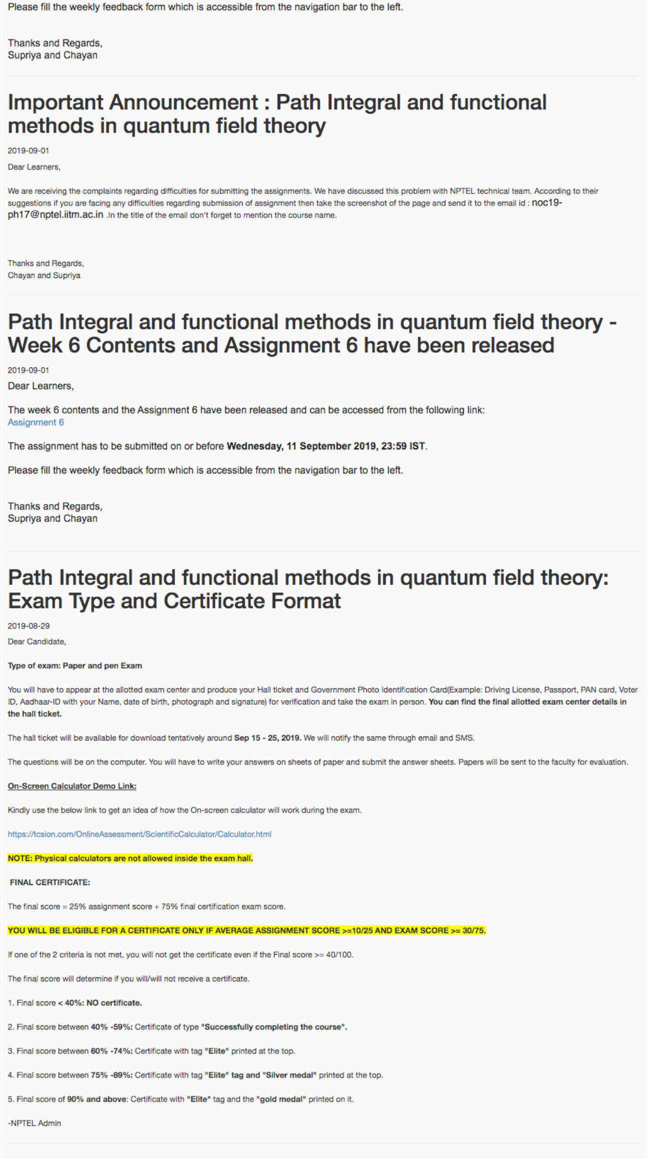
Path Integral and functional methods in quantum field theory - Week 7 Contents and Assignment 7 have been released

2019-09-08

Dear Learners,

The week 7 contents and the Assignment 7 have been released and can be accessed from the following link:
Assignment 7

The assignment has to be submitted on or before **Wednesday, 18 September 2019, 23:59 IST**.



Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Important Announcement : Path Integral and functional methods in quantum field theory

2019-09-01

Dear Learners,

We are receiving the complaints regarding difficulties for submitting the assignments. We have discussed this problem with NPTEL technical team. According to their suggestions if you are facing any difficulties regarding submission of assignment then take the screenshot of the page and send it to the email id : noc19-ph17@nptel.iitm.ac.in .In the title of the email don't forget to mention the course name.

Thanks and Regards,
Chayan and Supriya

Path Integral and functional methods in quantum field theory - Week 6 Contents and Assignment 6 have been released

2019-09-01

Dear Learners,

The week 6 contents and the Assignment 6 have been released and can be accessed from the following link:
Assignment 6

The assignment has to be submitted on or before **Wednesday, 11 September 2019, 23:59 IST**.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory: Exam Type and Certificate Format

2019-08-29

Dear Candidate,

Type of exam: Paper and pen Exam

You will have to appear at the allotted exam center and produce your Hall ticket and Government Photo Identification Card(Example: Driving License, Passport, PAN card, Voter ID, Aadhaar-ID with your Name, date of birth, photograph and signature) for verification and take the exam in person. **You can find the final allotted exam center details in the hall ticket.**

The hall ticket will be available for download tentatively around **Sep 15 - 25, 2019.** We will notify the same through email and SMS.

The questions will be on the computer. You will have to write your answers on sheets of paper and submit the answer sheets. Papers will be sent to the faculty for evaluation.

On-Screen Calculator Demo Link:

Kindly use the below link to get an idea of how the On-screen calculator will work during the exam.

https://tcsion.com/OnlineAssessment/ScientificCalculator/Calculator.html

NOTE: Physical calculators are not allowed inside the exam hall.

FINAL CERTIFICATE:

The final score = 25% assignment score + 75% final certification exam score.

YOU WILL BE ELIGIBLE FOR A CERTIFICATE ONLY IF AVERAGE ASSIGNMENT SCORE >=10/25 AND EXAM SCORE >= 30/75.

If one of the 2 criteria is not met, you will not get the certificate even if the Final score >= 40/100.

The final score will determine if you will/will not receive a certificate.

1. Final score **< 40%: NO certificate.**

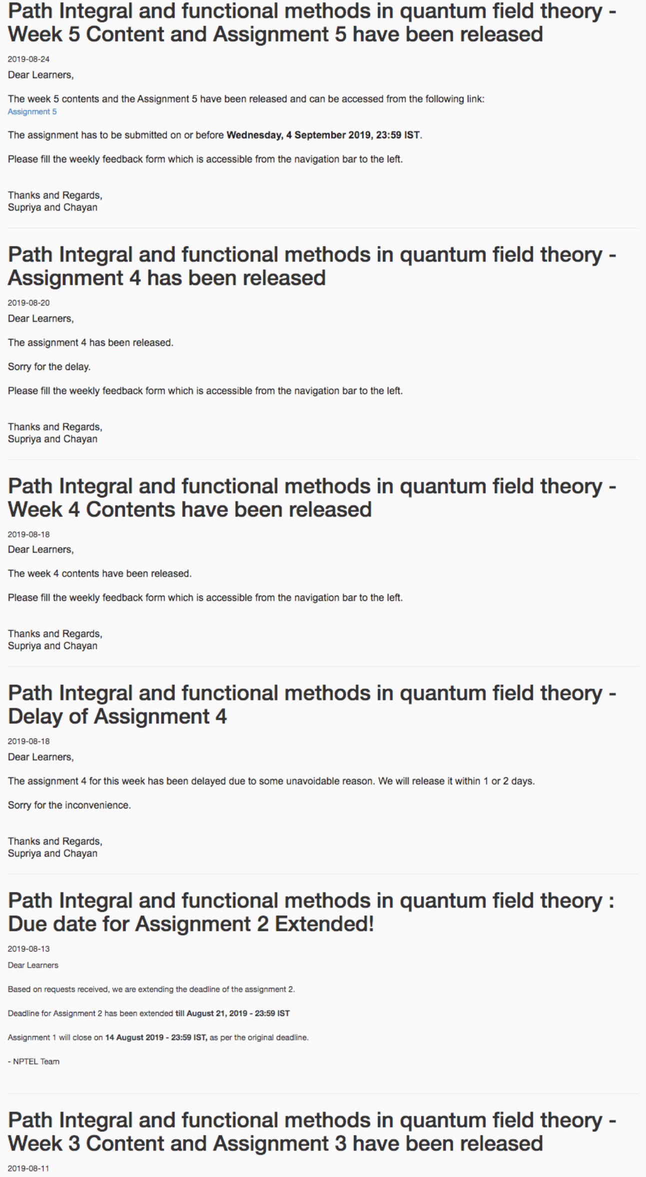
2. Final score between **40% -59%:** Certificate of type **"Successfully completing the course".**

3. Final score between **60% -74%:** Certificate with tag **"Elite"** printed at the top.

4. Final score between **75% -89%:** Certificate with tag **"Elite" tag and "Silver medal"** printed at the top.

5. Final score of **90% and above**: Certificate with **"Elite"** tag and the **"gold medal"** printed on it.

-NPTEL Admin



Path Integral and functional methods in quantum field theory - Week 5 Content and Assignment 5 have been released

2019-08-24

Dear Learners,

The week 5 contents and the Assignment 5 have been released and can be accessed from the following link:
Assignment 5

The assignment has to be submitted on or before **Wednesday, 4 September 2019, 23:59 IST**.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory - Assignment 4 has been released

2019-08-20

Dear Learners,

The assignment 4 has been released.

Sorry for the delay.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory - Week 4 Contents have been released

2019-08-18

Dear Learners,

The week 4 contents have been released.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory - Delay of Assignment 4

2019-08-18

Dear Learners,

The assignment 4 for this week has been delayed due to some unavoidable reason. We will release it within 1 or 2 days.

Sorry for the inconvenience.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory : Due date for Assignment 2 Extended!

2019-08-13

Dear Learners

Based on requests received, we are extending the deadline of the assignment 2.

Deadline for Assignment 2 has been extended **till August 21, 2019 - 23:59 IST**

Assignment 1 will close on **14 August 2019 - 23:59 IST,** as per the original deadline.

- NPTEL Team

Path Integral and functional methods in quantum field theory - Week 3 Content and Assignment 3 have been released

2019-08-11

Dear Learners,

The week 3 contents and the Assignment 3 have been released and can be accessed from the following link:
Assignment3

The assignment has to be submitted on or before **Wednesday, 21 August 2019, 23:59 IST**.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory - Week 2 Contents and Assignment 2 have been released

2019-08-04

Dear Learners,

The week 2 contents and the Assignment 2 have been released and can be accessed from the following link:
Assignment2

The assignment has to be submitted on or before **Wednesday, 14 August 2019, 23:59 IST**.

Please fill the weekly feedback form which is accessible from the navigation bar to the left.

Thanks and Regards,
Supriya and Chayan

Path Integral and functional methods in quantum field theory : Steps to access the assignment through Mobile App

2019-08-01

Dear Learners

Assignments have been released for all courses for week 1. If you are using the mobile app, please ensure you see the assignment link. If you don't, please do the following steps:

Step 1: Go to setting on your android phone
Step 2: Go to the "Apps" in the settings
Step 3: You will get a list of apps. Click on Swayam app
Step 4: You will see app info. Go to the storage in the app info
Step 5: Click on clear data and clear cache button.
Step 6: Login again to the SWAYAM app using the credentials used to enroll in the course.

Please note that if the OS version in your Android phone is 6, the content may not show up properly. Kindly refer to the web version to ensure you see all the contents of the week and then proceed to use the app.

-NPTEL Team

Path Integral and functional methods in quantum field theory - Week 1 Contents and Assignment 1 release

2019-07-25

Dear Learners,

The week 1 contents and the Assignment 1 are released and can be accessed from the following link:
Assignment 1

The assignment has to be submitted on or before **Wednesday, 14 August 2019, 23:59 IST**.

Path Integral and functional methods in quantum field theory - Assignment 0 release

2019-07-15

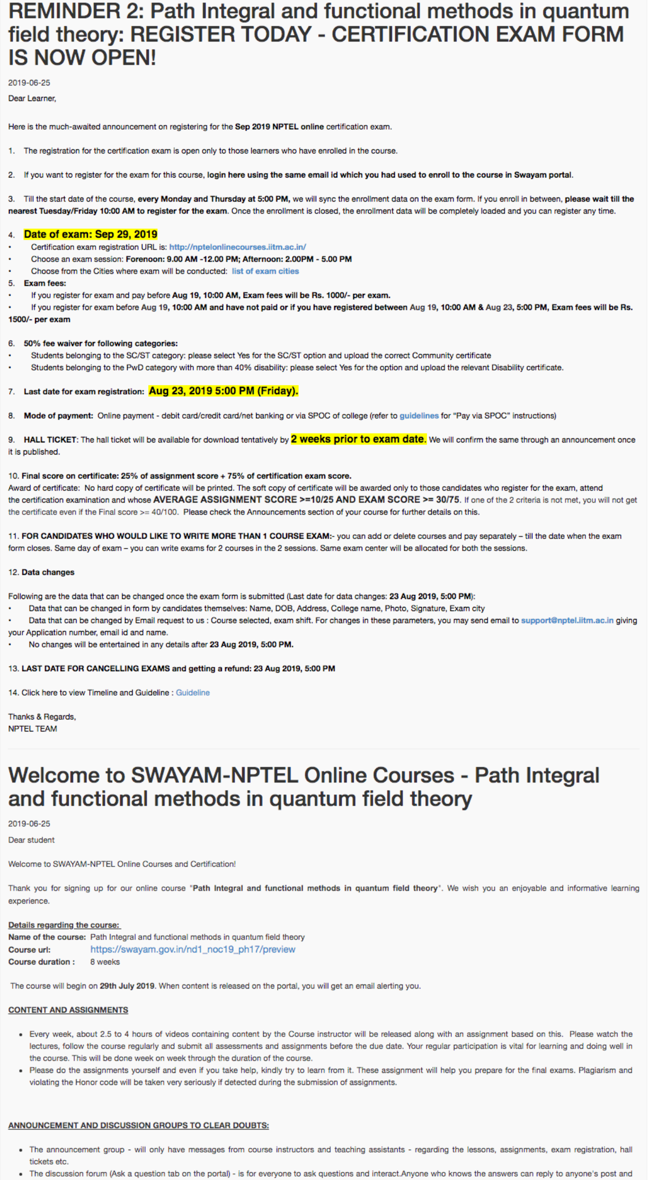
Dear Learners,

Assignment 0 is released and can be accessed from the following link:
Assignment 0

The assignment has to be submitted on or before **Saturday, 31 August 2019, 23:59 IST**.

Please use the discussion forums if you have any query.

-NPTEL Team



REMINDER 2: Path Integral and functional methods in quantum field theory: REGISTER TODAY - CERTIFICATION EXAM FORM IS NOW OPEN!

2019-06-25

Dear Learner,

Here is the much-awaited announcement on registering for the **Sep 2019 NPTEL online** certification exam.

1. The registration for the certification exam is open only to those learners who have enrolled in the course.

2. If you want to register for the exam for this course, **login here using the same email id which you had used to enroll to the course in Swayam portal**.

3. Till the start date of the course, **every Monday and Thursday at 5:00 PM,** we will sync the enrollment data on the exam form. If you enroll in between, **please wait till the nearest Tuesday/Friday 10:00 AM to register for the exam**. Once the enrollment is closed, the enrollment data will be completely loaded and you can register any time.

4. **Date of exam: Sep 29, 2019**
- Certification exam registration URL is: http://nptelonlinecourses.iitm.ac.in/
- Choose an exam session: **Forenoon: 9.00 AM -12.00 PM; Afternoon: 2.00PM - 5.00 PM**
- Choose from the Cities where exam will be conducted: list of exam cities

5. **Exam fees:**
- If you register for exam and pay before **Aug 19, 10:00 AM, Exam fees will be Rs. 1000/- per exam.**
- If you register for exam before Aug 19, **10:00 AM and have not paid or if you have registered between** Aug 19, **10:00 AM &** Aug 23, **5:00 PM, Exam fees will be Rs. 1500/- per exam**

6. **50% fee waiver for following categories:**
- Students belonging to the SC/ST category: please select Yes for the SC/ST option and upload the correct Community certificate
- Students belonging to the PwD category with more than 40% disability: please select Yes for the option and upload the relevant Disability certificate.

7. **Last date for exam registration: Aug 23, 2019 5:00 PM (Friday).**

8. **Mode of payment:** Online payment - debit card/credit card/net banking or via SPOC of college (refer to guidelines for "Pay via SPOC" instructions)

9. **HALL TICKET**: The hall ticket will be available for download tentatively by **2 weeks prior to exam date.** We will confirm the same through an announcement once it is published.

10. **Final score on certificate: 25% of assignment score + 75% of certification exam score.**
Award of certificate: No hard copy of certificate will be printed. The soft copy of certificate will be awarded only to those candidates who register for the exam, attend the certification examination and whose **AVERAGE ASSIGNMENT SCORE >=10/25 AND EXAM SCORE >= 30/75**. If one of the 2 criteria is not met, you will not get the certificate even if the Final score >= 40/100. Please check the Announcements section of your course for further details on this.

11. **FOR CANDIDATES WHO WOULD LIKE TO WRITE MORE THAN 1 COURSE EXAM:**- you can add or delete courses and pay separately – till the date when the exam form closes. Same day of exam – you can write exams for 2 courses in the 2 sessions. Same exam center will be allocated for both the sessions.

12. **Data changes**

Following are the data that can be changed once the exam form is submitted (Last date for data changes: **23 Aug 2019, 5:00 PM**):
- Data that can be changed in form by candidates themselves: Name, DOB, Address, College name, Photo, Signature, Exam city
- Data that can be changed by Email request to us : Course selected, exam shift. For changes in these parameters, you may send email to support@nptel.iitm.ac.in giving your Application number, email id and name.
- No changes will be entertained in any details after **23 Aug 2019, 5:00 PM.**

13. **LAST DATE FOR CANCELLING EXAMS and getting a refund: 23 Aug 2019, 5:00 PM**

14. Click here to view Timeline and Guideline : Guideline

Thanks & Regards,
NPTEL TEAM

Welcome to SWAYAM-NPTEL Online Courses - Path Integral and functional methods in quantum field theory

2019-06-25

Dear student

Welcome to SWAYAM-NPTEL Online Courses and Certification!

Thank you for signing up for our online course "**Path Integral and functional methods in quantum field theory**". We wish you an enjoyable and informative learning experience.

Details regarding the course:

Name of the course:	Path Integral and functional methods in quantum field theory
Course url:	https://swayam.gov.in/nd1_noc19_ph17/preview
Course duration :	8 weeks

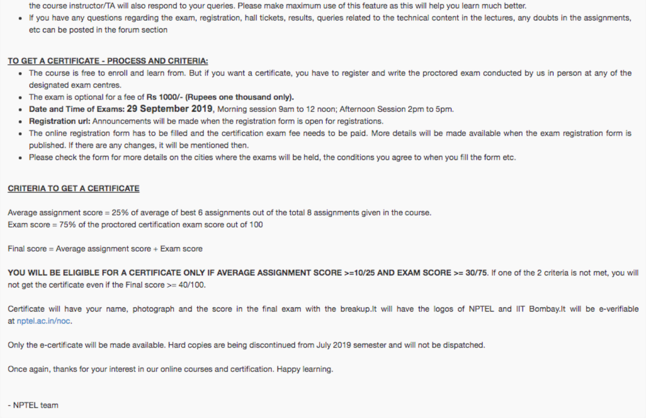
The course will begin on **29th July 2019**. When content is released on the portal, you will get an email alerting you.

CONTENT AND ASSIGNMENTS

- Every week, about 2.5 to 4 hours of videos containing content by the Course instructor will be released along with an assignment based on this. Please watch the lectures, follow the course regularly and submit all assessments and assignments before the due date. Your regular participation is vital for learning and doing well in the course. This will be done week on week through the duration of the course.
- Please do the assignments yourself and even if you take help, kindly try to learn from it. These assignment will help you prepare for the final exams. Plagiarism and violating the Honor code will be taken very seriously if detected during the submission of assignments.

ANNOUNCEMENT AND DISCUSSION GROUPS TO CLEAR DOUBTS:

- The announcement group - will only have messages from course instructors and teaching assistants - regarding the lessons, assignments, exam registration, hall tickets etc.
- The discussion forum (Ask a question tab on the portal) - is for everyone to ask questions and interact.Anyone who knows the answers can reply to anyone's post and



- the course instructor/TA will also respond to your queries. Please make maximum use of this feature as this will help you learn much better.
- If you have any questions regarding the exam, registration, hall tickets, results, queries related to the technical content in the lectures, any doubts in the assignments, etc can be posted in the forum section

TO GET A CERTIFICATE - PROCESS AND CRITERIA:

- The course is free to enroll and learn from. But if you want a certificate, you have to register and write the proctored exam conducted by us in person at any of the designated exam centres.
- The exam is optional for a fee of **Rs 1000/- (Rupees one thousand only).**
- **Date and Time of Exams: 29 September 2019**, Morning session 9am to 12 noon; Afternoon Session 2pm to 5pm.
- **Registration url:** Announcements will be made when the registration form is open for registrations.
- The online registration form has to be filled and the certification exam fee needs to be paid. More details will be made available when the exam registration form is published. If there are any changes, it will be mentioned then.
- Please check the form for more details on the cities where the exams will be held, the conditions you agree to when you fill the form etc.

CRITERIA TO GET A CERTIFICATE

Average assignment score = 25% of average of best 6 assignments out of the total 8 assignments given in the course.
Exam score = 75% of the proctored certification exam score out of 100

Final score = Average assignment score + Exam score

YOU WILL BE ELIGIBLE FOR A CERTIFICATE ONLY IF AVERAGE ASSIGNMENT SCORE >=10/25 AND EXAM SCORE >= 30/75. If one of the 2 criteria is not met, you will not get the certificate even if the Final score >= 40/100.

Certificate will have your name, photograph and the score in the final exam with the breakup.It will have the logos of NPTEL and IIT Bombay.It will be e-verifiable at nptel.ac.in/noc.

Only the e-certificate will be made available. Hard copies are being discontinued from July 2019 semester and will not be dispatched.

Once again, thanks for your interest in our online courses and certification. Happy learning.

- NPTEL team